U.S. Department of Justice
National Institute of Corrections

CORRECTIONAL Health Care

Guidelines for the Management of an Adequate Delivery System

2001 EDITION

U.S. Department of Justice
National Institute of Corrections
320 First Street NW.
Washington, DC 20534

Morris L. Thigpen
Director

Larry Solomon
Deputy Director

Susan M. Hunter
Chief, Prisons Division

Madeline Ortiz
Project Manager

National Institute of Corrections
World Wide Web Site
http://www.nicic.org

Correctional Health Care

Guidelines for the Management of an Adequate Delivery System

2001 Edition

B. Jaye Anno, Ph.D., CCHP-A

December 2001

National Commission on Correctional Health Care

1300 West Belmont Avenue

Chicago, Illinois 60657-3240

World Wide Web address: *http://www.ncchc.org*

e-mail: *ncchc@ncchc.org*

(773) 880-1460

This document was prepared under cooperative agreement number 98PO2GIH4 from the National Institute of Corrections, U.S. Department of Justice.

Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the U.S. Department of Justice.

Contents

LIST OF EXHIBITS

Foreword

Few areas cause prison and jail administrators more concern than providing health services for inmates. A perennial problem is how to deliver quality health services to inmates on a timely basis and in a cost-effective manner. This problem is exacerbated by the absence of guidance in areas such as legal issues, ethical concerns, custody-medical interfaces, staffing, inmates' special health needs, and cost containment.

The National Institute of Corrections (NIC) commissioned the 2001 edition of this comprehensive reference book for jail and prison administrators and correctional health professionals to provide guidance in the provision of health services. The book reviews the most recent literature and case law on correctional health care and summarizes the positions of national organizations and correctional health care experts on a variety of topics.

This book will help to focus attention on correctional health issues, provide guidance to the field in improving the delivery of correctional health care, and identify directions for future efforts. NIC believes that improving health care delivery in jails and prisons will enhance the corrections field as a whole.

Morris L. Thigpen
Director
National Institute of Corrections

Preface

In 1991, the National Institute of Corrections (NIC) published the first comprehensive reference book on prison health care, *Prison Health Care: Guidelines for the Management of an Adequate Delivery System.* After a decade of use, NIC has updated the material and added information useful to staff in large jails as well as prisons. The 2001 edition of this book is the result of a cooperative agreement between NIC and the National Commission on Correctional Health Care (NCCHC). NCCHC sets standards and provides educational services to improve public health through better delivery of health care in U.S. jails, prisons, and juvenile confinement facilities.

Throughout the 2001 edition, material has been added to help large jails better manage their health care delivery systems. Also, the chapters include references published over the last decade. In addition, new material has been added. For example, the legal considerations chapter (III) addresses new topics, such as charging fees to inmates for health care services, the Prison Litigation Reform Act, and sexual predator laws. In the ethical considerations chapter (IV), the section on confidentiality was expanded, and new sections were added on organ donation, mental health evaluations, and financial incentives for physicians. The chapter on organizational structure of correctional health services (V) includes information obtained from national surveys of prison and jail systems conducted by NCCHC in 1999. These national surveys also included information on staffing patterns, salaries for various correctional health care positions, and vacancy and turnover rates. The chapter on the health care delivery system model (VII) includes new sections on eye care and on discharge planning for both medical and mental health programs. An entire new chapter (IX) addresses the health needs of incarcerated women. The chapter on quality improvement (XIII) includes a new section describing resources available to help facilities design quality improvement programs and studies. Finally, the cost considerations chapter (XIV) reflects the results of new surveys conducted by NCCHC in 1999 regarding the cost of health care in prison and large jail systems.

Acknowledgments

Unquestionably, writing is a solitary activity, but nobody produces a book like this alone. The final product is a reflection of the substantial contributions of a number of people. First and foremost, I thank the members of the publication advisory group that was established to assist me in this project:

John Clark, MD, MPH, CCHP-A
Madeline LaMarre, MSN, FNP
Keith Nelson
Cassandra Newkirk, MD
Madeline Ortiz
Manuel Romero
Ronald M. Shansky, MD, MPH
Ernesto Velasco

Manuel Romero and Ernesto Velasco were particularly helpful in giving me the perspective of a prison administrator and a jail administrator, respectively.

I also acknowledge the assistance of the editorial advisory board of the first edition of this book because much of their work remains:

Nancy Neveloff Dubler, LLB
Kenneth L. Faiver, MLIR, MPH
Bernard P. Harrison, JD
Nick Pappas
Walter Y. Quijano, Ph.D.
Ronald M. Shansky, MD, MPH
Armond H. Start, MD, MPH

The combined expertise of these individuals is astounding.

I am grateful as well to my coauthors who contributed to various chapters of this book:

Judy Coe, RN, MA
Nancy Neveloff Dubler, LLB
Kenneth L. Faiver, MLIR, MPH
Peter Kwasnik, RS, CSP
Nick Pappas
William J. Rold, JD, CCHP-A
Ronald M. Shansky, MD, MPH

Their special expertise was essential in developing a comprehensive book on correctional health care.

Special thanks are due to Keith Nelson and Madeline Ortiz, representatives of the National Institute of Corrections, who helped shepherd this edition through to its conclusion, and to R. Scott Chavez, PA-C, and Edward Harrison, vice-president and president, respectively, of the National Commission on Correctional Health Care (NCCHC), who provided the necessary resources and support.

Special thanks also are due to the many prison and jail health administrators who took the time to respond to our surveys on organizational structure and health care costs. Their willingness to share information about their health delivery systems is extremely useful to their correctional health care colleagues.

Additionally, Judi Chavez of NCCHC was an outstanding project assistant. Her services in library research, data preparation, formatting, and proofreading were invaluable.

The editing and production team at Aspen Systems Corporation in Rockville, Maryland, added immeasurably to the quality of the final product. The team included:

Melissa Brandstatter, Designer
Tatiana Noerdlinger, Designer
Laura Penny, Editor
Maggie Pettersen, Product Coordinator

Finally, my primary debt is to my family. My husband, Bernard Harrison, and our daughter, Kari, were unwavering in their support and encouragement. They have my thanks and my love.

The singular efforts of each of these individuals contributed to the whole. Any credit is theirs to share. Any blame is mine. I thank them all.

B. Jaye Anno

Abbreviations

ABA	American Bar Association
ACA	American Correctional Association
ACE	AIDS Counseling and Education program
ACHSA	American Correctional Health Services Association
ACLU	American Civil Liberties Union
ADA	American Diabetes Association, Americans with Disabilities Act
ADAPT	Alcohol and Drug Abuse Prenatal Treatment Program
ADP	average daily population
ADPS	automatic data processing system
AHIMA	American Health Information Management Association
AIDS	acquired immunodeficiency syndrome
ALA	American Lung Association
AMA	American Medical Association
ANA	American Nurses Association
APA	American Psychiatric Association
APHA	American Public Health Association
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
AZT	zidovudine
BOP	federal Bureau of Prisons
BJS	Bureau of Justice Statistics
CASA	National Center on Addiction and Substance Abuse
CCHP	certified correctional health professional
CCHP-A	certified correctional health professional-advanced
CDC	Centers for Disease Control and Prevention
CHCP	Correctional Health Care Program
CO	correctional officer
COPD	chronic obstructive pulmonary disease
CPI	consumer price index
CPR	cardiopulmonary resuscitation
CPT	current procedural terminology
CQI	continuous quality improvement
CRT	cathode ray tube
CT	computerized tomography
dBA	decibel on the A scale
DDS	doctor of dental surgery
DEA	Drug Enforcement Administration
DMFT	decayed, missing, filled teeth index
DNA	deoxyribonucleic acid
DNR	do not resuscitate
DO	doctor of osteopathy
DOC	department of corrections
DRG	diagnostic-related group
DSM	Diagnostic and Statistical Manual
EAP	employee assistance program
EEG	electroencephalogram
EFA	Epilepsy Foundation of America

EH&S	environmental health and safety
EMT	emergency medical technician
ESRD	end-stage renal disease
FMIS	financial management information system
FTE	full-time equivalent
FY	fiscal year
GAO	U.S. General Accounting Office
GSBB	Girl Scouts Behind Bars
HACCP	hazard analysis critical control point
HBV	hepatitis B virus
HCV	hepatitis C virus
HIV	human immunodeficiency virus
HMO	health maintenance organization
HSD	health services director
H/VAC	heating, ventilation, and air conditioning
ICD	International Classification of Diseases
IDOC	Illinois Department of Corrections
IRA	Irish Republican Army
IRB	institutional review board
IV	intravenous
JAMA	Journal of the American Medical Association
JCAHO	Joint Commission on Accreditation of Healthcare Organizations
JCCMT	Joint Commission on Correctional Manpower and Training
KOP	keep-on-the-person (medication distribution)
LEAA	Law Enforcement Assistance Administration
LLB	bachelor of laws
LOS	length of stay
LPN	licensed practical nurse
LSD	lysergic acid diethylamide
MD	doctor of medicine
MIS	management information system
MMR	measles, mumps, and rubella
NACCJSG	National Advisory Commission on Criminal Justice Standards and Goals
NAC	National AIDS Clearinghouse
NCCD	National Council on Crime and Delinquency
NCCHC	National Commission on Correctional Health Care
NCJRS	National Criminal Justice Reference Service
NCPHSBBR	National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research
NIC	National Institute of Corrections
NIDA	National Institute on Drug Abuse
NIJ	National Institute of Justice
NP	nurse practitioner
NPDB	National Practitioner Data Bank
NSA	National Sheriffs' Association
OB/GYN	obstetrics/gynecology
OD	doctor of optometry
OJT	on-the-job training
OMB	Office of Management and Budget
OSHA	Occupational Safety and Health Administration
OTC	over-the-counter (medications)
PA	physician assistant
PCP	phencyclidine
Ph.D.	doctor of philosophy
PLRA	Prison Litigation Reform Act

POMR	problem-oriented medical record
POPS	Project of Older Prisoners
PPD	purified protein derivative (of tuberculin)
PPO	preferred provider organization
p.r.n.	pro re nata (as the occasion requires)
PRO	peer review organization
PTSD	posttraumatic stress disorder
PULHES	physical, upper extremities, lower extremities, hearing, eyes, psychiatric
QA	quality assurance
QI	quality improvement
RAM	random access memory
RFP	request for proposal
RM	risk management
RN	registered nurse
RPh	registered pharmacist
RPR	rapid plasma reagin
SCP	Society of Correctional Physicians
SOAP	subjective, objective, assessment, plan
STAT	immediately
STD	sexually transmitted disease
TB	tuberculosis
TC	therapeutic community
TDC	Texas Department of Corrections
TDCJ	Texas Department of Criminal Justice
UCRS	unit-cost report system
UDS	utilization data system
UHA	unit health authority
UR	utilization review
WAIS-R	Wechsler Adult Intelligence Scale-Revised
ZBB	zero-based budgeting

Introduction

Chapter 1

Chapter 1

Introduction

Professionalism in medicine depends on our ability to provide quality care to the least of us.

Alvin J. Thompson, MD[1]

Prison and jail inmates are overwhelmingly poor, are disproportionately minorities, and have the added stigma of having been charged with transgressing society's laws. They do not vote, they are essentially without power, and few special interest groups are concerned with their welfare. Why should anyone care whether the health services provided to these individuals are adequate? Perhaps because, as Dr. Thompson suggests, the care and treatment provided to the incarcerated reflect the degree of professionalism attained by the field of correctional medicine and are hallmarks of a civilized society.

Correctional health care as a separate field of endeavor is a relatively new phenomenon. It was not until the early 1970s that anyone focused on the type of health care and level of services provided to those who were incarcerated. In the 1970s, the primary problem was that few prisons or jails had a system of care in place. In the years that followed, two parallel forces—namely, the courts and the health professional associations—were at work defining what that system of care should be.

Three decades later, almost all state departments of correction and large jails have a system of health care in place; some because they were mandated to do so by federal courts, and others because they chose to follow the recommendations of the health professional associations. Nonetheless, a number of problems remain. The legal guidelines established by the courts and the standards developed by the health professional associations (most notably, the American Medical Association and the American Public Health Association in the 1970s and, later, the National Commission on Correctional Health Care (NCCHC)) offered a framework for improving correctional health care. For the most part, though, they did not provide detailed guidance as to how these improvements could be accomplished. The first edition of this reference manual, published by the National Institute of Corrections (NIC) in 1991, offered some assistance to prison health staff in upgrading their health care delivery systems. The 2001 edition will further help to fill that void.

The major purposes of this book can be summarized as follows:

1. To trace the historical, legal, and ethical issues that characterize the field of correctional health care.
2. To develop a model of health care in prisons and jails that addresses issues, problems, organizational structures, and programs and that provides guidelines for correctional and medical administrators and health practitioners.
3. To examine in detail the kinds of health programs that should be in place and how to implement them in a correctional setting.
4. To offer guidelines that contain the mechanisms for successful program implementation, including national standards, policies, procedures, planning methods, budget development, and staffing patterns.

5. To provide a structure for administering, monitoring, and evaluating ongoing programs.

6. To review issues and explore future needs in correctional health care.

This book focuses on health care in prisons and, to a lesser extent, large jails. It is intended to serve as a reference for correctional and medical administrators and health practitioners working in the correctional environment. Although much of the historical, legal, and ethical discussions and some of the planning and programmatic elements apply to both large jails and prisons, some do not. For example, a health delivery staffing pattern designed to meet the needs of a relatively stable, longer term population such as that in most prisons is likely to be very different from one designed to address the health needs of a more transient, short-term population typical of most jails. Where such differences occur, they are addressed in the text. In addition to practitioners, others with interest in correctional health care, such as lawyers, professors, and students, also will find this book of value.

Various approaches were used to compile the material for each chapter, including literature searches, onsite visits to selected prison systems, and telephone inquiries. In all sections, the discussions reflect an awareness of court decisions and the requirements of national standards. The most important resource, however, proved to be the expertise of the members of the Project Advisory Board created for this 2001 edition and the staffs of the NCCHC and NIC. The combined knowledge and experience of these groups regarding how correctional health systems should be organized and managed formed the basis for many of the chapters that follow. The contents of the chapters are summarized below.

Chapter II provides a **historical overview** of the status of health care in correctional institutions and the need for reform. Barriers to improving care are described, along with early reform efforts, including those of the courts and professional associations. The chapter ends by describing current programs aimed at improving the field of correctional health care.

Legal issues surrounding the provision of care in prisons and the origin of inmates' constitutional right to health care are described in chapter III. The "deliberate indifference" standard articulated by the Supreme Court in 1976 in the landmark case of *Estelle v. Gamble* is presented, along with relevant cases that have further defined the limits and extent of that legal standard. The chapter briefly states the legal requirements for providing basic medical, mental health, and dental services and discusses such issues as forced psychotropic medications, confidentiality, and AIDS.

Chapter IV introduces **ethical principles** basic to health care providers, including confidentiality and informed consent, and discusses them in the context of the correctional setting. Other issues, such as the participation of inmates in biomedical research and the use of advance directives for the terminally ill, are addressed. This chapter also offers guidance for ethical behavior when correctional health professionals are asked to participate in custody functions, such as searching body cavities, collecting forensic information, or witnessing use of force. Ethical dilemmas posed by the use of restraints, disciplinary segregation, hunger strikes, and executions are discussed as well. Finally, the chapter examines the circumstances under which it is appropriate for correctional health professionals to share limited information about their patients with custody staff.

Chapter V focuses on the **organizational structure of prison health services.** The results of an NCCHC survey demonstrate the variability of health services' organizational structure among state departments of correction (DOC) and a sample of large jails. The components of a model organizational structure are discussed, including the need for a designated systemwide health services director with line authority over unit health staff; the placement of health services within the DOC or jail administration; and the rationale for including medical, dental, and mental health services under a single organizational umbrella. Additionally, the issue of contracting health services to a for-profit firm is addressed, and guidelines are provided regarding the elements that should be included in such a contract.

Positions and roles are suggested for health staff functioning at the central office, regional office, and unit levels. The same model works well for large jail systems with more than one facility.

Chapter VI concentrates on **staffing concerns** that require special consideration in a correctional setting. Deciding how many health staff of each type are needed to provide the desired level of care may be an administrator's most difficult task. Developing health staffing patterns for prisons and jails is complicated further by custody rules and regulations that affect productivity. Rational staffing patterns that take special factors into account are suggested. Recruiting and retaining correctional health staff present a special challenge. Reviewing the system's employment package, offering such benefits as employee health care and employee assistance programs, selecting staff, and orienting and training health professionals are discussed.

Chapter VII reviews the components of a **model health care delivery system.** Basic elements of the medical, dental, and mental health programs are discussed, along with such ancillary services as eye care, pharmacy, laboratory, radiology, and medical records. Guidelines are provided for conducting intake screening, health assessments, and sick call, and for monitoring individuals who are chronically ill. Special considerations in arranging for emergency services, specialty services, hospitalization, and other community referrals are described. Throughout this chapter, the requirements of the various sets of national standards are referenced and compared.

Chapter VIII addresses **inmates' special health needs,** including specific chronic illnesses or communicable diseases. Caring for special populations—such as inmates who are suicidal, developmentally disabled, or physically handicapped—is addressed, as well as the unique health needs of the geriatric population and the terminally ill. The need to identify and accommodate these groups is emphasized. Special housing, treatment, and staffing implications are reviewed, and model programs operated by various prisons and jails are presented.

Chapter IX describes the health needs of **women offenders.** It reviews what is known about the health status of women behind bars, including their risk behaviors and health care utilization patterns. Diseases and conditions of concern to females and the special health needs of women, including pregnancy and parenting, are described. Procedures and programs designed to meet the various health needs of this group of offenders are suggested as well.

Chapter X discusses strategies to **prevent disease, control infection, and promote health and safety** in prisons and jails. Detailed guidelines for establishing and operating an effective environmental health and safety program are presented. The requirements of the various national standards governing environmental health issues are reviewed. Information needed to implement infection control and communicable disease programs is provided. This chapter makes a case for developing aggressive health education programs for inmates. The public health perspective reflected in this chapter suggests that preventive measures can yield long-term savings in the cost of care.

Chapter XI describes issues that administrators and architects should consider when **planning correctional health facilities.** The steps involved in the planning process, including instituting the planning committee, determining its composition, and defining its objectives and scope of authority, are reviewed. The need for accurate data about the population to be served is stressed, so that appropriate decisions can be made regarding the level of care and services to be offered at the new or renovated facility. The process of summarizing design needs and developing an architectural program statement is reviewed. Basic equipment needs are outlined as well.

Chapter XII focuses on **data management and documentation issues.** Basic information is provided regarding what data to collect, how to collect them, and how they can be used in planning and managing prison and jail health care services. The need for administrative statistics, utilization data, budgetary information, and epidemiological data is stressed. Other documentation issues—such as the

use of standardized forms, the organization and management of medical records, and the efficacy of computers—are reviewed.

Chapter XIII discusses **quality improvement.** Various strategies to improve the quality of care and reduce liability are discussed. Guidelines are established for implementing a quality improvement program for a state DOC or large jail system that addresses the role of both central office and unit health staff. Additionally, the benefits of review by external groups are presented, and the accreditation programs offered by the American Correctional Association, the Joint Commission on Accreditation of Healthcare Organizations, and NCCHC are compared.

Chapter XIV reviews **cost considerations.** It describes financing options available to fund correctional health programs and offers advice on developing a budget and dealing with insufficient funding. This chapter presents the results of a survey conducted for this 2001 edition that demonstrate the escalating cost of care in prison health systems. The survey also was sent to a sample of large jails to obtain baseline costs for these facilities. Strategies for controlling these costs are discussed.

Chapter XV concludes the book by reviewing the **state of prison and jail health care** and suggesting the areas that need refinement and emphasis in the new millennium. Emerging issues and future trends are presented.

The appendixes contain sample forms, worksheets, checklists, policies, and standards from state and local departments of correction and NCCHC. Details from the national cost of care survey also are presented.

In all, the 15 chapters and the appendixes are intended to serve as a comprehensive reference to prison and jail health care—its past, the complexities of its present, and a look toward its future needs.

NOTE

1. Dr. Thompson, past president of the Washington State Medical Association, made this statement in the film "Out of Sight—Out of Mind" (Chicago: American Medical Association, 1979).

Historical Overview: The Movement to Improve Correctional Health Care

Chapter II

Chapter II

Historical Overview: The Movement to Improve Correctional Health Care[1]

Now it is true that the prisoner's basic material needs are met—in the sense that he does not go hungry, cold or wet. He receives adequate medical care and he has the opportunity for exercise.

Gresham Sykes, 1958

Those words were written more than 40 years ago by one of this nation's foremost criminologists. In making a point about the lack of amenities for inmates in prison, Sykes assumed that the necessities of life were provided. Nevertheless, by the 1970s, various studies and court cases had begun to document institutional atrocities that forced society to question seriously whether the necessities of life were being provided to those behind bars. With respect to health care, consider the following accounts of treatment of inmates in some of the nation's jails and prisons three decades ago:

> According to her account,[2] she was constantly horrified and often terrified by the inhumanity on the part of both the staff and the inmates. It began with the physical examination when the matron searched seven women for concealed narcotics, using a vaginal tool without sterilizing it between the examinations. When Mrs. X protested, the matron made her the last of the women to be examined. The doctor who examined her took away her prescription medicine for a heart condition and never returned it although he had promised to do so. (Menninger, 1969:41)

> His constant threats of suicide and his constant animation called for medical intervention. Indeed, the medical department found a solution to his problems that was not particularly unique in the [19th] century but somewhat disconcerting in the 20th century: they filled him with tranquilizers and shackled his legs and arms to the bars.[3] (Goldsmith, 1975:83)

> A quadriplegic, who spent many months in the hospital at the M&DC [Medical and Diagnostic Center], suffered from bed sores which had developed into wounds because of lack of care and which eventually became infected with maggots. Days would pass without his bandages being changed until the stench pervaded the entire ward. The records show that in the month before his death, he was bathed and his dressings were changed only once. *(Newman v. Alabama, 1972)*

> Prisoners are supposedly screened during the classification process for job assignments so that men with health conditions which would be aggravated by a particular job or which would be unsafe to others are assigned appropriately. There are indications that the job assignment process does

> not function as intended. For example, a man at Camp Hill with a known heart and stomach condition was assigned to a garbage detail; he reportedly died after lifting heavy garbage pails. (Health Law Project, 1972:35-36)

In all fairness, though, Sykes should not bear the brunt of criticism for a remark he made in passing several years ago. A host of other authorities (and in the more recent past) failed to consider the pressing problem of health care in corrections. The American Medical Association (AMA) noted the following in its proposal to the Law Enforcement Assistance Administration (LEAA) for funding a correctional health program:

> As recently as 1965 . . . when the National Crime Commission studied a national sample of short-term institutions, it did not isolate health services as a topic of special concern. The Joint Commission on Correctional Manpower and Training established by Congress a short time later similarly failed to obtain systematic information on health services in jails and related institutions. (American Medical Association, 1974:3)

Other authorities—namely, the courts—confronted with instances of negligent or inadequate health care in correctional institutions chose to ignore it. Relying on the "hands off" doctrine[4] established decades earlier,[5] the courts—in most instances until the 1970s—abstained from reviewing the actions of prison and jail officials.

The medical profession itself and, in particular, organized medicine, expressed little interest in the plight of prisoners' health care until about 1970.[6]

The sections that follow explore issues surrounding health care in prisons and jails in greater depth. Section A examines the status of health care in correctional facilities prior to efforts to improve it and identifies deficiencies in its delivery. Section B reviews the barriers to improving the inmates' lot that previously existed. Section C outlines some of the justifications for upgrading health care in corrections, and section D discusses early attempts to improve correctional health care. Section E describes recent efforts to improve correctional health care, including litigation and compliance with national standards.

This chapter focuses on health care in prisons and jails as opposed to other types of correctional institutions, such as juvenile detention facilities, halfway houses, or overnight police lockups. A prison is usually defined as an individual facility operated by a unit of state (or federal) government for the confinement of adults convicted of a felony whose sentences exceed 1 year. In contrast, a jail generally is operated by a city or county for the purpose of holding arrestees pretrial or confining individuals convicted of misdemeanors who generally are sentenced to 1 year or less. A number of authorities cited herein, however, do not make this distinction and use the terms "prison" and "jail" interchangeably.[7]

A. The Status of Health Care in Prisons and Jails

> No other system surpasses the jails for having the absolute worst health care system in the United States. (Shervington, 1974)

This quote reflected the growing belief that the status of health care in corrections was poor and that the health status of inmates—whether or not the result of incarceration—also was poor. Until about 1970, few studies existed to support this belief. Indeed, as noted in the previous section, the issue itself was not generally a topic of concern.

After 1970, however, a number of organizations began to study health care in corrections, albeit not in any systematic way. Many of the early reports were theoretically rather than empirically based. They relied on anecdotes rather than experimental data to support their assertions. Even those few studies that tried to field-test some general notions about the lack of health care in corrections usually were methodologically flawed. Nevertheless, these

studies represented the best information available at the time and, thus, should not be dismissed out of hand.

In general, the common assumptions running through these studies included one or all of the following assertions:

- Inmates were in poorer health than others in their age group at the time they entered institutions.
- Several institutions in the United States lacked any health care facilities.
- Even in those institutions where health care facilities were available, the services offered and the care given may have been inadequate.
- The living conditions in jails and prisons themselves caused health problems.

In the sections that follow, each of these assertions is examined along with supportive evidence available from a review of the early literature.

1. Inmates Entered Institutions in Poor Health

Most of the evidence with respect to this assumption was indirect. In the early 1970s, no published studies attempted to document the general health status of inmates at the time of their admission to jails or prisons and compare their status with that of individuals in the community of similar age, sex, and ethnicity. Instead, the statement was assumed to be true on the basis of the interrelationships between poverty, crime, and poor health.[8]

Some evidence of the poor health status of inmates existed at the federal level. For example, one article decrying the inadequacy of health care in correctional institutions in general contained the following statement:

> At the outset, the prison population is not healthy . . . the "typical" inmate enters prison with a 95% chance that he needs medical care and a 66% chance that the care he receives will be his first contact with professional medical attention. Furthermore, he has a 50% likelihood of drug abuse, a 5% chance of severe psychiatric disturbance, and a 15% possibility of having serious emotional problems. ("Medicine behind bars," 1971:26)

The basis of these estimates was not reported, but the statistics were startling. Even more startling was the fact that the author was referring to the federal prison system. If Menninger and others are to be believed,[9] the situation at the local level must have been even more dismal.

Although empirical studies detailing the overall health status of inmates at the time of admission were lacking, several other reports described particular health problems in prison and jails. These typically focused on problems of alcoholism,[10] drug abuse,[11] and mental illness.[12] Although none of these reports dealt with alcoholism, drug abuse, or mental illness specifically as medical issues, they helped to identify areas of medical need. Regardless of the exact numbers, the following seemed clear:

- Some inmates were alcoholic and, thus, might exhibit both acute and chronic medical problems at the time of their admission, including seizures, delirium tremens, malnutrition, and chronic liver ailments.
- Some inmates in correctional institutions were substance abusers and, thus, were prone to such diseases as hepatitis, in addition to other conditions that might accompany drug abuse.
- Some inmates were mentally ill or retarded. Others became mentally ill after incarceration, as the number of suicides and suicide attempts, as well as physical and sexual assaults, attested.
- Other categories of inmates brought their special medical problems with them. For example, prostitutes and homosexuals were more likely to have a higher incidence of venereal disease.

Seemingly, some inmates were entering institutions in poor health. It also was becoming clear that most jails and prisons lacked the facilities necessary to handle inmates' health care needs.

2. *Many Institutions Lacked Health Care Facilities*

A review of the early literature suggests that the first national survey even to broach the question of the availability of health facilities in corrections did not occur until 1970.[13] Then, it was determined that only about half of the responding jails had any medical facilities at all.[14] True, the LEAA survey included only one item related to the availability of medical facilities, and the nature of these facilities was unknown. Still, it was a beginning.

At about the same time, the AMA began to show an interest in the status of health care in jails. In view of the dearth of data on the subject, the AMA decided to complete its own survey to determine the scope of the problem. Meetings with correctional officials as well as a small exploratory study[15] had convinced the AMA that a problem existed and that organized medicine could play a part in its solution; but first, more information was needed.

A 4-page questionnaire was mailed to 2,930 sheriffs administering local jails who were listed with the National Sheriffs' Association. Of the forms returned, 1,159 were usable—about 40 percent of the total number of questionnaires mailed (American Medical Association, 1973: 1-2). From the responding jails, a dismal picture of the availability of health care facilities began to emerge:

- In two-thirds of the jails (65.5%), the *only* "medical facility" available within the jail itself was first aid. An *additional* 16.7 percent reported that not even first aid was available (p. 12).
- *No* physician was available on a regularly scheduled basis in 28 percent of the jails, and physicians were not available even on an "on call" basis in 11.4 percent of the jails (p. 20).
- Only 37.8 percent of the jails indicated that a dentist was available and only seven jails (less than 1%) said a dentist made daily visits (pp. 20, 28).

The jails' availability of resources for handling the medical problems of special categories of offenders was no better. Less than 20 percent of the responding jails had any special facilities for handling alcoholics, only 10 percent had facilities for drug addicts, and only 14 percent had facilities for the mentally ill (p.14).

Admittedly, the AMA survey was methodologically flawed, and the response rate was not optimal. However, another survey conducted the same year, but not reported until 1974, tended to support the AMA findings on the lack of availability of medical facilities and staff in jails.[16]

Seemingly, medical personnel and facilities did not exist on a formal basis in the majority of the nation's jails, and even where they did exist, there was no assurance that they were adequate. But what about prisons?

Unfortunately, no comparable national surveys identified the level and extent of health care services in state correctional systems. Indeed, such a survey still has not been conducted. The evidence from the few studies of state prison health care delivery (e.g., in Kansas, Kentucky, Maryland, Massachusetts, Michigan, Pennsylvania, Washington)[17] or from court cases of that era (e.g., *Holt v. Sarver* (1970), *Newman v. Alabama* (1972)) indicates that, contrary to popular opinion, health care systems in prisons were no better than those in jails.

In some ways, prison systems may have been worse. For example, the lack of ongoing health care delivery systems in jails often meant that when inmates "really needed" care, they were sent to the local hospital emergency department to receive it. While this may not have been the most efficient or least costly alternative, at least the care received met community standards. In contrast, most prisons tended to have some facilities for health care onsite and hence may have been more reluctant to send an inmate to the "free world" for care. The health staff in prisons, though, often consisted of unlicensed foreign medical graduates or physicians with institutional licenses, supplemented by unlicensed medical corpsmen and untrained inmate "nurses."[18] As noted below, these and other factors scarcely meant that health care in prisons was adequate.

3. Health Care in Corrections Was Inadequate

The third common assertion running through the literature was that even where medical staff and facilities existed in correctional institutions, the care given was often inadequate. Most of the studies reflecting this view were conducted in state prison systems.

One of the first studies to focus on the adequacy of health care in prisons (and the only known national study to date) was undertaken by the National Society of Penal Information in 1929.[19] After describing the generally inadequate conditions of the health care delivery systems in the prisons studied, Rector outlined minimum standards for medical care in institutions. These included recommendations for *all* inmates to receive physical examinations by a "competent physician" both at the time of admission *and* at the time of discharge from the institution. Rector also indicated that daily sick call should be held by a physician and that complete dental care and complete optometric care should be available.[20]

Later studies indicated that these standards were still largely unmet. For example, the 1972 AMA survey noted that less than 7 percent of the jails examined all inmates as a matter of course. In most instances, physical examinations were given only when the inmates complained (American Medical Association, 1973:26). Similar findings were reported in a Massachusetts study of state prisons (Medical Advisory Committee on State Prisons, 1971) and in studies of the Kansas (Woodson and Settle, 1971) and Kentucky (Kentucky Public Health Association, 1974) systems as well. Daily sick call was not a universal norm (Health Law Project, 1972:87-88; Kentucky Public Health Association, 1974), and even when held, it was not necessarily of good quality.[21]

Mental health services were lacking also. The absence of screening mechanisms (Medical Advisory Committee on State Prisons, 1971) and testing services (Kentucky Public Health Association, 1974) coupled with deficiencies in staffing and facilities (Office of Health and Medical Affairs, 1975a) meant that inmates' mental health needs frequently were not addressed.

Dental care, when available, often was limited to emergency extractions, with little thought given to restorative or preventive care.[22] This situation existed in spite of the fact that the vast majority of inmates seriously needed dental services (Office of Health and Medical Affairs, 1975a:226; Anno, 1977). Optometric care was virtually nonexistent (Health Law Project, 1972:97; Office of Health and Medical Affairs, 1975a:225-226).

4. Living Conditions in Prisons and Jails Caused Health Problems

The fourth assertion often found in the literature was that the living conditions in prisons and jails were harmful to inmates' health. Of the numerous deficiencies listed, those concerning overcrowding, inadequate diet, poor sanitation, and lack of recreation and exercise facilities were the most frequent and the most serious. Many reports suggested that if inmates were not sick when they entered institutions, they would become so once they got there.

The general living conditions that reportedly existed in jails and prisons in the early 1970s were, for the most part, atrocious. Many institutions were old and outmoded, and many more were in disrepair.[23] Adequate lighting, heating, and ventilation often were unavailable, and air conditioning was a luxury provided to few. More important, sanitary conditions frequently were lacking.[24]

The literature is replete with examples of unsanitary conditions and practices in correctional facilities. The Pennsylvania study noted earlier reported instances of cockroaches in the dining room, rat droppings in the kitchen, medical reports documenting mice bites, and infestations of lice and vermin (Health Law Project, 1972:23). Similar conditions were found in institutions in the Michigan study[25] and also documented in court cases of that era.[26]

Furthermore, the Pennsylvania study stated that "no institution had an established routine for physical inspection of the premises to monitor cleanliness" (Health Law Project, 1972:23). These same findings

were borne out by the 1972 AMA survey, which found that although most of the respondents stated that sanitary inspections were made, the person conducting those inspections was usually the sheriff (American Medical Association, 1973: 30-31). At the prison level, Walker and Gordon (1977) noted that environmental inspections, where conducted, were usually the responsibility of correctional officers who were not trained as environmental health specialists.

Finally, the National Advisory Commission on Criminal Justice Standards and Goals (NACCJSG) in its discussion of major institutions indicated that:

> Many institutions are poorly cooled, heated, and ventilated. Lighted levels may be below acceptable limits. Bathroom facilities often are insanitary, too few, and too public. Privacy and personal space hardly ever are provided because of overriding preoccupation with security. Without privacy and personal space, inmates become tense and many begin to react with hostility. As tension and hostility grow, security requirements increase, and a negative cycle is put into play. (1973:355)

Deficiencies also existed in the management of food services and nutritional content of the meals. The Michigan study noted that "beverage milk handling in most locations observed was at best primitive, and at worst risks contamination and transmission of infection, particularly of the enteric diseases." Additionally, there were "faulty and insanitary equipment and utensils . . . unclean storage refrigerators, improperly cleaned and maintained equipment and insufficient hand washing lavatory facilities . . . " (Office of Health and Medical Affairs, 1975a:327). The Kentucky survey of penal institutions showed similar deficiencies. Furthermore, sufficient nutritional content in the daily diet may have been lacking,[27] a hot meal may have been served only once a day,[28] and what was served may have been so unattractive as to make it virtually inedible.[29]

Beyond the inadequacies of sanitary conditions and diet, overcrowding once again was becoming a serious problem with which to contend. During the late 1960s and early 1970s, when community treatment of offenders and diversion were most in vogue, prison and jail populations began to decline. In 1970, the National Jail Census found that only 5 percent of jails in its survey reported overcrowding (Law Enforcement Assistance Administration, 1971:4). In contrast, however—whether as a result of a backlash against community treatment programs or simply an increase in the number of young people (who are statistically associated with higher rates of crime) in the general population—a 1976 survey found that the number of inmates in state and federal institutions was at an all-time high and that overcrowding in many areas had reached crisis proportions (Gettinger, 1976:9-20). A 1978 survey of state and federal prisons reported that "across the nation, 46 percent of federal inmates and 44 percent of state inmates lived in high density, multiple occupancy units" (Mullen and Smith, 1980:61-63).[30]

The effects of overcrowding on inmates' physical and psychological health status have been debated by researchers for years. A host of psychological studies have yielded contradictory results.[31] While some have claimed that suicide,[32] violence,[33] or stress[34] in prisons increases in overcrowded conditions, others have pointed to the methodological flaws in such research.[35] The data on the physiological effects of overcrowding are much more compelling and less speculative, however. A number of researchers have demonstrated that the risks of transmitting tuberculosis[36] and other airborne bacteria and viruses[37] increase in overcrowded conditions.

To add to the health hazards of unsanitary environments, inadequate diets, lack of personal hygiene, and overcrowding, respite—however temporary—from these dismal facts of life was rare. The lack of outside exercise yards[38] or indoor gymnasia, meaningful work or sufficient educational and vocational programs,[39] and recreational activities meant that many inmates served their terms in forced idleness.

These factors, taken together, clearly constituted a public health hazard that was staggering.

B. BARRIERS TO IMPROVEMENT

If all of these conditions with respect to health care existed in correctional institutions, why was so little done about it? A portion of the blame surely rests with the universal claim of "inadequate resources." True, corrections often has been referred to as a "stepchild" for its failure to obtain sufficient resources from state and local legislatures. It also may be true that in many communities, the public has shown reluctance to provide better conditions for those who have transgressed its laws or offended its sense of morality. However, as public officials know all too well, public opinion can be changed or even ignored when the purpose suits them. Thus, if it had only been a question of inadequate resources, the task of improving health care in prisons and jails would have been relatively easy. Pressures could have been brought to bear to appropriate the necessary funds.

The real barriers to improvement, however, were more difficult to overcome. They involved actions as well as attitudes and were, therefore, all the more entrenched. Included in this latter group were the positions taken by the courts, the attitudes of prison and jail officials, the realities of the inmate social system, and the problems and disinterest of the medical profession. Each of these barriers is examined in turn.

1. Courts and the "Hands Off" Doctrine

A century ago, individuals incarcerated in penal institutions had virtually no rights. Zalman states that prisoners were considered to be "slaves of the state and entitled only to the rights granted them by the basic humanity and whims of their jailors"(1972:185). In reality, that statement would be more accurate if the word "rights" were changed to "privileges." Until recently, the courts clung to a distinction between rights and privileges as a justification for their failure to review the actions of correctional officials in their treatment of inmates.[40]

Judicial attitudes "prevented the expansion of the few 'privileges' afforded prisoners into meaningful 'rights'" (Hirschkop, 1972:452). With the exception of the eighth amendment's general prohibition against cruel and unusual punishment, nothing in the U.S. Constitution applies directly to the protection of inmates. Thus, in the absence of specific constitutional provisions to the contrary, the courts interpreted the realm of correctional administration as beyond their jurisdiction to review.

In addition to relying on the concept of separation of powers, the courts also reasoned that they lacked the necessary expertise in penology to determine whether actions of prison and jail officials were justifiable and stated a further reluctance to interfere based on the notion that such intervention might subvert prison discipline.[41] The inevitable result of this hands-off policy by the courts was to grant prison and jail administrators broad discretionary powers in the way they cared for and treated their charges.

State courts often hid behind the hands-off doctrine in dismissing petitions for writs of habeas corpus (to bring a party before a court or judge) or granted relief only where the petitioner could show that medical treatment or the lack of it amounted to cruel and unusual punishment of such a magnitude as to "shock the conscience of the court."[42] A 1963 Utah case, *Hughes v. Turner,* demonstrated that extreme deprivation had to be present before the courts would grant relief. In this instance, the prisoner's complaint that he was being denied "sufficient food for his sustenance and comfort" was dismissed by the court, which ruled that hunger pains were subjective.[43]

Relief was further limited because federal appellate review of state prison administrators' actions and state court decisions was virtually unavailable until the 1960s. Like the state courts, the federal courts took refuge in the hands-off doctrine and added the concept of federalism as further justification for their abstentions from review. Under this latter policy, powers not specifically delegated to the federal government were said to rest with the states and the constitutional protections of the Bill of Rights extended only to federal issues.

With the passage of time, one by one the guarantees of the Bill of Rights were said to be incorporated in the equal protection clause of the 14th amendment and made applicable to the states. Thus, the eighth amendment was judged to be so incorporated in a 1962 case, *Robinson v. California*. The result of this extension was to open state cases charging a denial of eighth amendment constitutional protections to federal judicial review. Further power for the federal courts to intervene in state matters was obtained by "the Supreme Court's explicit recognition in *Cooper v. Pate* (1964) that state prisoners could seek to invoke the protections of the Civil Rights Act (§1983)"—passed by Congress in 1871 (Alexander, 1972:17).

The immediate effect of these decisions, however, was not to broaden the remedies available to prisoners alleging cruel and unusual punishment. Rather, it initially served to entrench the federal courts further in their use of the hands-off doctrine. In the area of medical treatment, the doctrine itself was refined and "three theories emerged to limit the concept that the denial of medical care amounted to cruel and unusual punishment" (South Carolina Department of Corrections, 1972:147).

The first theory generally held that an action for deprivation of civil rights under §1983 was not a substitute for available state remedies for damages. The second invoked the notion that deprivation of medical care must be so barbaric or extreme as to "shock the conscience of the court" before it would constitute cruel and unusual punishment. Under this test, all cases alleging deprivation of medical care were denied relief for failing to reach constitutional magnitude (see, e.g., *Haggerty v. Wainwright* (1970), *Krist v. Smith* (1970), *Snow v. Gladden* (1964)). In the third theory, the courts distinguished between the availability of medical treatment and the adequacy of treatment given. When the issue was adequacy and not deprivation of medical care, the courts deferred to the opinion of correctional physicians and officials that reasonable care was being provided. As long as some treatment was given, the courts were reluctant to determine that it was not sufficient.[44]

The effect of these actions, taken together, was virtually to bar prisoners from obtaining redress for anything but the most extreme deprivation of medical care. The courts relied on the willingness of officials "to do the right thing" without judicial intervention in prison and jail administration. As indicated in previous sections of this chapter, however, that trust was not always well founded.

2. Correctional Officials' Attitudes and the Inmate Social System

The failure of correctional officials to provide adequate health care for inmates becomes more understandable when the goals of the prison system are examined. Although jails existed in the 18th century,[45] the use of prisons as a form of punishment in America began around 1820.[46] The creation of the prison initially was undertaken as a reform movement: "discipline 'directed at the mind' replaced a cluster of punishments 'directed at the body'—whipping, branding, the stocks, and public hanging" (Ignatieff, 1978:xiii). A strong religious component was included in "the invention of the penitentiary" (Rothman, 1971:79). In fact, the term "penitentiary" is derived from the Puritan notion of doing penance for one's sins. According to Rothman (1971:105), "the doctrines of separation, obedience, and labor became the trinity around which officials organized the penitentiary." It was believed that such a regimented life would transform the offender and that "the penitentiary would promote a new respect for order and authority" (Rothman, 1971:107).

Although today's correctional administrators have all but abandoned the "rehabilitative ideal"[47] as a purpose of confinement, the politics of punishment[48] and prisons' and jails' quasi-military management style remain much the same. Issues of security and order still take precedence over all other considerations. Prisons and jails exist almost solely for the purpose of custody. To the extent that health services are not seen as contributing toward that goal, they are likely to be given a low priority. In fact, according

to one researcher, "to many correctional officers, medical department activities, which often require seemingly excessive movement of inmates, drugs, and vulnerable people (particularly nurses) on cellblocks, not only do not contribute to but are disruptive of basic prison goals" (Goldsmith, 1975:24).

Furthermore, while the existence of some of the atrocious living conditions and inadequate health services may have been due to the deliberate cruelty of some officials, the more prevalent attitudes simply may have been indifference to the inmates' plight or beliefs that the deprivation was justified or that the inmates were "faking." By virtue of the fact that they are incarcerated, correctional staff may feel that inmates are undeserving of basic human considerations. As Goffman points out, staff notions of moral superiority are one of the characteristics of "total institutions":

> In total institutions there is a basic split between a large managed group, conveniently called inmates, and a small supervisory staff. . . . Each grouping tends to conceive of the other in terms of narrow, hostile stereotypes, staff often seeing inmates as bitter, secretive, and untrustworthy, while inmates often see staff as condescending, highhanded, and mean. Staff tends to feel superior and righteous; inmates tend, in some ways at least, to feel inferior, weak, blameworthy, and guilty. (1961:7)

In jails and prisons, the reciprocal roles of inmates and staff are compounded further by continuous struggles for power.[49] Although correctional officers normally have the upper hand, inmates may spend inordinate amounts of time thinking up ways to subvert institutional discipline and manipulate officials to their advantage.[50]

Regarding medical matters, correctional officers are well aware of the additional benefits that may accrue to inmates who ostensibly are seeking relief from illness or pain. A trip to the facility's infirmary or to a hospital on the outside offers the inmate the further possibilities of lessening the usual boredom of the day's routine, getting out of an undesirable or unwanted work situation, "scoring" such items as drugs and supplies that later may be used as currency, meeting with other inmates or family members who may be at the infirmary or hospital by prearrangement, and finally—the most disturbing of all possibilities to correctional officials—escaping.[51]

Given their usual distrust of inmates and the knowledge that inmates can fake illness to their own advantage, some correctional officers become cynical and refuse to believe that any except the most obviously ill need care. Other staff resent that convicted criminals are given what they perceive as a level of care and a degree of access denied to them and their families. Correctional officers have been known to make the system of health care work to their advantage in several ways. In the past, access to medical care usually was controlled by the security staff; they could either withhold it as a disciplinary measure or grant it as a special privilege. In either case, inmates actually needing medical care likely were not receiving it. Similarly, officers and correctional administrators have been known to exert considerable pressure on clinicians (sometimes in a very subtle manner) to treat a patient more conservatively than was properly indicated, particularly when offsite, inconvenient, or expensive treatment is involved. In addition, a shortage of escort or transportation officers or vehicles becomes a convenient excuse for denying (or at least delaying) care.

3. The Medical Profession and "Hands On" Care

It has been pointed out that prisons and jails lacked sufficient coverage by medically trained personnel and that sometimes those who served inmates were uncaring or, worse, incompetent. This resulted in the attachment of a disparaging stigma to the term "prison doctor," creating a vicious cycle by making it even more difficult to recruit qualified and dedicated health professionals. Other reasons existed for the shortage of competent physicians and allied health personnel in correctional facilities. In some cases, the

community at large may have experienced a shortage of physicians and medical resources. Prisons tend to be located in rural areas and are, therefore, out of the "medical mainstream." In other cases, correctional facilities failed to allocate sufficient moneys to attract and retain qualified health professionals. In still others, the correctional facility's policy of refusing to hire women for jobs "behind the walls" meant that inmates were medically underserved.[52] Additionally, the working conditions in prisons and jails and the ingrained attitudes of health professionals themselves often acted as even more effective barriers to improving existing conditions.

In the past, a correctional facility was not likely to be a comfortable place to work. The general atmosphere may have been unattractive and oppressive, the conditions unsanitary, and the working space for health services inadequate. Supplies and equipment frequently were insufficient and outmoded, and the provision for backup facilities within the institution and support services in the community often were nonexistent.

Furthermore, prisons and jails offered health professionals—especially physicians—little in the way of money, status, or prestige. In addition, the patients that physicians served were likely to be professionally uninteresting. Physicians probably encountered few cases that represented an intellectual challenge. Instead, they were confronted with a series of common ailments—both real and claimed—for which treatment was fairly routine.[53] Much of the correctional physician's workload consists of holding sick call and performing standardized physical examinations. Emergency situations are rare in most institutions and are as likely to occur when the physician is away from the facility as not (Goldsmith, 1975:21-23).

Compounding these issues were the attitudes and values of the physicians themselves. If a gap exists between the lifestyles and belief systems of corrections officials and inmates, the social distance between physicians and inmates is even greater. Moreover, the correctional setting is not conducive to developing a relationship of mutual trust. Inmates may view health professionals as allies of the corrections staff and fear that the usual doctor-patient privilege may be abrogated in favor of security concerns. By the same token, a physician who has been conned once too often may come to view almost all inmate medical complaints as attempts at manipulation.[54] This conflict, from the physician's perspective, has been described as follows:

> The physician in our society, goal oriented, hard working, motivated by intellectual, economic and ego needs, has little empathetic relationship with the prisoner who is a patient. In addition, it is not beyond reason to suspect that the physician believes the prisoner is an exploiter, a malingerer, and even a source of veiled and violent threat. With so much to be done in this world, is the valued time of the physician to be spent in this area? ("A proposal for the improved care of prisoners in the state of Maryland . . . ," undated:8 as quoted in American Medical Association, 1974:19)

The physician-inmate relationship is further complicated by the attitudes and beliefs of the correctional staff. A physician who wants to practice good medicine may not be allowed to do so. On one end, the warden or jail administrator may control the direction of the medical program, in addition to its purse strings. On the other end, line personnel often control inmates' access to medical services. The physician and other health personnel are caught somewhere in the middle. They must walk a tightrope, trying to balance the real medical needs of inmates with the security concerns and priorities of the line and supervisory correctional staff. If health care personnel become overly identified as "inmates' advocates," they run the risk of having their program subverted by correctional staff. If, however, they lean too far toward the custody side, their relationship with their patients is jeopardized and the inmates' medical needs may not be served adequately.

Given all these factors, it is easy to understand why working in the nation's prisons and jails may have been less attractive to competent health professionals than opportunities in other settings in the community.

C. JUSTIFICATIONS FOR IMPROVING CORRECTIONAL HEALTH CARE

No matter how formidable the barriers seemed, by the 1970s, society's obligation to make improvements in correctional health care was becoming clear. The nation exhibited a growing awareness of the extent of the system's deficiencies. Justifications for assuming this monumental task were manifold, including ethical considerations, security reasons, humanitarian and health concerns, and legal issues. In addition, and perhaps for all of these reasons, many citizens recognized improved correctional health care simply as good public policy.

1. Ethical Considerations

Some of the most compelling reasons for improving health care in correctional facilities were based on moral principles. In general, our communities increasingly believed that good health care should be a right extended to everyone and not a privilege available only to those who could afford it.[55] With respect to prisoners, the courts increasingly recognized that a government was not entitled to withhold the basic necessities of life from its charges and that access to health care was one of these necessities.

One of the most encouraging signs indicating that prospects for change were good was the support received from correctional representatives regarding inmates' rights to health care. NACCJSG phrased it this way:

> One of the most fundamental responsibilities of a correctional agency is to care for offenders committed to it. Adequate medical care is basic; food and shelter are basic. Withholding medical treatment is not unlike the infliction of physical abuse. Offenders do not give up their rights to bodily integrity, whether from human or natural forces, because they were convicted of a crime. (1973:36)

From the U.S. Bureau of Prisons' manual on jails came this strongly worded statement:

> No jail is too small to provide adequate medical care. Whether the jail holds one inmate or a thousand, the administrator has a responsibility to protect the health of his prisoners and to safeguard the health of the community. He cannot meet this responsibility if he does not provide medical care for prisoners. Certainly no jail administrator has the right to impose a death sentence, and failure to provide for the medical needs of those in custody is equivalent to pronouncing a death sentence. (Pappas, 1972:140)

Even more heartening, however, was a statement from the National Sheriffs' Association that read, in part, as follows:

> Insufficient resources and inadequately trained custodial personnel are repeatedly cited as reasons for the lack of adequate medical and dental care, as well as for the absence of recreational programs and facilities.
>
> But while all these conditions and problems may prevail in a given institution, they do not alter the responsibility of the jail administrator to fulfill the right of each person in custody to a healthful and safe environment. *The duty of the jailer is not simply to keep secure those entrusted to his custody, he must care for them as well.* (1974a:13, emphasis added)

And finally, the American Correctional Association (ACA) had this to say:

> The objectives of a health and medical services program for prisoners must include the

promotion of health, the prevention of disease and disability, the cure or mitigation of disease, and the rehabilitation of the patient.

Good medical care cannot be promoted when services are rendered on the basis of a double standard, as for instance, one for "paying patients" and one for "public charges." To achieve the goals set down above, medical care programs for prisoners must be equivalent in quality to the care which is available in the community. Acceptance of a lesser standard will make impossible the achievement of these goals. (1966:436)

2. Security Reasons

Another set of arguments for improving correctional health care was based on the belief that it also would improve institutional security. If "custody" is the primary objective of prisons and jails, then order and security must be maintained. Because anything that threatens order violates the institution's primary objective, presumably a correctional administrator would be interested in improving inmates' health services as a way to maintain order and reduce the threat of violence.

Undoubtedly, most prison riots have been precipitated in part by the appalling conditions and inhumane treatment that existed in those institutions. In virtually every prison riot in which inmate demands are made, the list of requested reforms includes better diet and general living conditions, as well as improvements in access to and adequacy of health care.[56] According to this viewpoint, riots and other instances of prison and jail violence are a direct result of intolerable conditions that reach a crisis proportion, and then the institution explodes.

Not all agreed with the "prison as a powder keg" theory of the cause of riots, among them penologist Lloyd McCorkle. McCorkle believed that riots occur because the people inside are unhappy. He did not think that riots were necessarily related to inmate complaints regarding poor conditions. In fact, he believed that the lists of grievances often were drawn up after the fact to legitimize the riot.[57]

If McCorkle is correct, the argument that improving prison and jail conditions will reduce the threat of violence is a specious one. Following the Attica uprising in 1971, however, a number of correctional observers again reasserted this theory.[58] Hence, another justification for improving correctional health care was added to the growing arsenal for reform.

3. Humanitarian and Health Concerns

If ethical and security considerations were not sufficiently convincing, further justification was found in humanitarian and public health reasons. The idea that society owed inmates health services that were at least comparable to those available to the general public was gaining ground. In fact, there was a growing belief in some circles that society had an even higher duty to care for inmates because they were not free to care for themselves.[59] Considering that many inmates entered prisons and jails in poor health and that the institutions themselves often exacerbated their conditions, any position to the contrary was difficult to justify on humanitarian grounds.

The importance of providing inmates with adequate health care not only for their welfare but also for that of the community, was becoming increasingly apparent. Health professionals began to recognize that the costs and consequences to the public of not providing necessary care while inmates were confined would be compounded when they were eventually released. For example, few facilities provided routine communicable disease screening of new inmates. Given inmates' high risk for carrying communicable diseases[60] and the relatively short-term nature of their incarceration,[61] the potential public health consequences of not performing this routine screening were considerable. Inmates were at risk for not only contracting a disease while incarcerated but also transmitting disease to their families and friends on release.[62]

Furthermore, when acute and chronic illnesses were not treated in prisons and jails, society often bore the burden of paying for necessary treatment. When inmates are released, many find their way onto the rolls of a variety of government-sponsored programs, such as welfare, Medicaid, and rehabilitation services. Thus, communities were simply delaying their costs, not avoiding them. Arguably, they were increasing their costs by not providing preventive and restorative care and, therefore, allowing conditions to deteriorate to a more serious and presumably more expensive level.

Finally, the failure to provide adequate medical care for inmates can result in additional costs to the community by reducing the chances for inmates' successful reintegration. Inmates may become bitter and more antisocial as a result of the indignities they endure in a correctional setting. Because feelings of well-being and self-esteem are virtually prerequisites for constructive change, neglecting inmates' health needs only compounds their already difficult task of readjustment. The National Advisory Commission phrased it this way:

> Medical care is of course a basic human necessity. It also contributes to the success of any correctional program. Physical disabilities or abnormalities may contribute to an individual's socially deviant behavior or restrict his employment. In these cases, medical or dental treatment is an integral part of the overall rehabilitation program. (1973:37)

4. Legal Issues

In the final analysis, however, it may be simply that correctional administrators no longer had a choice whether or not to provide adequate health care for their charges. During the early 1970s, the federal courts in particular began to overcome their reluctance to intervene in matters regarding the internal administration of correctional facilities. Emerging case law at all levels of government began to dictate that at least certain basic elements of adequate health care must be provided.

The case that signaled the beginning of the reversal of the hands-off doctrine with respect to prisoners' rights to medical care was *Newman v. Alabama* (1972). In this October 1972 decision, a U.S. district court found the entire state correctional system of Alabama to be in violation of the 8th- and 14th-amendment rights of its inmates by failing to provide them with *adequate and sufficient* medical care. In what has been described as "the first major federal civil rights action devoted entirely to prison medical care" (American Bar Association, 1974a:144), the court placed the state's correction agency under injunction and demanded immediate remedies for all existing deficiencies. Cost considerations were not a sufficient defense for failing to provide care. Subsequent review at the circuit court level upheld this landmark decision (*Newman v. Alabama,* 1974).

Following closely on the heels of *Newman* came a host of other cases that began to carve out specific rights related to inmates' general health and well-being. According to a U.S. General Accounting Office report (1976, appendix I), courts at various levels ruled that certain inmates in certain places were entitled to—

- "The essential elements of personal hygiene (e.g., soap, towels, toothbrush, toothpaste and toilet paper)" (see, e.g., *Finney v. Arkansas Board of Corrections* (1974), *Holt v. Hutto* (1973)).
- Adequate and sanitary living conditions (e.g., sufficient space, heat, lighting, and ventilation; clean laundry; essential furnishings) (see, e.g., *Gates v. Collier* (1970)).
- "Adequate drinking water and diet, prepared by persons screened for communicable disease in kitchens meeting reasonable health standards" (see, e.g., *Holt v. Hutto* (1973)).
- Competent medical and dental care backed up by competent supportive facilities (see, e.g., *Finney v. Arkansas Board of Corrections* (1974), *Gates v. Collier* (1970)).

- Drugs and special diets that are medically prescribed (see, e.g., *Finney v. Arkansas Board of Corrections* (1974), *Steward v. Henderson* (1973)).
- Drug detoxification and/or treatment for drug dependence (see, e.g., *Wayne County Jail Inmates v. Lucas* (1974)).
- Professional treatment and evaluation of psychiatric problems in appropriate settings for detainees under civil commitment (see, e.g., *O'Connor v. Donaldson* (1975)).
- Use of exercise and recreational areas (see, e.g., *Rhem v. Malcolm* (1974)).
- Visitors (including touching their visitors) and telephone calls to the outside world (see, e.g., *Rhem v. Malcolm* (1974)).

At first glance, this appears to be an impressive list of inmates' rights. It should be noted, however, that this list was compiled from a number of cases in different parts of the country, that not all were federal court decisions, and that not all applied equally to all categories of inmates (e.g., some applied only to detainees or to civil commitments). It should be noted further that although precedents may be established, court decrees are binding only on the specific litigants involved. Thus, in the absence of a Supreme Court decision or specific federal legislation making offenders' rights to health care binding on all states, there was no assurance that correctional administrators would follow the developing legal trend of safeguarding inmates' rights to medical care. Other solutions still were needed to improve correctional health care.

D. Early Solutions—The Beginning of Reform

During the 1970s, interest in ensuring adequate health care for inmates was growing in areas outside the courts. Correctional and medical personnel at both state and national levels were indicating concern over the existing deficiencies in health care in correctional facilities and were attempting a series of solutions. These solutions usually took one of two forms: either the implementation of specific programs designed to improve health care in certain facilities or the development of standards for health care.

1. State, Local, and National Programs

The early 1970s saw an increase in the number of programs at specific correctional facilities that were designed to improve an aspect of health care for inmates or to alleviate a particular medical condition. Several attempts were made at the state correctional level to improve health care systems: Texas developed an innovative program "designed to introduce medical students to the problems and concerns of prison health care" (Texas Department of Corrections, 1974). The Georgia Department of Corrections received a substantial grant from LEAA to revamp its health care system and reallocate its prison health care dollars in a more efficient fashion. Health care in Alabama's correctional system underwent improvements as a result of the federal court's intervention in *Newman*. The literature also reported several programs designed to improve specific medical conditions of prisoners, such as facial disfigurement,[63] which met with varying degrees of success.[64]

At the local level, some programs were specifically designed to improve overall medical care in a given jail, but most concentrated on a particular medical problem—for instance, drug abuse[65]—or were funded to alleviate general problems, such as poor or unsanitary living conditions, inadequate security or safety measures, and insufficient attention to the comfort, rehabilitation, and privacy needs of inmates.[66]

Funding a few programs, though, did not guarantee that they would produce the desired changes. For example, the U.S. General Accounting Office surveyed 22 jails that had received federal funding to improve conditions and concluded that inadequacies still remained. The report pointed out that efforts to improve conditions were hampered by the fact

that "there are no nationally acknowledged standards to be applied in determining whether physical conditions are adequate and whether sufficient services are available in local jails" (General Accounting Office, 1976:i).

In 1975, however, LEAA provided a grant to the AMA to upgrade correctional health care. The pilot program was designed to develop model health care delivery systems in a number of jail sites, devise correctional health care standards that would serve as the basis for implementing a national accreditation program, and establish a clearinghouse to develop and disseminate information on correctional health care issues.

The LEAA-funded AMA program continued through 1981 and, by all accounts, achieved its program objectives.[67] It started by involving 6 state medical societies that worked with 30 jails.

Six years later, 25 medical societies and more than 400 jails had participated. In addition, the program had accomplished the following:

- Developed model health care delivery systems for jails.
- Established three sets of health care standards (for jails (1979a), prisons (1979c), and juvenile facilities (1979b)) covering medical, dental, mental health, and chemical dependency services.
- Developed 20 monographs on various correctional health care topics, a guide for implementing standards, and an accreditation brochure.
- Completed an award-winning documentary film on health care in jails, "Out of Sight—Out of Mind."
- Compiled an annotated bibliography on medicine and criminal justice.
- Developed a training package for jailers on receiving screening and other aspects of correctional health care.
- Disseminated more than 210,000 copies of AMA correctional health care publications.
- Held five conferences on correctional health care, which were well received by the participants.
- Accredited health care systems in 111 facilities.
- Expanded the accreditation effort to jails in all 50 states (Anno, 1982:2924).

In 1977, LEAA awarded a grant to the Michigan Department of Corrections, Office of Health Care, to provide technical assistance to 10 states to improve health services in their prison systems. Subcontracts with the School of Public Health at the University of Michigan and with the Colleges of Human and Osteopathic Medicine at Michigan State University provided staff, additional expertise, and training resources to assist in this effort. Aside from the benefits of training and assistance that accrued to the prison health personnel in the selected states, probably the most lasting effect of this program was the development of 19 manuals on various health topics, such as diet, dental services, pharmaceuticals, education programs, quality assurance, and policy development. The Correctional Health Care Program (CHCP) manuals were printed in 1980, and although some of the material requires updating, much of it is still useful for today's prison health personnel.[68] The AMA draft *Standards for Health Services in Prisons* (1979c) (described below) was broadly circulated by the CHCP and reviewed by hundreds of correctional health providers and administrators.[69]

2. National Standards

At the national level, early attempts to improve correctional health care generally consisted of setting standards. Key professional correctional organizations affirmed inmates' rights to adequate health care and outlined the essentials that should be included to safeguard these rights. Standards for medical care and healthful environments were established by the NACCJSG (1973) and the National Sheriffs' Association (1974a, 1974b, 1974c, 1974d, 1974e). In addition, ACA began revising its *Manual of Correctional Standards* (1966), which had devoted only eight pages to health and medical services.

There were, however, difficulties with the standards that had been established so far. First, they were mostly too general to provide much impetus for change.[70] Courts and correctional administrators seeking specific guidelines as to what constituted "adequate" provisions for health care were not likely to be helped by the early standards. The interpretation of such terms as "access," "available," "reasonable," "appropriate," and "acceptable" and the determination of specific elements and services to be included in, for example, "physical examinations" or "emergency treatment on a 24-hour basis" were left entirely to the discretion of the reader. Second, the standards lacked enforcement power. The national standards were simply suggested guidelines that prisons and jails were free to adopt or reject. Clearly, a set of standards was still needed that would provide more specificity and enable correctional health administrators to measure their facilities against those standards.

The initial solution to problems came not from corrections, but from the health professions. The first national health care standards drafted specifically for correctional institutions were published by the American Public Health Association (APHA) in 1976. Said to be applicable to both prisons and jails, the APHA standards provided more specificity than earlier sets of standards. They did not, however, address the problem of enforcement.

In 1977, the AMA published its first correctional health standards. This edition was specific to jails and, although not as detailed as those of APHA, had the advantage of an accompanying accreditation effort to measure compliance by facilities.[71] The AMA jail standards were revised in 1978, 1979, and again in 1981, with each successive revision providing more direction and more detail based on the experience of applying these standards against actual delivery systems.

In 1979, the AMA published its first health care standards for prisons. It was not until 1982, though, that the first prison health system (at the Georgia State Prison in Reidsville) was accredited. Three more years passed before the next prison health systems (13 units of the Texas Department of Corrections) were accredited. Significantly, litigation was a factor in both systems' accreditation.[72]

ACA revised its standards for adult institutions in 1977 and again in 1981 and used the AMA standards as a basis for its health care section.[73] In addition, ACA also developed an accreditation effort for prisons and jails that included a review of health services. As noted in chapter XIII, however, there are some important differences in how the correctional and medical accreditation programs operate.

E. Recent Efforts to Improve Correctional Health Care

Since *Newman v. Alabama* was heard in 1972, hundreds of class action suits have been filed (usually under Section 1983 of the Civil Rights Act) on behalf of state and local inmates alleging unconstitutional conditions, including health services. In its 1995 "Status Report," the National Prison Project of the American Civil Liberties Union noted that only three states (Minnesota, New Jersey, and North Dakota) had "never been involved in major litigation challenging overcrowding or conditions in their prisons" (National Prison Project, 1995:1).

Shansky (1989:2) suggests that with respect to health services "a review of the last 20 years of litigation has shown that where constitutional deficiencies have been identified, certain patterns of problems have been described." He identifies four types of deficiencies that courts have regularly recognized as demonstrating deliberate indifference: lack of inmate access to medical services, poor followthrough of needed health care, insufficient resources to provide adequate care, and preventable negative outcomes of care.

In most of the major class action suits, both sides have retained medical experts. Ken Faiver, who has served as the correctional health administrator for both Michigan and Puerto Rico, believes that:

> In the majority of class action lawsuits involving allegations of inadequate health care, the parties have chosen to negotiate a consent agreement rather than go to trial for adjudication of the constitutional question. When this happens, the professional health care experts retained by the parties generally tend to agree on the major issues, though they sometimes quibble endlessly over certain details. Stated another way, the band of difference of opinion among qualified health care experts is relatively narrow.
>
> The decision makers for the defendants, however, usually include corrections administrators, attorneys, and fiscal staff who are less willing to agree to costly improvements. Often an immense expenditure of resources is made by the governmental entity in resisting, delaying, challenging, or only partially complying with the requirements of the court. In the face of such resistance, some judges have appointed a special master or court monitor to oversee compliance with court orders. (Personal communication, May 1990)

The role of the master in effecting change can be an important one. According to Nancy Dubler, an attorney who publishes frequently on correctional health topics:

> Masters provide expert assistance to the court in the institution. In some cases, the appointment of a master has been found to be essential to achieving compliance with the court's orders (see, e.g., *Lightfoot v. Walker*). Masters can and do further not only the interests of the inmate patients at whose behest they are usually appointed, but also the interests of the entire medical staff. Their recommendations lead to increases in resources and administrative reforms that empower medical units as they compete for their fair share of the budget. (Personal communication, March 1990)

There is no question that litigation can be an effective strategy for improving correctional health services. Indeed, some correctional administrators (although seldom publicly) welcome such suits as a way to obtain dollars otherwise denied to them and as a way to provide a cap on their population size. Nevertheless, although litigation may be an effective strategy for reform, it is seldom an efficient one. It may take years, even decades, for legal actions against government entities to accomplish their intended results and at extraordinary cost to the taxpayers.[74]

There is a less costly, less rancorous, yet equally effective approach to improving correctional health care; namely, voluntary compliance with national professional standards. According to Vincent M. Nathan, who has served as a special master for federal district courts in Georgia, New Mexico, Ohio, Puerto Rico, and Texas:

> No serious student of American correctional history can deny that litigation has provided the impetus for reform of medical practice in prisons and jails; likewise, no one who has been a judge, a litigating attorney, or a special master in a case involving correctional medical care can argue that meaningful reform is possible in the absence of the human and scientific resources of medicine. Indeed, the standards of medical care in jails and prisons adopted by the American Medical Association and the American Public Health Association have, to a large extent, translated the vague legal rulings of the courts into practical and viable tests for measuring the legal adequacy of institutional health care programs. (1985:3-4)

Organizations such as the AMA, APHA, and the National Commission on Correctional Health Care (NCCHC) have made significant contributions not only in improving correctional health care delivery systems but also in upgrading the quality of health professionals serving in correctional medicine as well.

The involvement of these groups and others has meant that correctional health professionals no longer need apologize for where they choose to work.

APHA continues its longstanding interest in correctional health care. Its standards were revised in 1986 (Dubler) and contain numerous references and legal citations that are of interest to correctional health professionals. Additionally, APHA has an active Jail and Prison Health Committee (within its medical care section), which offers papers on correctional health topics at the annual APHA meetings. APHA also is represented on the board of directors of NCCHC.

The American Correctional Health Services Association (ACHSA)—an organization that evolved out of a meeting of prison health administrators in 1975—also is active today. ACHSA is a multidisciplinary membership organization with a current enrollment of 570 correctional health professionals.[75] ACHSA is affiliated with the American Correctional Association, offers correctional health workshops at ACA annual meetings, and holds its own conference each spring. Furthermore, ACHSA publishes a bimonthly newsletter, *CorHealth*, for its members and is represented on the NCCHC board.

In the 1980s, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) discovered corrections as a potential market for its ambulatory care standards. Long-time leader in accreditation of community health facilities, JCAHO had accredited some of the few prison hospitals in the past.[76] Additionally, the Federal Bureau of Prisons has embarked on an ambitious project to obtain JCAHO accreditation of the health services at all its prison units.

The newest organization in the field—the Society of Correctional Physicians (SCP)—was founded in 1994. As its name implies, SCP is a professional membership organization for physicians working in the correctional health care field. Currently, it has about 250 members.[77] SCP also is represented on the NCCHC board of directors.

In the opinion of many, though, the dominant organization in correctional medicine today is NCCHC—in part because it consolidates the efforts of so many professional associations[78] and in part because it offers many diverse activities aimed at helping correctional institutions upgrade their health services.

An outgrowth of the AMA's Jail Program, NCCHC was incorporated in 1983 and began conducting business as NCCHC in January 1984.[79] Its sole purpose is to improve health care in correctional institutions (prisons, jails, and juvenile facilities) by—

- Continuing its accreditation program under revised standards.[80]
- Offering onsite technical assistance at the request of the courts or correctional facilities.
- Providing health-related training to correctional staff in such areas as receiving, screening, and suicide prevention.
- Holding annual conferences that offer continuing education credits to hundreds of correctional health professionals.
- Performing quality reviews of inmate health records.
- Developing an AIDS education program for incarcerated youth (under a cooperative agreement with the Centers for Disease Control and Prevention).
- Disseminating monographs and manuals on correctional health care topics.
- Distributing a quarterly newspaper, *CorrectCare,* at no charge to more than 19,000 readers.
- Publishing the *Journal of Correctional Health Care* biannually.
- Initiating a certification program for correctional health professionals in 1990 that has enrolled more than 1,400 certified correctional health professionals (CCHPs) and 45 CCHPs-advanced status.[81]

F. CONCLUSIONS

Although both litigation and the assistance offered by the health professional associations have resulted in significant improvements in the status of correctional health care in various states, some problems remain. Nonetheless, the pressing problems of the first decade of the new millennium are not the same as those of the 1970s.[82] In the 1970s, prisons and jails lacked adequate health delivery systems, and inmates' access to care often was blocked by correctional personnel. Now, it is rare to find any system where inmates serve as caregivers; almost all health workers in corrections are appropriately licensed, registered, or credentialed; correctional staff are far less apt to impede inmates' access to health care or to deny it overtly as punishment; and virtually every state department of corrections and large jail system has a health delivery system in place.

In the first edition of this book, the challenges for the 1990s included "how to fine tune those systems so that the quality of care offered will mirror that of the community" (Anno, 1991, citing Anno, 1989), how to cope with population increases that put pressure on existing delivery systems, and how to control burgeoning health care costs. In the new millennium, the challenges remain the same. It is toward these ends that the remainder of this book is directed.

NOTES

1. The outline and format of this chapter as well as some of the content have been taken from Anno (1981).

2. This excerpt refers to an account by a businesswoman who had been sentenced to a week in the Cook County Jail for contempt of court.

3. This is a portrait of an inmate called "Billy," whom the author asserts is a "composite of real people" encountered in his study of prison health care.

4. This concept is discussed in more detail in section B.1 of this chapter.

5. See, e.g., *Price v. Johnson* (1948).

6. In 1846, a small group of physicians met in New York City to consider forming a professional association. The next spring, a larger group of physicians met in Philadelphia and officially formed the American Medical Association (AMA). At this meeting, May 2, 1848, was chosen as the date for the AMA's first annual session (Burrow, 1963). A review of the transactions from that first session revealed that the AMA had adopted the following resolution:

> Resolved, That the Committee on Public Hygiene be requested to investigate the effects of confinement in prisons and penitentiaries, and of the discipline in general, in those institutions, on the health of their inmates, and report to the next meeting of the Association. (American Medical Association, May 1848:44)

Although the AMA had articulated a concern for inmates' health the year after its formation, no further concern was expressed officially for the next 82 years. The study called for in that early resolution apparently was never conducted—at least no mention of such a report is made in the proceedings of the House of Delegates in subsequent years.

The next official action of the AMA concerning prisoners' health care occurred in 1930. At that annual session, the House passed a resolution supporting a report of the American Bar Association's Committee on Psychiatric Jurisprudence, which called for the availability of psychiatric services to courts and to penal and correctional institutions (American Medical Association, 1930:41). Ten years later, the AMA voted to table a resolution supporting a plan to create a training program in legal psychiatry—which was an outgrowth of the 1930 resolution (American Medical Association, 1940:67).

The proceedings of the House of Delegates from 1940 through 1968 include occasional references to "crime" or "prisoners"—for example, in 1952 a resolution expressing disapproval of the participation of inmates in scientific experiments was adopted

(American Medical Association, 1952:90-92, 109-110)—but nothing further regarding correctional health care. Thus, the few statements that the AMA made regarding the plight of prisoners from 1848 to 1968 were simply statements of principle and were not accompanied by any programs seeking remedies.

Even the AMA's involvement in the Joint Commission on Correctional Manpower and Training (JCCMT) from 1966 to 1969 did not result in any action and the JCCMT reports include very little reference to health care personnel (Joint Commission on Correctional Manpower and Training, 1969 and 1970). In fact, the AMA's role in this organization was so low profile that there was no mention of it in any of the accounts of the AMA's official actions (e.g., the various proceedings of the House of Delegates or Digests of Official Actions), and most AMA staff—including the person who initiated the Jail Program—were unaware of the AMA's participation in JCCMT (Personal interview, Bernard P. Harrison, April 1981).

7. For example, Goldsmith (1975) titled his book Prison Health even though in the preface he noted that "this book focuses on health care in jails." Similarly, Alexander (1972) used the term "prison" to include jails.

8. See, e.g., Clark (1971:40-51).

9. In distinguishing jails from prisons, Menninger says "Both are wretched, abominable institutions of evil, but generally the jails are by far the worse" (1969:44). Indeed, the belief that a positive relationship existed between the level of government and the level of services provided meant that the earliest efforts to improve correctional health care were most often directed at jails, because they were believed to be the most in need.

10. See The President's Commission (1967a:233-237; 1967b).

11. See The President's Commission (1967a:211-231; 1967c).

12. See, e.g., Clark (1971:42-43).

13. Ibid.

14. See Law Enforcement Assistance Administration (1973, Table 2:160-322).

15. An American Medical Association (AMA) representative was invited to participate in the National Conference on Corrections held in Williamsburg, Virginia, in 1971. Following the informal exchanges at that conference, the AMA conducted a small telephone poll of a cross-section of jail administrators. The results of that poll revealed a lack of available medical resources in jails and a generally positive response toward organized medicine as a potential solution to the problem (American Medical Association 1974:3-4).

16. See Law Enforcement Assistance Administration (1974) and (1975). The Law Enforcement Assistance Administration survey of 3,291 jails revealed that only "one out of every eight jails had some sort of in-house medical facility" (1974:8); only 19 percent had a doctor on staff and of those, only one-third served on a full-time basis (1975:10); only one-third had facilities to treat drug addicts (1974:9); and finally, less than 18 percent indicated the availability of counseling programs for mentally ill inmates (1974:9).

17. See Woodson and Settle (1971); Kentucky Public Health Association (1974); Medical and Chirurgical Faculty of the State of Maryland (1973); Baker, DeMarsh, and Laughery (1971); Medical Advisory Committee on State Prisons (1971); Office of Health and Medical Affairs (1975a); and Health Law Project (1972).

18. See, e.g., *Burks v. Teasdale* (1980), *Guthrie v. Evans* (1987), *Holt v. Sarver* (1970), *Newman v. Alabama* (1972), and *Ruiz v. Estelle* (1980).

19. See Rector (1929).

20. Ibid., pp. 24-26.

21. For example, one study reported that prior to the Attica uprising, the prison doctors had conducted sick call from behind a mesh screen—hardly what can be called adequate hands-on care (New York

State Commission on Attica, 1972). See also the report of the Medical and Chirurgical Faculty of the State of Maryland (1973) and the report of the Office of Health and Medical Affairs (1975a) especially pp. 26f, 301f, 312, 314, and 335f.

22. See, e.g., Health Law Project (1972:136-138) and Report of the Medical Advisory Committee on State Prisons (1971).

23. According to the National Advisory Commission on Criminal Justice Standards and Goals (1973:343), fully half of the state maximum security institutions in use in 1970 had been built in the 19th century.

24. See, e.g., Walker and Gordon (1977) and the cases cited therein.

25. Office of Health and Medical Affairs (1975a:80). The 1975 Michigan study also reported the following:

> Birds are a chronic problem in the [housing] unit with at least a dozen sparrows noted flying through the cell block with nests apparent within the cell block area. The windows to the cell block are open during the warmer periods to provide some ventilation for the area and the windows are not screened, creating an entry area for the birds. Since ventilation is limited for the area and at times the windows must be opened, steps should be taken to screen the windows at this time to minimize entry of the birds. On some levels pigeons have nested on exterior sills with noticeable pigeon and other bird droppings apparent. Since pigeon droppings could result in transmission of certain infections, a bird control program is needed for the building as well as all entries to the building being restricted to birds. (Office of Health and Medical Affairs, 1975b:127)

Even in the prison hospital, birds and other animals constituted problems of note:

> [Examples of] inadequate building and equipment maintenance signifying an almost complete lack of preventive or corrective maintenance [include] . . . penetrations in pipe chases, holes in wall or screens, [and] windows lacking screens, all permitting access and propagation of insects, rodents, and birds. Evidence of all this was seen in various locations (Office of Health and Medical Affairs, 1975a:323f).
>
> Pigeon habitation outside windows, particularly the operating room suite, risks the danger of contamination intake from their droppings through window air conditioners as well as loose fitting or open windows (Office of Health and Medical Affairs, 1975a:325).

26. See, e.g., *Gates v. Collier* (1970), *Pugh v. Locke* (1976).

27. In "Medicine behind bars" it was reported that "budgets are grossly inadequate to sustain nutrition" (as noted in Alexander, 1972:21).

28. The 1972 jail census phrased its question regarding meals as: "Is a hot meal usually served at least once a day to inmates?" (Law Enforcement Assistance Administration, 1975: Appendix II, 5). Hence, it is impossible to tell from this census whether one or more than one hot meal per day was the norm.

29. A case in point was a concoction called "grue"—a mishmash of meat, potatoes, eggs, margarine, and syrup—that was routinely served to inmates in isolation in the Arkansas prison system (see *Holt v. Sarver* (1970)).

30. The situation in the 1980s regarding overcrowding was no better and in some cases worse than in the mid-1970s. The number of adults held in state and federal prisons has continued to rise every year since 1975, as has the housing of state and federal prisoners in county jails (see Potter, 1980:25 and Bureau of Justice Statistics, 1989). Furthermore, the National Prison Project (1990) of the American Civil Liberties Union reported that as of January 1989, 43 states (plus the District of Columbia, Puerto Rico, and the

Virgin Islands) were operating under court orders because of violations of the constitutional rights of prisoners due to the conditions of their confinement or overcrowding (reported in one or more institutions in 39 state prison systems), or both.

31. For an excellent summary and critique of psychological research on overcrowding, see Ruback and Innes (1988).

32. See, e.g., McCain, Cox and Paulus (1980).

33. See, e.g., Nacci, Teitelbaum and Prather (1977).

34. See, e.g., American Medical Association and American Public Health Association *Amicus* brief (1981) and the references cited therein.

35. See, e.g., Gaes (1985) and Ruback and Innes (1988) on violence and stress and Anno (1985) on suicide research. While some studies have reported higher suicide rates in overcrowded facilities, it is erroneous to assume that overcrowding increases suicides. In fact, the opposite is more likely to be true because multiple occupancy units reduce the opportunity for successful suicide. Two national surveys 7 years apart reported that the majority of inmates who committed suicide did so while in isolation. See Hayes and Kajdan (1981) and Hayes and Rowan (1988).

36. See, e.g., Abeles, Feibes, Mandell and Girard (1970); King and Geis (1977); and Stead (1978).

37. See, e.g., Walker and Gordon (1980).

38. For example, until the 1980s, few of the Texas Department of Corrections (TDC) prisons had outside yards. It was not uncommon for inmates to serve their whole sentence (whether 2, 10, or 20 years) without going outside (Personal interviews with numerous TDC inmates in 1981).

39. According to a 1977 survey of 163 major correctional institutions, although the vast majority reported offering both educational and vocational programs, only one-third of the inmates were enrolled in the former and less than 20 percent were enrolled in the latter (Hindelang et al., 1981:148).

40. See Van Alstyne (1968).

41. See Goldfarb and Singer (1973:365-366).

42. See Zalman (1972:185-189).

43. See Goldfarb and Singer (1973:371).

44. South Carolina Department of Corrections (1972:148). See also, *Cates v. Ciccone* (1970), *Coppinger v. Townsend* (1968), *Willis v. White* (1970).

45. The Walnut Street Jail in Philadelphia usually is cited as the first American correctional facility, although Durham (1989) makes a strong case for other predecessors.

46. For an excellent historical discussion of the use of prisons in America, see Rothman (1971). See also Eriksson (1976). See Ignatieff (1978) for a historical review of the use of the penitentiary in England.

47. During the 1970s, the concept of rehabilitation of offenders began to lose favor based on several studies that examined the effectiveness of correctional treatment. For different sides of the debate, see, e.g., Adams (1974), Bailey (1971), Carlson (1978), Fogel (1975), Frank (1979), Hawkins (1976), Lipton, Martinson and Wilks (1975), Martinson (1974), McKelvey (1977), Messinger (1977), Morris (1974), Palmer (1975), Riley and Rose (1980), Robinson and Smith (1971), Ross and McKay (1979), Von Hirsch (1976) and Wilkins (1975).

48. See Berk and Rossi (1977), Holloway (1980), and Wright (1973) for discussions of the politics of punishment (i.e., who goes to prison and why).

49. See Zald (1968).

50. See Sykes and Messinger (1971).

51. See Goldsmith (1975:19-21).

52. The overwhelming majority of nurses and nurse practitioners are women. Furthermore, the number of women physicians is increasing steadily, and women are represented in all other health professions. Aside from the illegality of such a policy, Brecher and Della

Penna noted the absurdity of refusing to hire women as follows:

> In an era when securing competent health care personnel is exceedingly difficult, no correctional institution should deliberately hamper its own recruitment efforts by rejecting on principle one half of the human species. Women bring to a correctional health care service a humanizing influence, which it urgently needs. If a correctional health care facility is in fact unsafe for female personnel, it is probably unsafe for male personnel as well, and steps should be promptly taken to make it safe for personnel of both sexes. (1975:56)

53. It should be acknowledged that many correctional physicians would disagree with this assessment. They like the diagnostic challenge that correctional medicine presents and state that they encounter more pathology in prison than they would in private practice.

54. See Brecher and Della Penna (1975:71).

55. The passage of Medicare and Medicaid legislation and the number of bills pending in Congress on national health insurance were a reflection of this trend during the 1960s and 1970s.

56. See, e.g., Attica (1972:251-257), Sykes (1958), McGraw and McGraw (1954), and Anno (1972).

57. Personal interview, November 15, 1972, as noted in Anno (1972).

58. See Hawkins (1976:42) and the authors cited therein.

59. See, e.g., National Advisory Commission on Criminal Justice Standards and Goals (1973:37).

60. Although by 1970 few studies documented the incidence of communicable diseases among correctional populations, available medical evidence suggested that certain types of offenders were more likely to have communicable diseases than others (e.g., hepatitis among drug addicts and venereal disease among prostitutes and homosexuals). Furthermore, these same individuals were less likely to have received prior medical care. These assumptions were borne out by later studies (see, e.g., Goldsmith (1975), Anno (1977 and 1978), Jones (1976), and King and Desai (1979)).

61. According to data from a 1983 survey with responses from 30 states, the mean time served in prison was 20.5 months and the median was 13 months. Thus, even those convicted of felonies returned to their communities in less than 2 years (Jamieson and Flanagan, 1987:410).

62. In his 1978 article, Stead reported evidence not only of transmission of tuberculosis within Arkansas prisons, but also of transmission to the community. A former inmate infected his wife and two children, one of whom later died.

63. See Kurtzberg, Safer and Mandell (1969).

64. A few jurisdictions deserve credit for taking early and definitive steps forward without any prompting by the courts, achieving significant and comprehensive improvements in their prison health care services during the late 1970s. The Michigan Department of Corrections (DOC) is one example. Central among such innovations introduced in Michigan in 1975 was a departmental reorganization conferring significant autonomy to a newly created Office of Health Care, whose director reported to the administrator of the DOC and supervised all institutional health care staff and resources. Unfortunately, a few years later, efforts to expand these improvements, especially with respect to mental health services, were deterred by hard economic times. Subsequently, however, a federal suit was introduced that resulted in a consent agreement and provided the leverage to move forward with further necessary improvements.

65. See Newman et al. (1976).

66. See U.S. General Accounting Office (1976).

67. Numerous evaluation studies were conducted by Anno and by Anno and Lang during the course of the program's funding. For a brief summary of these evaluation results, see Anno (1982).

68. Unfortunately, the Correctional Health Care Program manuals are no longer in print.

69. For more information on the Correctional Health Care Program grant, see Lindenauer and Harness (1981).

70. In discussing the United Nations attempt to set standards for correctional practices, the National Advisory Commission on Criminal Justice Standards and Goals noted that "usually they are broad, idealistic and ignored." (1973:356)

71. The first jails were surveyed for accreditation under American Medical Association standards in August 1977, and 16 were awarded this distinction.

72. The impetus for health care accreditation in the prisons in both Georgia and Texas was at least partially attributable to Vincent M. Nathan, an attorney who served as the special master in the *Guthrie v. Evans* (1987) and *Ruiz v. Estelle* (1980) cases.

73. The American Correctional Association also had a Law Enforcement Assistance Administration grant to develop standards and an accreditation program, and because it and the American Medical Association grant had the same project monitor (Nick Pappas), some coordination of efforts was achieved.

74. The *Ruiz v. Estelle* (1980, 1982, 1983) case in Texas is a prime example. Originally filed in 1972, it was still ongoing in 1999. Besides the hundreds of millions of dollars spent in court-ordered reforms, it has cost the state millions in attorneys' fees (which it was required to pay for both sides) and millions to pay for the services of the court-appointed master and his monitors. The *Costello v. Wainwright* (1975) case in Florida and the *Duran v. Anaya* (1986) case in New Mexico have had similar longevity.

75. Personal communication, Herbert A. Rosefield, EdD, CCHP, President of American Correctional Health Services Association, August 1999.

76. Only a handful of acute care hospitals serve prisoners exclusively. The federal prison system has hospitals accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) at its facilities in Springfield, Missouri, and Rochester, Minnesota, and the Texas Department of Criminal Justice hospital in Galveston, Texas, also is JCAHO-accredited. There may be other examples as well, but not many.

77. Personal communication, Paula Hancock, Executive Director of Society of Correctional Physicians, September 1999.

78. The National Commission on Correctional Health Care (NCCHC) is a not-for-profit 501(c)3 organization, whose board of directors includes individuals named by the following professional associations: American Academy of Child and Adolescent Psychiatry, American Academy of Pediatrics, American Academy of Physician Assistants, American Academy of Psychiatry and the Law, American Association of Physician Specialists, American Association of Public Health Physicians, American Bar Association, American College of Emergency Physicians, American College of Healthcare Executives, American College of Neuropsychiatrists, American College of Physicians, American Correctional Health Services Association, American Counseling Association, American Dental Association, American Diabetes Association, American Dietetic Association, American Jail Association, American Medical Association, American Nurses Association, American Osteopathic Association, American Pharmaceutical Association, American Psychiatric Association, American Psychological Association, American Public Health Association, American Society of Addiction Medicine, John Howard Association, National Association of Counties, National Association of County and City Health Officials, National District Attorneys Association, National Juvenile Detention Association, National Medical Association, National Sheriffs' Association, Society for Adolescent Medicine, and Society of Correctional Physicians. For further information about NCCHC, see appendix M.

79. The founder of the American Medical Association's Jail Program, Bernard P. Harrison, JD, also was the founder of the National Commission on Correctional Health Care (NCCHC). When the Jail Program terminated in November 1981, Mr. Harrison obtained

a 2-year grant from the Robert Wood Johnson Foundation to explore the viability of continuing a national effort to improve correctional health care. That grant resulted in the formation of NCCHC as a separate corporate entity and was the realization of an idea conceived a decade earlier (see Harrison (1973)).

80. The standards originally developed by the American Medical Association were adopted by National Commission on Correctional Health Care (NCCHC) and revised as follows: Standards for Health Services in Juvenile Confinement Facilities (1984); Standards for Health Services in Jails (1987a); and Standards for Health Services in Prisons (1987b). NCCHC revises its standards every 3 to 5 years. The current edition of the NCCHC jail standards was published in 1996, the one for prisons was published in 1997, and the one for juvenile facilities was published in 1999.

81. Personal communication, Paula Hancock, National Commission on Correctional Health Care Director of Professional Services, July 1999.

82. Reform of prison health care was delayed so long, in large part, because what transpired "behind the walls" was hidden from public scrutiny. It is a welcome sign that many prison systems are "opening their doors," either voluntarily or through court directive, and are seeking relevant licensure, regulation, or accreditation of their health care services through appropriate state and other outside agencies.

REFERENCES

Articles and Books

Abeles, Hans, Henry Feibes, Elaine Mandel and Josephine A. Girard

1970 "The large city prison—A reservoir of tuberculosis." 101 American Review of Respiratory Disease 706-709.

Adams, Stuart

1974 "Measurement of effectiveness and efficiency in corrections." Pp. 1021-1049 in Daniel Glaser (Ed.), Handbook of Criminology. Chicago: Rand McNally.

Alexander, Susan

1972 "The captive patient: The treatment of health problems in American prisons." 6 Clearinghouse Review 1:16-27.

American Bar Association

1974a Medical and Health Care in Jails, Prisons and Other Correctional Facilities—A Compilation of Standards and Materials (third edition). Washington, DC: Commission on Correctional Facilities and Services.

1974b Survey and Handbook on State Standards and Inspection Legislation for Jails and Juvenile Detention Facilities (third edition). Washington, DC.

American Correctional Association

1966 Manual of Correctional Standards (third edition). College Park, MD.

1977 Manual of Standards for Adult Correctional Institutions. Washington, DC: Commission on Accreditation for Corrections.

1981 Manual of Standards for Adult Correctional Institutions (second edition). Washington, DC: Commission on Accreditation for Corrections.

American Medical Association

1848 The Transactions of the American Medical Association. Chicago (May).

1930 Minutes, House of Delegates. Chicago (June).

1940 Minutes, House of Delegates. Chicago (June).

1952 Minutes, House of Delegates. Chicago (December).

1973 Medical Care in U.S. Jails—A 1972 American Medical Association Survey. Chicago.

1974 "Proposal for a pilot program to improve medical care and health services in correctional institutions." Chicago. Unpublished.

1977 Survey Questionnaire for the Accreditation of Medical Care and Health Services in Jails. Chicago.

1978 Standards for the Accreditation of Medical Care and Health Services in Jails (revised edition). Chicago.

1979a Standards for Health Services in Jails. Chicago.

1979b Standards for Health Services in Juvenile Correctional Facilities. Chicago.

1979c Standards for Health Services in Prisons. Chicago.

1981 Standards for Health Services in Jails (revised edition). Chicago.

American Medical Association and American Public Health Association

1981 *Amicus curiae* brief before the U.S. Supreme Court, *Rhodes v. Chapman,* 452 U.S. 337.

American Public Health Association

1976 Standards for Health Services in Correctional Institutions. Washington, DC.

Anno, B. Jaye

1972 "Prison riots: Notes on causes, prevention and cure." Paper presented at John Jay College of Criminal Justice, New York, NY. Unpublished.

1977 Analysis of Inmate/Patient Profile Data. Washington, DC: Blackstone Associates, Inc.

1978 Analysis of Inmate/Patient Profile Data, Year Two. Silver Spring, MD: B. Jaye Anno Associates.

1981 Health Care in Jails: An Evaluation of a Reform. Dissertation submitted to the faculty of the Graduate School of the University of Maryland, College Park, MD.

1982 "The role of organized medicine in correctional health care." 247 Journal of the American Medical Association 21:2923-2925.

1985 "Patterns of suicide in the Texas Department of Corrections 1980-1985." 5 Journal of Prison and Jail Health 2:82-93.

1989 "Prison health care: The state of the states." Pp. 39-47 in the December 1, 1989, Conference on Issues in Corrections, A Record and Proceedings on Medical Issues. Washington, DC: Federal Bureau of Prisons.

1991 Prison Health Care: Guidelines for the Management of an Adequate Delivery System. Chicago: National Commission on Correctional Health Care.

Bailey, Walter C.

1971 "Correctional outcome: An evaluation of 100 reports." Pp. 187-195 in Leon Radzinowicz and Marvin E. Wolfgang (Eds.), The Criminal in Confinement. New York: Basic Books, Inc.

Baker, Joel W., Quin B. DeMarsh and Rory Laughery

1971 Review of the Quality of Health Care in the State Penal Institutions. Pp. 142oo-142uu in the American Bar Association's Medical and Health Care in Jails, Prisons, and Other Correctional Facilities—A Compilation of Standards and Materials. Washington, DC. (1974).

Berk, Richard A., and Peter H. Rossi

1977 Prison Reform and State Elites. Cambridge, MA: Ballinger Publishing Company.

Brecher, Edward M., and Richard D. Della Penna

1975 Health Care in Correctional Institutions. Washington, DC: U.S. Department of Justice, Law Enforcement Assistance Administration.

Bureau of Justice Statistics

1989 Correctional Populations in the United States, 1987. Washington, DC: U.S. Department of Justice.

Burrow, James G.

1963 AMA: Voice of American Medicine. Baltimore: The Johns Hopkins University Press.

Carlson, Norman A.
1978 "Towards a balanced mission for corrections." 40 American Journal of Corrections 1:13, 28.

Clark, Ramsey
1971 Crime in America. New York: Pocket Books.

Dubler, Nancy N. (Ed.)
1986 Standards for Health Services in Correctional Institutions (second edition). Washington, DC: American Public Health Association.

Durham III, Alexis M.
1989 "Newgate of Connecticut: Origins and early days of an early American prison." 6 Justice Quarterly 1:89-116.

Eriksson, Torsten
1976 The Reformers: An Historical Survey of Pioneer Experiments in the Treatment of Criminals. New York: Elsevier Publishing Company.

Fogel, David
1975 "We Are the Living Proof": The Justice Model for Corrections. Cincinnati: The W.H. Anderson Company.

Frank, Benjamin
1979 "The American prison: The end of an era." 43 Federal Probation 3:3-9.

Gaes, Gerald G.
1985 "The effects of overcrowding in prison." Pp. 95-146 in Michael Tonry and Norval Morris (Eds.), Crime and Justice: An Annual Review of Research. Chicago: University of Chicago Press.

Gettinger, Stephen
1976 "U.S. prison population hits all-time high." 2 Corrections Magazine 3:9-20.

Goffman, Erving
1961 Asylums: Essays on the Social Situation of Mental Patients and Other Inmates. Garden City, New York: Doubleday and Company, Inc., Anchor Books.

Goldfarb, Ronald L., and Linda R. Singer
1973 After Conviction. New York: Simon and Schuster.

Goldsmith, Seth B.
1975 Prison Health: Travesty of Justice. New York: Prodist Publications.

Harrison, Bernard P.
1973 "A plan to improve health care in our jails." Pp. 50-52 in Proceedings: National Medicolegal Symposium. Las Vegas (March 24).

Hawkins, Gordon
1976 The Prison: Policy and Practice. Chicago: The University of Chicago Press.

Hayes, Lindsay M., and Barbara Kajdan
1981 "And Darkness Closes in . . .": National Study of Jail Suicides. Washington, DC: National Center on Institutions and Alternatives.

Hayes, Lindsay M., and Joseph R. Rowan
1988 National Study of Jail Suicides: Seven Years Later. Alexandria, VA: National Center on Institutions and Alternatives.

Health Law Project
1972 "Health care and conditions in Pennsylvania's state prisons." Philadelphia: University of Pennsylvania Law School. Unpublished.

Hindelang, Michael J., Michael R. Gottfredson and Timothy J. Flanagan (Eds.)
1981 Sourcebook of Criminal Justice Statistics, 1980. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Hirschkop, Philip J.
1972 "The rights of prisoners." Pp. 451-468 in Norman Dorsen (Ed.), The Rights of Americans. New York: Vintage Books.

(Holloway), Louis X.
1980 "Prison abolition or destruction is a must!" Pp. 479-482 in Ira P. Robbins (Ed.), Prisoners' Rights Sourcebook: Theory, Litigation, Practice, Volume II. New York: Clark Boardman Company, Ltd.

Ignatieff, Michael
1978 A Just Measure of Pain: The Penitentiary in the Industrial Revolution, 1750-1850. New York: Columbia University Press.

Jamieson, Katherine M., and Timothy J. Flanagan (Eds.)
1987 Sourcebook of Criminal Justice Statistics, 1986. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Joint Commission on Correctional Manpower and Training
1969 Manpower and Training in Correctional Institutions. Washington, DC.

1970 Perspectives on Correctional Manpower and Training. Washington, DC.

Jones, David A.
1976 The Health Risks of Imprisonment. Lexington, MA: Lexington Books, D.C. Heath and Company.

Kentucky Public Health Association
1974 "The captive patient: Prison health care." Pp. 142i-142z in the American Bar Association's Medical and Health Care in Jails, Prisons, and Other Correctional Facilities—A Compilation of Standards and Materials. Washington, DC.

King, Lambert N., and Bindu Desai
1979 "An Epilepsy Program for Correctional Institutions." Pp. 1-14 in Management of Common Medical Problems in Correctional Institutions: Epilepsy and Tuberculosis. Chicago: National Commission on Correctional Health Care.

King, Lambert N., and George Geis
1977 "Tuberculosis transmission in a large urban jail." 237 Journal of the American Medical Association 8:791-792.

Kurtzberg, Richard, Howard Safer and Wallace Mandell
1969 "Plastic surgery in corrections." 33 Federal Probation 3:44-47.

Law Enforcement Assistance Administration
1971 1970 National Jail Census. Washington, DC: U.S. Department of Justice.

1973 Local Jails: A Report Presenting Data for Individual County and City Jails from the 1970 National Jail Census. Washington, DC: U.S. Department of Justice.

1974 "Survey of inmates of local jails 1972: Advance report." Washington, DC: U.S. Department of Justice.

1975 The Nation's Jails. Washington, DC: U.S. Department of Justice.

Lindenauer, Marilyn R., and Jay K. Harness
1981 "Care as part of the cure: An historical overview of correctional health care." 1 Journal of Prison Health 1:56-66.

Lipton, Douglas, Robert Martinson and Judith Wilks
1975 The Effectiveness of Correctional Treatment: A Survey of Evaluation Studies. New York: Praeger.

Martinson, Robert
1974 "What works? Questions and answers about prison reform." 35 Public Interest 22-54.

McCain, Garvin, Verne Cox and Paul B. Paulus
1980 The Effect of Prison overcrowding on Inmate Behavior. Washington, DC: U.S. Department of Justice, National Institute of Justice.

McGraw, Peg, and Walter McGraw
1954 Assignment: Prison Riots. New York: Henry Holt and Company.

McKelvey, Blake
1977 American Prisons: A History of Good Intentions. Montclair, NJ: Patterson Smith.

Medical Advisory Committee on State Prisons
1971 "Report of the Medical Advisory Committee on State Prisons." Pp. 89-104 in the American Bar Association's Medical and Health Care

in Jails, Prisons, and Other Correctional Facilities—A Compilation of Standards and Materials. Washington, DC (1974).

Medical and Chirurgical Faculty of the State of Maryland

1973 Report of the Ad Hoc Committee on Medical Care in State Penal Institutions. Pp. 142aa-142nn in the American Bar Association's Medical and Health Care in Jails, Prisons, and Other Correctional Facilities—A Compilation of Standards and Materials. Washington, DC.

"Medicine behind bars: Hostility, horror and the Hippocratic oath."

1971 12 Medical World News 23:26-29, 31, 34-35.

Menninger, Karl

1969 The Crime of Punishment. New York: Viking Press.

Messinger, Sheldon L.

1977 "The future of punishment." Pp. 43-44 in Crime and Justice in America. Del Mar, CA: Publisher's, Inc.

Morris, Norval

1974 The Future of Imprisonment. Chicago: The University of Chicago Press.

Mullen, Joan, Kenneth Carlson and Bradford Smith

1980 American Prisons and Jails, Volume I: Summary of Findings and Policy Implications of a National Survey. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Mullen, Joan, and Bradford Smith

1980 American Prisons and Jails, Volume III: Conditions and Costs of Confinement. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Nacci, Peter L., Hugh E. Teitelbaum and Jerry Prather

1977 "Population density and inmate misconduct rates in the federal prison system." 41 Federal Probation 2:26-31.

Nathan, Vincent M.

1985 "Guest editorial." 5 Journal of Prison and Jail Health 1:3-12.

National Advisory Commission on Criminal Justice Standards and Goals

1973 Corrections. Washington, DC: U.S. Department of Justice.

National Commission on Correctional Health Care

1984 Standards for Health Services in Juvenile Confinement Facilities. Chicago.

1987a Standards for Health Services in Jails. Chicago.

1987b Standards for Health Services in Prisons. Chicago.

1996 Standards for Health Services in Jails. Chicago.

1997 Standards for Health Services in Prisons. Chicago.

1999 Standards for Health Services in Juvenile Detention and Confinement Facilities. Chicago.

National Prison Project

1990 "Status report: State prisons and the courts." Journal of the National Prison Project 22:7-8, 14-17, 20.

1995 "Status report: State prisons and the courts." Washington, DC.

National Sheriffs' Association

1974a Inmates' Legal Rights. Washington, DC.

1974b Jail Administration. Washington, DC.

1974c Jail Programs. Washington, DC.

1974d Jail Security, Classification and Discipline. Washington, DC.

1974e Sanitation in the Jail. Washington, DC.

New York State Special Commission on Attica

1972 Attica—The Official Report of the New York State Special Commission on Attica. New York: Bantam Books.

Newman, Charles L., Barbara R. Price, Jacqueline B. Sobel, Sheldon Adelberg, Marque Bagshaw and Dean Phillips
1976 Local Jails and Drug Treatment. University Park, PA: College of Human Development, The Pennsylvania State University.

Office of Health and Medical Affairs
1975a Key to Health for a Padlocked Society. Lansing: Michigan Department of Corrections.

1975b Key to Health for a Padlocked Society: A Technical Supplement. Lansing: Michigan Department of Corrections.

Palmer, Ted
1975 "Martinson revisited." 12 Journal of Research in Crime and Delinquency 1:133-152.

Pappas, Nick (Ed.)
1972 The Jail: Its Operation and Management. Washington, DC: U.S. Department of Justice, Federal Bureau of Prisons.

Potter, Joan
1980 "Annual population survey: Growth slows, at least for now." 6 Corrections Magazine 2:25-30.

The President's Commission on Law Enforcement and Administration of Justice
1967a The Challenge of Crime in a Free Society. Washington, DC: U.S. Department of Justice, Law Enforcement Assistance Administration.

1967b Task Force Report: Drunkenness. Washington, DC: U.S. Department of Justice, Law Enforcement Assistance Administration.

1967c Task Force Report: Narcotics and Drugs. Washington, DC: U.S. Department of Justice, Law Enforcement Assistance Administration.

Rector, Frank L.
1929 Health and Medical Service in American Prisons and Reformatories. New York: National Society of Penal Information, Inc.

Riley, Pamela J., and Vici McNickle Rose
1980 "Public vs. elite opinion on correctional reform: Implications for social policy." 8 Journal of Criminal Justice 6:345-356.

Robinson, James O., and Gerald Smith
1971 "The effectiveness of correctional programs." 17 Crime and Delinquency 67-80.

Ross, Robert R., and H. Bryan McKay
1979 "Behavioral approaches to treatment in corrections: Requiem for a panacea." Pp. 694-710 in Sheldon R. Messinger and Egon Bittner (Eds.), Criminology Review Yearbook, Volume I. Beverly Hills, CA: Sage Publications, Inc.

Rothman, David J.
1971 The Discovery of the Asylum. Boston: Little, Brown and Company.

Ruback, R. Barry, and Christopher A. Innes
1988 "The relevance and irrelevance of psychological research (the example of prison overcrowding)." 43 American Psychologist 9:683-693.

Shansky, Ronald M.
1989 "Identifying and correcting constitutional violations in correctional settings: The role of physician experts." Paper presented at the annual meeting of the American Public Health Association in Chicago (November).

Shervington, Walter
1974 "Prison, psychiatry and mental health." 4 Psychiatric Annals 3:43, 47-49, 53, 56-57, 60.

South Carolina Department of Corrections
1972 The Emerging Rights of the Confined. Columbia, SC: The Correctional Development Foundation, Inc.

Stead, William W.
1978 "Undetected tuberculosis in prison." 240 Journal of the American Medical Association 23:2544-2547.

Sykes, Gresham M.
1958 The Society of Captives. Princeton, NJ: Princeton University Press.

Sykes, Gresham M., and Sheldon L. Messinger
1971 "Inmate social systems." Pp. 77-85 in Leon Radzinowicz and Marvin E. Wolfgang (Eds.), The Criminal in Confinement. New York: Basic Books, Inc.

Texas Department of Corrections
1974 "Medical student externship program." Huntsville, TX.

U.S. General Accounting Office
1976 Conditions in Local Jails Remain Inadequate Despite Federal Funding for Improvements. Washington, DC: GGD-76-36 (April 5).

Van Alstyne, William W.
1968 "The demise of the right-privilege distinction in constitutional law." 81 Harvard Law Review: 1439-1464.

Von Hirsch, Andrew
1976 Doing Justice: The Choice of Punishments. New York: Hill and Wang.

Walker, Bailus, Jr., and Theodore J. Gordon
1977 "Environmental health needs in correctional institutions." 41 Federal Probation 4:34-38.

1980 "Health and high density confinement in jails and prisons." 44 Federal Probation 1:53-58.

Wilkins, Leslie T.
1975 "Putting 'treatment' on trial." 5 The Hastings Center Report 1:35-36, 39-48.

Woodson, Robert N., and Russell O. Settle, Sr.
1971 The Clinical Services of the Kansas Penal System. The Governor's Committee on Criminal Administration. Pp. 142a-142h in the American Bar Association's Medical and Health Care in Jails, Prisons, and Other Correctional Facilities—A Compilation of Standards and Materials. Washington, DC (August 1974).

Wright, Erik Olin
1973 "Prison reform and radical change." Pp. 313-346 in The Politics of Punishment: A Critical Analysis of Prisons in America. New York: Harper Colophon Books.

Zald, Mayer N.
1968 "Power balance and staff conflict in correctional institutions." Pp. 397-425 in Lawrence E. Hazelring (Ed.), Prison within Society: A Reader in Penology.

Zalman, Marvin
1972 "Prisoners' rights to medical care." 63 Journal of Criminal Law, Criminology and Police Science 2:185-189.

Court Cases

Burks v. Teasdale, 492 F. Supp. 650 (W.D. Mo. 1980).

Cates v. Ciccone, 422 F.2d 926 (8th Cir. 1970).

Cooper v. Pate, 378 U.S. 546 (1964).

Coppinger v. Townsend, 398 F.2d 392 (10th Cir. 1968).

Costello v. Wainwright, 397 F. Supp. 20 (N.D. Fla. 1975) (see note 74).

Duran v. Anaya, 642 F. Supp. 510, 524 (D.N.M. 1986).

Finney v. Arkansas Board of Corrections, 505 F.2d 194 (8th Cir. 1974).

Gates v. Collier, 501 F.2d 1291 (5th Cir. 1970).

Guthrie v. Evans, Civ. A. No. CV3068 (First Report of the Special Master) (S.D. Ga., Savannah Div., 1987).

Haggerty v. Wainwright, 427 F.2d 1137 (5th Cir. 1970).

Holt v. Hutto, 363 F. Supp. 194 (E.D. Ark. 1973).

Holt v. Sarver, 309 F. Supp. 362 (E.D. Ark. 1970).

Hughes v. Turner, 14 Utah 2d 128 (1963).

Krist v. Smith, 309 F. Supp. 497 (S.D. Ga. 1970), *aff'd,* 439 F.2d 146 (5th Cir. 1971).

Lightfoot v. Walker, 486 F. Supp. 504 (S.D. Ill. 1980).

Newman v. Alabama, 349 F. Supp. 285 (M.D. Ala. 1972), *aff'd,* 503 F.2d 1320 (5th Cir. 1974); *cert. denied,* 421 U.S. 948 (1975).

O'Connor v. Donaldson, 422 U.S. 563 (1975).

Price v. Johnson, 364 U.S. 266 (1948).

Pugh v. Locke, 406 F. Supp. 318 (M.D. Ala. 1976).

Rhem v. Malcolm, 507 F.2d 333 (2d Cir. 1974).

Robinson v. California, 370 U.S. 660 (1962).

Ruiz v. Estelle, 503 F. Supp. 1265 (S.D. Tex. 1980), *aff'd in part and rev'd in part,* 679 F.2d 1115 (5th Cir. 1982), *am. in part, vac. in part,* 688 F.2d 266 (5th Cir. 1982), *cert. denied,* 460 U.S. 1042 (1983).

Snow v. Gladden, 338 F.2d 999 (9th Cir. 1964).

Steward v. Henderson, 364 F. Supp. 283 (N.D. Ga. 1973).

Wayne County Jail Inmates v. Lucas, 216 N.W.2d 910 (Mich. 1974).

Willis v. White, 310 F. Supp. 205 (E.D. La. 1970).

Legal Considerations in the Delivery of Health Care Services in Prisons and Jails

Chapter III

Chapter III

Legal Considerations in the Delivery of Health Care Services in Prisons and Jails*

It is but just that the public be required to care for the prisoner, who cannot, by reason of the deprivation of his liberty, care for himself.

Spicer v. Williamson, Supreme Court of North Carolina, 1926

A. Summary

Although early state court decisions such as *Spicer v. Williamson* (1926) paved the way, it took 50 years, until 1976, for the U.S. Supreme Court to rule in *Estelle v. Gamble* that health care for inmates was a right embodied in the eighth amendment to the U.S. Constitution. Today, however, the constitutional obligation of government officials who incarcerate inmates to provide for their medical, psychiatric, and dental care is well established.[1] The 25 years that have passed since *Estelle v. Gamble* (1976) affirmed that prisoners had a right to be free of "deliberate indifference to their serious health care needs" have resulted in the development of both case law and national standards regarding correctional health care.

As the courts have sought to protect inmates from unnecessary physical and mental suffering and restore bodily function where this is possible, three basic rights have emerged: the right to access to care, the right to the care that is ordered, and the right to a professional medical judgment. The failure of correctional officials to honor these rights has resulted in protracted litigation, the awarding of damages and attorneys' fees, and the issuance of injunctions regarding the delivery of health care services.

To provide for constitutional care and protect themselves from litigation, correctional administrators must adopt procedures to protect inmates' basic rights, including a functioning sick call system that uses properly trained health care staff, a means of addressing medical emergencies, a priority system so that those most in need of care receive it first, the development and maintenance of adequate medical records, liaison with outside resources for specialist and hospital care when needed, a system for staff development and training, and an ongoing effort at quality control. Jail and prison administrators and their chief medical officers must develop policies and procedures to meet the special needs of disabled, elderly, and mentally ill inmates as well as those with HIV infection and AIDS and to preserve the confidentiality of medical information.

Because litigation is so expensive, all efforts should be made to achieve voluntary compliance with national standards of care and gain accreditation. Facilities that meet community standards of care are much less likely to face class action or even individual lawsuits.

*This chapter, developed by William J. Rold, JD, CCHP-A, is an update of the chapter in the first edition of this *Guidelines* book. The chapter on legal considerations in the first edition was developed by Jacqueline M. Boney, Nancy Neveloff Dubler, and William J. Rold. Portions of this chapter, reprinted with permission, are taken from an article originally written by Mr. Rold under a contract with the Agency for Health Care Policy and Research of the U.S. Department of Health and Human Services and a chapter written by Mr. Rold in *Clinical Practice in Correctional Medicine* (Puisis, 1998).

B. INTRODUCTION

From 1980 to 1993 in the United States, the number of prison inmates increased by 188 percent (Bureau of Justice Statistics, 1994), and the average daily census of jail inmates rose by more than 200 percent from 1980 to 1990 (Bureau of Justice Statistics, 1991). Between 1990 and 1995, 213 new federal and state prisons were built (*New York Times,* 1997). In 1998, 1 in every 150 Americans was under some degree of criminal justice supervision (Bureau of Justice Statistics, 1999). The more than 1.3 million adults now behind bars in the United States on any given day constitute one of the largest public health challenges in the world (Puisis, 1998), and this dramatic increase in incarceration also raises serious practical questions about societal allocation and distribution of resources to a system filled with people needing medical care that is not inherently designed to treat them (May, 2000).

Drawn largely from disadvantaged segments of society for whom regular health care is often unavailable, ignored, or haphazard, inmates have health care needs more complex than their youthful demographics would suggest. In addition to such chronic diseases as diabetes, hypertension, and asthma, incarcerated patients bring to prisons and jails the ravages of substance abuse, the debilitating effects of AIDS and HIV and hepatitis infection, and the challenge of multiple-drug-resistant tuberculosis.

Inmates also disproportionately require mental health services (*New York Times,* 1999). According to the National Alliance for the Mentally Ill, more than 283,800 people with mental illnesses were incarcerated in American prisons and jails in 1998. This is four times the number of people in state mental hospitals throughout the country (Ditton, 1999). One study found that at least 25 percent of prison inmates were suffering from a significant psychiatric or functional disability that required mental health intervention (Steadman, Fabisiak, Dvoskin, and Holohean, 1987). Moreover, in jails, virtually all estimates of mental disability among inmates exceed those for prison populations (Teplin and Schwartz, 1989).

In addition to the mentally ill, correctional institutions confine inmates drawn from the estimated 3 percent of the U.S. population who are mentally retarded (Ellis and Luckasson, 1985) or developmentally disabled (New York State Commission on Quality of Care for the Mentally Disabled, 1991). Seizure disorder is one of the most common chronic conditions in prisons and jails, where the prevalence of epilepsy may be three times that found in the unincarcerated population (Epilepsy Foundation of America, 1992; King and Young, 1978).

In general, because inmates have little money and no health insurance and are ineligible for welfare, the cost of their health care is borne by the public. Where pressure from increasing numbers of inmates requiring health care faces a growing scarcity of resources appropriated to meet their needs, litigation is a frequent result.

C. INMATE LAWSUITS

Although the perception is widespread that massive numbers of inmates are abusive litigants filing frivolous cases, the data do not support this view. While prisoner filings, especially civil rights suits, have increased substantially during the past 25 years, they have not kept pace with the explosion of civilian filings and actually have grown more slowly than has the number of persons incarcerated (Thomas, 1989). Moreover, the vast majority of inmate filings concern their criminal cases, not their conditions of confinement, and are raised as petitions for habeas corpus. In addition, although some prisoners file multiple court cases, most litigate a single suit (Rold, 1995; Thomas, 1989).

Although inmate lawsuits concerning conditions of confinement, such as health care, are a small part of the volume of federal litigation filed by inmates, substantial damages have been awarded in such cases. In a 2-year summary of lawsuits against 34 state departments of corrections that resulted in settlement or recovery of damages for denial of proper medical care, the awards ranged from $200 to $640,000, with a mean of $133,931 (Contact

Center, Inc., 1985). Attorneys' fees also were awarded in many of these cases.

In addition to individual lawsuits concerning the conditions of confinement of a particular individual, there are class action lawsuits where an entire population of a prison or jail, or even all the inmates in a correctional system, challenge the delivery of services. Such litigation can last for years and cost hundreds of thousands, or even millions, of dollars. At least 40 states plus the District of Columbia, Puerto Rico, and the Virgin Islands were under court order or consent decree in the 1990s to limit population and/or improve conditions in either the entire system or its major facilities (American Civil Liberties Union, 1995; Koren, 1993). This compares with 25 states under court order in 1981 (*Criminal Justice Newsletter,* 1981).

Health care is a primary issue in most class action suits alleging unconstitutional conditions. In many of the jurisdictions where the entire prison system has been under court order or consent decree, the adequacy of health care services was a major focus of the litigation.

Scores of county jails also have been, and continue to be, the subject of class action litigation. The passage of the Prison Litigation Reform Act in 1996 has, to some degree, reduced federal court involvement in prison and jail management, however, as discussed below.

Remedies ordered by the courts in class action cases have included increased funding for staffing, equipment, and services. Time deadlines for provision of care, detailed recordkeeping requirements, and the adoption of quality control and other supervisory mechanisms also have been imposed. Where unconstitutional conditions are the result of antiquated facilities, courts have prompted, and sometimes ordered, the closing of prisons or jails and the construction of new ones.

Commonly, class action lawsuits involve both the court and the attorneys for the inmates in a long-term, continuing effort to monitor compliance with the court's orders or consent decree. Frequently, the court appoints a monitor or special master with full quasi-judicial powers or substantial authority to interpret the judgment or independently order actions to be taken to effectuate compliance. Such appointments have occurred in more than half the jurisdictions involved in major litigation on overcrowding and/or conditions of confinement (Koren, 1993), and they remain in place in at least 16 states currently, affecting more than 100 institutions (Criminal Justice Institute, Inc.,1998:64-65). In the most extreme cases of noncompliance, the court may appoint a receiver to supersede or replace the defendant officials, as occurred, for example, in the past in Alabama and Georgia and recently in the District of Columbia. All of these compliance costs are usually borne by the government.

In short, every jurisdiction is affected by the role of the courts in enforcing the requirement of the eighth amendment that prisoners be free of cruel and unusual punishment. It was not always so.

D. THE EIGHTH AMENDMENT

The antecedents of the law's prohibition of excessive punishment date from the time of the *Magna Carta.* Under the rule of Edward I, however, misdemeanors were still punishable by whipping, mutilation, or removal of a hand or an ear; felonies, by decapitation. Treason carried particularly harsh punishment: as late as 1782, the unfortunate David Tyree was sentenced to be drawn, hanged, castrated, disemboweled, burnt, beheaded, quartered, and then "disposed of where His Majesty shall think fit" (Howell and Howell, 2000:844). In his *Commentaries,* Blackstone wrote that, although some punishments, such as "banishment . . . to the American colonies," did not involve physical injury, most were "mixed with some degree of corporal pain" (Blackstone, 1769:377).

It was in light of this history that the drafters of the American Bill of Rights sought in 1791 to prohibit cruel and unusual punishment. Early interpretations of the eighth amendment forbade torture or wanton

infliction of suffering, but the courts rarely interfered with prison administration. In 1871, for example, the Virginia Supreme Court of Appeals wrote: "[the prisoner] is for the time being a slave, in a condition of penal servitude to the State, and subject to such laws and regulations as the State may choose to prescribe" (*Ruffin v. Commonwealth,* 1871:790). The eighth amendment would lie largely dormant for a century.

E. The Evolution of Judicial Involvement in Correctional Health Care

In the 1960s, the judiciary began to scrutinize conditions in prisons and jails more assiduously and to enforce more strictly the precepts of the eighth amendment.[2] With respect to health care, judges applied the amendment to prohibit not only the infliction of pain and suffering, but also the failure to relieve pain and the failure to restore function. Recognizing that prison and jail inmates are restrained by the arm of the state from securing care on their own, the federal courts became increasingly involved in reviewing complaints from inmates in state and local facilities.

One of the first federal cases concerned conditions in the prisons of Alabama. The evidence revealed serious shortages of staff, equipment, and supplies; the use of inmates to administer treatment, dispense medication, and perform minor surgery; absent or incomplete medical records; and emergency care patients left unattended for extended periods. Individual cases of maggot-infested wounds, unnecessary amputations, and deaths because of medical neglect convinced the court that the practices were so bad that they shocked the conscience of a reasonably civilized people and that the callous indifference was so rampant that inmates were subjected to severe deprivations (*Newman v. Alabama,* 1974).

In the landmark case of *Estelle v. Gamble* (1976), the U.S. Supreme Court affirmed federal court jurisdiction over prison and jail health care systems and ruled that, where constitutional rights are jeopardized, the courts have not only the right but the duty to intervene. According to *Estelle,* the eighth amendment is violated when correctional officials are "deliberately indifferent" to an inmate's serious medical needs.

F. Deliberate Indifference

"Deliberate indifference" constitutes the "unnecessary and wanton infliction of pain" proscribed by the eighth amendment:

> . . . whether the indifference is manifested by prison doctors in their response to the prisoner's needs or by prison guards in intentionally denying or delaying access to medical care or intentionally interfering with the treatment once prescribed. Regardless of how evidenced, deliberate indifference to a prisoner's serious illness or injury states a cause of action. (*Estelle v. Gamble,* 1976:104-105)

In the 25 years since *Estelle v. Gamble,* the notion of deliberate indifference has been articulated in various ways by the courts,[3] but at least three categories have emerged: denied or unreasonably delayed access to a physician for diagnosis and treatment, failure to administer treatment prescribed by a physician, and the denial of professional medical judgment.

The standard of liability under the eighth amendment is relatively narrow. The eighth amendment does not render prison officials or staff liable in federal cases for malpractice or accidents, nor does it resolve professional disputes about the best choice of treatment (*Ramsey v. Ciccone,* 1970).[4] It does require, however, that sufficient resources be made available to protect the three basic rights.

While the constitutional standard does not require that an express intent to inflict pain be shown (*Wilson v. Seiter,* 1991), it does include an inquiry into a defendant's state of mind. A violation of the eighth

amendment requires a subjective showing of deliberate indifference. It is not enough that the defendant should have known or ought to have understood the danger to the inmate. The defendant must know of and disregard a substantial risk (*Farmer v. Brennan,* 1994). Such knowledge, however, can be inferred from the surrounding facts when the failure to respond to a clear risk constitutes recklessness. In *Farmer,* a frail, transsexual inmate was raped by other inmates after placement by prison officials in the general population at a maximum security prison. The Supreme Court found that the obviousness of the risk could establish a defendant's deliberate indifference. In health care, failure to provide access to care, denial of the care that is ordered, or the absence of professional medical judgment in the delivery of medical services will usually satisfy the subjective test of *Farmer* when the unaddressed medical needs are serious.

1. The Right to Access to Care

The right to access to care is fundamental: When access is denied or delayed, the health staff does not know which patients need immediate attention and which patients need care that can wait. Indeed, a "well-monitored and well-run access system is the best way to protect prisoners from unnecessary harm and suffering and, concomitantly, to protect prison officials from liability for denying access to needed medical care" (Winner, 1981:67).

The right to access to care includes access to both emergency and routine care. Institutions of all sizes must have the capacity to cope with emergencies and provide for sick call. Access to specialists and inpatient hospital treatment, where warranted by the patient's condition, also are guaranteed by the eighth amendment. Access to care must be provided for any condition (medical, dental, or psychological) if denial of care may result in pain, continued suffering, deterioration, less likelihood of a favorable outcome, or degeneration (Anno, 1991).

For example, in 1987, a federal court placed a correctional facility under a comprehensive court order after it found a "total breakdown in the administration of [its] dental clinic," resulting in the inmates' "suffering from pain, loss of teeth, discomfort, weight loss, and infection" (*Dean v. Coughlin,* 1985:392). At trial, the prison's dentist testified that it often took him 3 days to see all the patients on 1 day's emergency list and that he was still working on February's emergency list in May. With respect to routine care, the evidence showed that more than 300 requests for appointments had been submitted to the dental clinic during the previous year, but nothing had been done with them. They were kept, unacknowledged, in a gauze box. The court's order required same-day evaluation of emergency requests and routine dental appointments within 1 week (Rold, 1988).

2. The Right to the Care That Is Ordered

Generally, courts assume that care would not have been ordered if it had not been needed. Thus, once a health care professional orders treatment for a serious condition, the courts will protect, as a matter of constitutional law, the patient's right to receive that treatment without undue delay.

Failure to provide ordered care for a serious medical need violates the eighth amendment (*Todaro v. Ward,* 1977). In *Martinez v. Mancusi* (1970), which was cited with approval by the Supreme Court in *Estelle v. Gamble* (1976), a constitutional claim was recognized when a prisoner was refused his prescribed pain killer and his leg surgery was rendered unsuccessful by requiring him to stand despite contrary instructions from his surgeon.

To ensure that the care that is ordered is, in fact, delivered, courts have required the treating physician to specify the time within which a test, examination, specialist consultation, or hospital admission must occur. In turn, once the doctor has determined the appropriate time limits, the court will direct that the order be honored by other medical and correctional staff.

3. The Right to a Professional Medical Judgment

In general, the courts will not determine which of two equally efficacious treatments should be chosen. The adjudication of constitutional claims is not the business of "second guessing" health care professionals. Rather, the courts seek to:

> . . . ensure that decisions concerning the nature and timing of medical care are made by medical personnel, using equipment designed for medical use, in locations conducive to medical functions, and for reasons that are purely medical. (Neisser, 1977:921)

Under *Estelle v. Gamble* (1976), the actual decisions of prison medical personnel are at issue only when they are not medical in nature or are so extreme or abusive that they are completely outside the range of professional medical judgment. For example, in *Williams v. Vincent* (1974), cited with approval by the Supreme Court in *Estelle v. Gamble,* an inmate whose ear had been severed presented himself for medical treatment. The physician's choice of the "easier and less efficacious treatment" of throwing away the prisoner's ear and stitching the stump was attributed to "deliberate indifference" rather than the exercise of professional judgment.[5]

By ensuring that professional judgment is actually exercised, however, the federal courts not only have protected the sphere of discretion surrounding medical practitioners' treatment and diagnostic decisions, but often have enhanced it. At issue in a typical injunctive case are such matters as staffing, physical facilities, transportation, sick call, and followup procedures. When a court orders relief in these areas, it is ensuring that the raw materials from which responsible professional judgment is formed and carried out are available to practitioners.

G. SERIOUS MEDICAL NEEDS

The U.S. Constitution requires that correctional officials provide medical care only for serious medical needs. Generally, a medical need is serious if it "has been diagnosed by a physician as mandating treatment or . . . is so obvious that even a lay person would easily recognize the necessity for a doctor's attention" (*Duran v. Anaya,* 1986:510, 524; *Ramos v. Lamm,* 1980:559, 575). Conditions also are considered to be serious if they "cause pain, discomfort, or threat to good health" (*Dean v. Coughlin,* 1985: 392, 404). A condition need not be life-threatening to be deemed serious, and many treatment plans that are labeled "elective" nevertheless are deemed serious within the meaning of *Estelle v. Gamble*.

In *Delker v. Maass* (1994), a chief medical officer was found to be deliberately indifferent when he adopted a blanket policy of denying surgery for "routine, nonincarcerated, simple small to moderate sized hernia[s]." The court rejected the notion that prison officials may avoid their duty to provide medical treatment "by the simple expediency of labeling such treatment as 'elective'" (p. 1399).

Numerous other examples are found in the case law where inmates have prevailed despite claims that the treatment sought was elective: *Johnson v. Bowers* (1989) for arm surgery, *Fields v. Gander* (1984) for an infected tooth, and *West v. Keve* (1982) for dysfunctional leg veins. As the court elaborated in *Delker v. Maass* (1994:1390, 1400, and note 6):

> Where surgery is elective, prison officials may properly consider the costs and benefits of treatment in determining whether to authorize that surgery, but the words "elective surgery" are not a talisman insulating prison officials from the reach of the eighth amendment. Each case must be evaluated on its own merits. . . .

> The length of the prison sentence is also a valid consideration. In some cases, prison officials may be justified in deferring "elective" treatment for an inmate serving a very brief sentence because the inmate will be able to obtain proper treatment following his release. Conversely, for an inmate serving a long sentence, a decision to defer surgery until after the inmate's release is really a decision to deny treatment.

In general, courts consider three factors in determining whether correctional officials are being deliberately indifferent to serious medical needs: (1) the amenability of the patient's condition to treatment, (2) the consequences to the patient if treatment does not occur, and (3) the likelihood of a favorable outcome. Within this mix, courts also may consider the length of the patient's anticipated incarceration. It is one thing to decline the provision of dentures or an artificial limb to an inmate with a 3-day jail sentence. It is quite another to withhold such adjuncts to a patient serving 20 years to life (Rold, 1997).

H. The Constitutional Class Action Challenge

Class action challenges to correctional health care delivery are put together in two ways, either of which is independently sufficient (*Todaro v. Ward,* 1977). First, numerous examples of individual cases of deliberate indifference closely related in time can establish a pattern of unconstitutional care. Alternatively, evidence of systemic deficiencies in staffing, facilities, recordkeeping, supervision, and procedures can show that unnecessary suffering is inevitable unless the deficiencies are remedied (*Bishop v. Stoneman,* 1974).

The best preventive medicine against a successful class action challenge is adequate funding, sound procedures, adherence to standards, staff training, and quality control. Where these safeguards are in place, numerous examples of inmate suffering and systemic deficiencies will be much less likely to occur.

I. Components of a Constitutional System

A constitutional system of health care delivery combines a number of critical elements, each of which serves to reinforce the others. Among these are the following:

1. A Communications and Sick Call System

Prisoners must be permitted to communicate their health care needs to the medical staff, and sick call must be available to all inmates regardless of security classification (*Hoptowit v. Ray,* 1982). National standards vary regarding the frequency of sick call, generally according to the size of the facility.[6] All standards agree, however, that inmates in segregation must be assessed upon admission and visited daily.

Adequate sick call requires a professional evaluation by trained personnel. Uniformed or lay staff may convey sick call requests, but they may not decide which prisoners will receive medical attention (*Boswell v. Sherburne County,* 1988; *Kelley v. McGinnis,* 1990; *Mitchell v. Aluisi,* 1989).

In one system of sick call screening found unconstitutional, nurses allotted inmates 15 to 20 seconds to present their complaints through a cashier's window. No physical examination was performed, and only cryptic notes (e.g., "stomach," "headache") were made. Later, the patients were assigned priorities on the basis of the notes. The court ordered the maintenance of detailed records and the individual examination of each patient by a nurse trained in triage (*Todaro v. Ward,* 1977). Indeed, the smooth functioning of a priority system in any facility is dependent on adequate examination and triage.

2. A Priority System

A correctional health system with generous funding can simply let the patients' demands determine ordered care. A system with scarcer resources, however, must set priorities calculated to relieve pain and restore function in accordance with the seriousness of the patients' conditions. A priority system for care is not only more equitable for the patients (see Conte, 1983) but also parallels the concerns of the courts in evaluating the constitutional sufficiency of systems under review.

When assessing the adequacy of a priority system, the courts recognize that no correctional clinic can provide complete state-of-the-art health care or the full range of health services available to unincarcerated persons. Decisions about the scope of care necessarily turn, in part, on the length of the inmates' incarceration, and a scaled-down program sufficient to relieve suffering in a jail may be inappropriate in a maximum security prison. Where such issues are resolved in accordance with a reasonable priority system, however, courts are likely to defer to it in determining what care is appropriate.

3. Personnel

Most cases in which courts have found constitutional violations of inmates' rights to health care were fostered by the demands made on an overburdened staff coping with too few resources. No amount of concern or good faith effort by medical staff can overcome inadequate financing, and it is perhaps in this area that the courts have made their greatest contribution by prompting and, if necessary, forcing governmental decisionmakers to appropriate the funds necessary to maintain humane health care. Although most courts are reluctant to mandate staffing and equipment levels (preferring instead to set constitutional standards and leave fashioning the means to achieve them to the institution), the courts will impose specific requirements when circumstances warrant.

A large institution, such as a state prison, may be required to have full-time health professionals, including physicians, on site; the largest facilities may need 24-hour coverage (*Ramos v. Lamm,* 1980). Even the smallest county jails, however, must have a means (such as an oncall system and officers trained in first aid) to deal with medical emergencies when no health care staff are present (*Green v. Carlson,* 1978).

The use of unqualified "medical technicians" and inmate assistants to provide care can pose a problem of constitutional magnitude. Use of untrained or unqualified staff to meet shortages in licensed physicians, nurses, and other personnel has led to findings of unconstitutional care in Illinois, Louisiana, Oklahoma, Texas, and other states.

The National Commission on Correctional Health Care (NCCHC) administers the Certified Correctional Health Professional (CCHP) program, which offers certification to health care employees in corrections and others, based on credentials, experience, and a written examination. More than 1,500 correctional nurses, doctors, dentists, and others have become certified as a result of this program.

4. Contracting Out

Many facilities have turned to contractual providers in their search for personnel. Some state systems have contracted out their entire health care delivery system. The use of independent contractors, however, does not relieve the institution (or the contractors) of legal responsibility for health care. In *West v. Atkins* (1988), the Supreme Court ruled that independent contractors or companies that provide medical care to inmates are held to the same eighth amendment standards as state civil service employees. However the employees are supplied, staffing health care delivery systems with sufficient and qualified personnel is key to a successful operation.

5. Medical Records

Maintenance of adequate medical records is "a necessity" (*Johnson-El v. Schoemehl,* 1989), and numerous courts have condemned the failure to maintain an organized and complete system of

health care records. At a minimum, records should be kept separately for each patient and include a medical history and problem list; notations of patient complaints; treatment progress notes; and laboratory, x-ray, and specialists' findings. Proper medical records not only promote continuity of care and protect the health and safety of the inmate population but also provide correctional administrators with evidence of the course of treatment when individual inmates sue them asserting that care was not provided (Kay, 1991).

6. "Outside" Care

No correctional facility can provide complete medical care within its confines. If an inmate requires a specialist evaluation, a sophisticated diagnostic test, or inpatient care that is not available in the prison or jail system, the failure to provide it may constitute deliberate indifference. In such cases, security and administrative considerations concerning transportation and cost must yield to medical determinations when a particular patient is in need of prompt treatment (*Ancata v. Prison Health Services,* 1985; *United States v. Michigan,* 1987).

7. Facilities and Resources

Space and supplies must be adequate to meet the health care needs of the institutional population (*Langley v. Coughlin,* 1989). Dangerous or unsanitary physical conditions, inadequate or defective space or equipment, or unavailability of medications or other items such as eyeglasses, dentures, braces, prostheses, or special diets can lead to violations of the constitution.

Federal courts ordered officials in Louisiana to build a new infirmary in *Hamilton v. Landrieu* (1972), and New York City was compelled to construct appropriate facilities for respiratory isolation of tuberculosis patients on Rikers Island (*Vega v. Sielaff,* 1992). Once constitutional violations are shown, courts have "broad discretion to frame equitable remedies" to alleviate them (*Todaro v. Ward,* 1977).

8. Quality Assurance, Accreditation, and Compliance With Standards

Quality assurance has been defined as a "process of ongoing monitoring and evaluation to assess the adequacy and appropriateness of the care provided and to institute corrective action as needed" (Anno, 1991). It is an essential aspect of any well-run system, and in its absence, courts often have imposed external audits or appointed monitors over health care services as part of a remedy for constitutional violations and to ensure compliance with court orders (see Byland (1983) and *Lightfoot v. Walker* (1980)).

In the free world, accreditation of health care facilities is encouraged by at least three factors: participation in government programs such as Medicare, eligibility for intern and resident training, and lower liability insurance premiums. None of these community incentives directly affects corrections; in fact, the development of national standards relating to correctional health care did not occur until 1976 (see American Public Health Association (APHA) (1976)).[7] The first accreditation of a prison health care system (at the Georgia State Prison in Reidsville) did not occur until 1982 (Anno, 1991).

Currently, four national bodies offer accreditation to correctional facilities: the American Correctional Association (ACA), which accredits the entire operation of an institution, including health care services; the Joint Commission on Accreditation of Healthcare Organizations, which has accredited a handful of health care facilities serving prisoners exclusively; NCCHC, an interdisciplinary organization focusing exclusively on health care delivery in corrections that has accredited several hundred prisons, jails, and juvenile facilities in the United States; and the Commission for Accreditation of Law Enforcement Agencies, whose primary focus is not health care. Unlike the standards of the other bodies, the NCCHC standards address only health care as delivered in correctional facilities.[8]

Much of the impetus for compliance with national standards and the move toward accreditation has come from litigation. According to Vincent M. Nathan, who has served as a special master for federal district courts in Georgia, New Mexico, Ohio, Puerto Rico, and Texas:

> [T]he standards of medical care in jails and prisons . . . have, to a large extent, translated the vague legal rulings of the courts into practical and viable tests for measuring the legal adequacy of institutional health care programs. (Nathan, 1985:1)

Litigation has been a factor in achieving accreditation, for example, in Georgia and Texas, largely due to Mr. Nathan's efforts (see *Guthrie v. Evans,* 1987, and *Ruiz v. Estelle,* 1980).

Although it is not determinative of the outcome of litigation,[9] compliance with national standards and accreditation frequently are regarded favorably by the courts. In the Arizona prison litigation (which ultimately reached the Supreme Court on the unrelated issue of inmates' claims of denial of access to the courts), experts for both sides relied on NCCHC standards in their testimony. The defendant prison officials' expert stated that "[t]here are no correctional health care standards that are more stringent or more difficult to fulfill than the National Commission on Correctional Health Care standards."[10] Facility accreditation also has been noted by courts in granting summary judgment to defendants in individual prisoner damages cases[11] and in upholding a fee-for-service system that charged inmates for health services.[12] On the other hand, achieving accreditation did not result in the ending of federal court jurisdiction over the prison health care systems in Tennessee (ACA accreditation) or Puerto Rico (NCCHC accreditation that was rescinded).[13]

Faced with court allegations of unconstitutional care, however, voluntary compliance with national standards and movement toward accreditation are not only hedges against liability but also sound investments in quality of care. The self-review process required in preparing for an accreditation survey is beneficial, as the institution assesses its own health care delivery. The cost of accreditation, generally a few thousand dollars, is a fraction of the resource drain that occurs with litigation.

J. Special Needs and Populations

Reflecting society, prisons and jails have many inmates who have special health care needs. Medical and mental health services must adjust to provide the individualized care the patients require.

1. Disabled Inmates

Unusual accommodations may be necessary to accomplish the provision of minimal conditions of incarceration for handicapped inmates; the need for unusual accommodations, however, does not absolve correctional officials of their duty toward these inmates (*Ruiz v. Estelle,* 1980). Thus, inmates who cannot walk are entitled to wheelchairs or necessary prostheses and braces, and patients with impaired hearing or vision are entitled to assistance (*Cummings v. Roberts,* 1980; *Johnson v. Hardin County,* 1990).

Protections afforded disabled people were expanded by Congress in the Americans with Disabilities Act, 42 U.S.C. Section 12101, *et seq.* (the ADA). In general, the ADA protects Americans from discrimination on the basis of disability and requires that accommodations be made for the disabled, including modification of architectural, communication, and transportation barriers and provision for auxiliary aids and services (see Tucker (1989)). The ADA also applies to correctional employees and to visitors to correctional facilities, both of whom have protection against discrimination and the right reasonably to be accommodated.

In 1998, the U.S. Supreme Court ruled that nothing in the ADA exempted correctional facilities from its reach and applied the ADA to the claim of a hypertensive inmate attempting enrollment in a prison boot camp if a reasonable arrangement could be made to accommodate him (*Pennsylvania Department of Corrections v. Yeskey,* 1998). In 2001, however, the

Supreme Court found that Congress had exceeded its authority in compelling *state* governments to pay damages for failure to comply with the ADA (*Board of Trustees of the University of Alabama v. Garrett,* 2001). Thus, under current law, state prisons can be enjoined to comply with the ADA, but they cannot be forced to pay damages because of the sovereign immunity of state governments and the 11th amendment's prohibition against suits against states. County and local jails, federal detention facilities, and private institutions are not exempt from damages claims. Even state facilities, however, must conform to the minimum requirements of the eighth amendment to refrain from deliberate indifference to the serious medical needs of the disabled.[14]

2. Mental Health Care

Denial of adequate mental health care for serious mental health needs may violate the eighth amendment under the same deliberate indifference standard applied to other medical needs. A mental health need is serious if it "has caused significant disruption in an inmate's everyday life and . . . prevents his functioning in the general population without disturbing or endangering others or himself" (*Tillery v. Owens,* 1989:1256, 1286).

Prisons and jails must provide mental health screening at intake to identify serious problems, including potential suicides (*Balla v. Idaho Board of Corrections,* 1984), other serious conditions that need by mental health professionals (*Smith v. Jenkins,* 1990), and to plan for the training of officers to deal with mentally ill inmates (*Langley v. Coughlin,* 1989). Additionally, there must be some means of separating severely mentally ill inmates from the mentally healthy. Mixing mentally ill inmates with those who are not mentally ill may violate the rights of both groups. Finally, failure to provide treatment for mentally retarded inmates also may violate the constitution, if regression occurs (see Ellis and Luckasson, 1985, and National Commission on Correctional Health Care, 1999a).

In *Washington v. Harper* (1990) the U.S. Supreme Court ruled that inmates have a "significant liberty interest" in avoiding the unwanted administration of antipsychotic drugs. The Court approved such use of antipsychotic drugs only where certain procedural protections were available, such as those in the Washington State case before it:

- Only a psychiatrist may order the drugs.
- The patient who objects is entitled to an administrative hearing before professional staff not currently involved in his or her treatment.
- The patient may attend the hearing, present and cross-examine witnesses, and have the assistance of a lay advisor with psychiatric knowledge.
- Minutes must be kept, with judicial review available.
- Continuation of the medication is subject to periodic review.[15]

The involuntary administration of antipsychotic drugs also arises in the context of capital punishment in which the condemned prisoner is currently insane: a psychotic inmate, who does not understand what is about to occur, cannot be executed (*Ford v. Wainwright,* 1986). The issue in *Perry v. Louisiana* (1992) was whether the inmate could forcibly be medicated to restore sanity in order to facilitate execution. The U.S. Supreme Court did not decide this case, instead sending it back to Louisiana for disposition under state law. On remand, the Louisiana Supreme Court ruled that forcible medication under these circumstances would violate the prohibition against cruel and unusual punishment (*Louisiana v. Perry,* 1992). The issues, however, both legal and ethical, will continue to exist in this complex area (Miller and Radelet, 1993).

Except in cases of short transfers for evaluation purposes, inmates also are entitled to notice and a hearing before being committed to a mental hospital because the stigmatizing consequences of a psychiatric commitment and the possible involuntary subjection to psychiatric treatment constitute a deprivation of liberty requiring due process (*Vitek v. Jones,* 1980). Psychiatric treatment may not be imposed for disciplinary purposes (*Knecht v. Gillman,* 1973), and the use of seclusion and restraint must be based on professional judgment reasonably related to its purpose (*Wells v. Franzen,* 1985).

Inmates with mental problems frequently find themselves in trouble in prisons and jails for violating institutional rules. The administrative punishment of inmates who are not mentally responsible for their actions has been of concern to administrators and the courts.[16] In *People ex rel. Reed v. Scully* (1988), a prisoner serving a manslaughter sentence for the stabbing death of his wife believed he was compelled by evil spirits that inhabited his body as a result of a voodoo curse. In prison, he killed another inmate, for which he was found not guilty by reason of insanity. Nevertheless, prison disciplinary charges were brought against him for assaulting the second victim, and the inmate was given 7 years solitary confinement and 4 years loss of good time. The court vacated the punishment, ruling that the inmate could not be punished for acts for which he had already been found insane. The court also ordered a new hearing at which the inmate would be represented by a "counsel substitute."

Training of correctional staff and hearing officers in recognition of mental health issues in misbehavior can assist in avoiding litigation. Conditions that lead to psychiatrically based misbehavior can be addressed, in part, by developing intermediate and chronic care capability for mental health services, closely monitoring the mental health condition of inmates in solitary confinement, and reviewing the disciplinary and administrative classification of inmates who are returned to facilities after psychiatric hospitalization, especially if a return to solitary confinement is being considered (see *Eng v. Kelly,* 1987, and Rold, 1992).

3. Pregnancy and Abortion

The number of pregnant inmates in prisons and jails is substantial. In one federal prison housing 1,300 women, the government estimates that about 50 are pregnant at any one time (*Berrios-Berrios v. Thornburg,* 1989). Treatment for (or to avoid) the complications of pregnancy constitutes a serious health care need within the context of the eighth amendment (*Boswell v. Sherburne County,* 1988).

Babies born to incarcerated women, however, can be separated from their mothers because there is no constitutional right to keep a child in prison. One federal court, however, has required prison officials to permit a prisoner to breast feed her newborn child during visiting hours (*Berrios-Berrios v. Thornburg,* 1989).

The termination of an unwanted pregnancy also is considered a serious medical need, and the denial of an abortion constitutes deliberate indifference. Jail or prison officials must provide for abortions regardless of the prisoner's ability to pay (*Monmouth County Correctional Institution Inmates v. Lanzaro,* 1987).

4. AIDS and HIV Infection

In general, claims of inadequate medical care for AIDS and HIV infection are evaluated under the same deliberate indifference standard as other medical care claims. The AIDS crisis, however, has generated several troublesome legal issues for corrections; for the most part, courts have largely deferred to the decisions of correctional administrators. For example, mandatory testing for HIV accompanied by segregation of HIV-positive inmates and the refusal to do mandatory testing have both been upheld (*Dunn v. White,* 1989; *Glick v. Henderson,* 1988; *Harris v. Thigpen,* 1990).

The Alabama program for segregation of HIV-positive inmates, which effectively denied them access to programs, including school and religious services, was upheld in 1999 by a divided decision of the U.S. Court of Appeals. The U.S. Supreme Court declined review.[17]

Inmate patients with HIV infection often seek access to therapeutic clinical trials, believing that research interventions may provide the best care from the most knowledgeable and astute university staff. Until recently, federal regulations governing research on human subjects generally were thought to preclude most research on inmates because of past abuses.[18] A special section of federal regulations makes it difficult to conduct research with inmates, but it is not

impossible.[19] Inmates who desire access to therapeutic clinical trials could be accommodated by protocols that pay particular attention to the prison setting, to ensure the most voluntary and uncoerced consent possible to trials designed for conditions not amenable to accepted treatment (Dubler and Sidel, 1989).

K. LEGAL AND ETHICAL CONSIDERATIONS

Correctional facilities impose unusual constrictions on the delivery of medical services. They are "inherently coercive institutions that for security reasons must exercise nearly total control over their residents lives and the activities within their confines" (*West v. Atkins,* 1988: 57, n. 15). Strict schedules regulate work, exercise, diet, cell assignment, and what items an inmate is permitted to possess. Frequently, inmates may not self-treat even minor ailments and must seek medical assistance even if all they need is an over-the-counter remedy or a day in bed (*Todaro v. Ward,* 1977).

Institutional regulations in a prison or jail direct inmates to health care staff to request a bandage, sunburn lotion, a cane, an extra shower for a skin condition, or a lower bunk because of a knee injury. Despite a trend in recent years toward providing some over-the-counter medications in institutional commissaries, sometimes inmates must see medical staff for such routine items as antacids, aspirin, or foot powder. This trivialization of sick call is a product not of inmate manipulation but of administrative rules that funnel trivial complaints to professional staff. In short, inmates are far from being "free agents," and writing an excuse or providing palliative treatment for a minor illness or occupational injury is not a concession or special privilege. It is what free agents commonly provide for themselves.

Additionally, health care professionals frequently are involved in custodial and administrative functions of the prison or jail. They may be depended on, for example, to certify the adequacy of food services, sanitation, waste disposal, or hygiene systems. Their recommendations affect job, housing, and programmatic assignments and in some cases substitute for an adequate classification system. Health care staff also are sometimes asked to assist the institution in ways that adversely affect or are coercive toward their patients, such as conducting body-cavity searches or other procedures to gather forensic evidence for disciplinary proceedings, documenting the consequences of use of force by security staff, and authorizing placement or retention of inmates in solitary confinement or physical restraints.[20] In corrections, institutional security, productivity, discipline, and administrative convenience all affect and are influenced by the exercise of medical judgment.

1. Provider-Patient Relationship

The provider-patient relationship in corrections is imposed by the state on both the inmate and the health care provider. The inmate cannot go elsewhere, and the provider cannot refuse to treat the patient. In fact, the patient usually remains the patient even after he or she has sued the provider—a relationship virtually unheard of outside a closed institution. This situation can damage the professional relationship between the provider and the patient and can engender distrust. As one commentator put it:

> No individual, however skilled and compassionate a doctor, can maintain a normal doctor-patient relationship with a man who the next day he may acquiesce in subjection to solitary confinement. (Brazier, 1982:282, 285)

2. Confidentiality

Inmates have a constitutional right to privacy in their medical diagnoses and other health care records and information (*Doe v. Coughlin,* 1988; *Woods v. White,* 1988). That right is not violated by the reporting of medical findings in the ordinary course of prison medical care operations or probably even to prison and jail executives with a reason to know, but the "[c]asual, unjustified dissemination

of confidential medical information to nonmedical staff and other prisoners" is unconstitutional (*Woods v. White,* 1988:874).

In *Powell v. Schriver* (1999), the court ruled that an HIV-positive inmate had a constitutionally protected right to privacy regarding his HIV status. Relying on its earlier decision in *Doe v. City of New York* (1994:264), the court ruled that "the gratuitous disclosure of an inmate's confidential medical information as humor or gossip . . . is not reasonably related to a legitimate penological interest."

Nevertheless, maintaining confidentiality in corrections is a "monumentally difficult task" (Anno, 1991:57). Medical information may be surmised from things as simple as an inmate's movement, a cell search, or a pattern of scheduled visits. Nevertheless, health care encounters should be performed in medical settings, out of earshot of other inmates and officers; health staff should not discuss one patient in front of another; medical records should be stored securely and transported in sealed containers; and inmates should not be assigned duties where they have access to confidential information.

On certain occasions a provider may have not only a prerogative but a duty to report or disclose confidential medical information to third parties. If a concrete risk to an identifiable person is revealed, and "disclosure is essential to avert danger," the revelation of a patient's private communication may be essential to protect innocent persons (*Tarasoff v. Regents of the University of California,* 1976:334, 337). In such cases, however, disclosure must be done "discretely" and in a way that preserves the privacy of the patient "to the fullest extent compatible with the prevention of the threatened danger."

Confidentiality in corrections also may be affected by regulations under the Health Insurance Portability and Accountability Act of 1996 (HIPAA) [Pub. L.104–191, 110 Stat. 1936 (1996)]. Sections 262 and 264 of HIPAA and the regulations promulgated thereunder affect disclosure, transmission, and redisclosure of medical information in a variety of contexts, including computerized storage and retrieval. [See proposed 45 CFR part 142, 63 F.R. 43241 (1998).]

3. Right to Refuse Treatment

A mentally competent adult has a constitutional right to refuse medical treatment, including the direction that lifesaving or other extraordinary measures be withdrawn in terminal cases (*Cruzan v. Missouri Department of Health,* 1990). As Judge Cardozo stated almost 80 years ago: "Every human being of adult years and sound mind has a right to determine what shall be done with his own body" (*Schloendorff v. Society of New York Hospitals,* 1914:125, 129). This right extends to prisoners as well (*White v. Napoleon,* 1990).

This right has never been regarded as absolute, however (see *Commissioner of Correction v. Myers,* 1979), and it may be overridden if there are strong public health reasons to administer treatment, as when the U.S. Supreme Court upheld mandatory smallpox vaccination in 1905, despite the patient's religious objections (*Jacobson v. Massachusetts,* 1905). Inmates have been required, for example, to submit to blood and tuberculosis tests and to diphtheria and tetanus injections (*Ballard v. Woodard,* 1986; *Thompson v. City of Los Angeles,* 1989; *Zaire v. Dalsheim,* 1988). The right to refuse is based on the concept of informed consent. As one court stated:

> A prisoner's right to refuse treatment is useless without knowledge of the proposed treatment. Prisoners have a right to such information as is reasonably necessary to make an informed decision to accept or reject proposed treatment, as well as a reasonable explanation of the viable alternative treatments that can be made available in a prison setting. (*White v. Napoleon,* 1990:113)

There are "reason[s] to be leery of refusals of care in prisons" (Anno, 1991:56), and care must be taken in corrections to determine if a refusal of care is genuine. An investigation of an inmate who does not appear for treatment should occur if the appointment is for a serious condition and a lapse in treatment might result in deterioration or a poor outcome. Staff should determine if the patient was too ill to report, was prevented from doing so by a cellblock

lockdown or other impediment, or had a conflict with a school examination, a family visit, or another program.

Finally, as society in general increasingly plans for terminal illness with advance directives and living wills, as the numbers of deaths increase in corrections due to AIDS or other conditions, and as the proportion of elderly inmates grows (*Washington Post,* 1999), correctional administrators will face requests to terminate treatment. If advance directives are appropriate for use in corrections, they must be truly voluntary and not be permitted to mask denials of care. A multidisciplinary committee of health providers from the prison and the community, as well as clergy and public officials, may help to ensure oversight and fairness (Dubler, 1998).

L. RECENT TRENDS AND ISSUES

The last few years have brought developments that are influencing the course of correctional health care and the law, including fee-for-service plans, the Prison Litigation Reform Act, and sexual predator laws. The legal ramifications of these developments are still emerging.

1. Fee-for-Service Plans

A growing number of states and localities have adopted policies that charge inmates for various types of health care encounters (see generally, Weiland, 1996). Although there are practical and ethical questions regarding implementation of a fee-for-service system (see Rold, 1996), the courts have tended to uphold carefully crafted systems and look to the following issues when evaluating such programs:

- Is medical care provided *first* with payment to follow?
- Are inmates who cannot pay nevertheless provided with necessary care?
- Is emergency care being provided regardless of payment?
- Is the payment amount reasonable relative to the inmate's resources or earnings so that it does not effectively deny care?
- Are chronically ill inmates allowed access to followup care despite cumulative charges?
- Is there a fair system for applying the charges and granting exceptions?

To date, few statistically valid studies have produced data on the efficacy of fee-for-service plans for inmates. At least some data show, however, "distressing examples" of possible denial of care when prescriptions and "offsite" referrals were reduced substantially after introduction of a fee-for-service program (Faiver, 1998). More sophisticated analysis is expected as experience with such programs continues.

2. The Prison Litigation Reform Act

In 1996, Congress passed the Prison Litigation Reform Act (PLRA) to limit the role of the federal courts in the management of prison and jail operations and reduce the number of civil rights lawsuits by prisoners that were thought to be without merit. Although there has been substantial litigation about the application and constitutionality of PLRA, the U.S. Supreme Court has yet to rule definitively on many of its important provisions, and a full exploration of PLRA is beyond the scope of this chapter. Suffice it to say that PLRA has changed the landscape of federal court involvement in prison condition lawsuits (including those involving health care) and in individual prisoners' claims for damages or injunctive relief (Prison Litigation Reform Act of 1995, 1996).

PLRA provides that when a lawsuit is brought challenging prison conditions as violative of a federal right and seeks prospective relief, the court shall

not issue orders unless it finds that such relief is "narrowly drawn, extends no further than necessary to correct the violation of the Federal right, and is the least intrusive means necessary to correct the violation of the Federal right."[21] PLRA also provides for termination of decrees previously entered without these findings, unless such relief "remains necessary to correct a current and ongoing violation of the Federal right."[22] Such findings are also required if judicial approval of future settlements is sought.[23]

PLRA further provides that "[n]o action shall be brought" by a prisoner about prison conditions "until such administrative remedies as are available are exhausted."[24] If an inmate is seeking an injunction (a court order directing correctional officials to provide certain care or to cease denying it), exhaustion of administrative proceedings is usually required. An exception may exist if the patient's condition is progressive and if the proceedings could take months and would, as a practical matter, make the administrative remedy not "available" (*Sanders v. Elyea,* 1998). Typically, however, a grievance must be filed.

In 2001, the Supreme Court ruled that even if a prisoner seeks only monetary damages that are not available through the institutional grievance system, the prisoner must still exhaust the administrative review system by filing a grievance (*Booth v. Churner,* 2001).

In addition, "[n]o Federal Civil action may be brought by a prisoner . . . for mental or emotional injury suffered while in custody without a prior showing of physical injury."[25] As construed, this provision applies in general only to claims for money damages, not requests for injunctions (see *Davis v. District of Columbia,* 1998; *Zehner v. Trigg,* 1997). Although in medical care damages cases, an inmate usually will be able to meet this requirement by alleging physical injury, its application in damages cases for poor mental health care remains unclear. One court has held that the physical manifestations of emotional distress are not physical injury for purposes of this provision (*Davis v. District of Columbia,* 1998).

PLRA also limits the ability of a pro se inmate (one without an attorney) to obtain a default judgment (an automatic judgment for the inmate based on the defendant's failure to answer or defend against a complaint). The defendant may waive a reply unless the court requires the defendant to answer the inmate's complaint after finding "that the plaintiff has a reasonable opportunity to prevail on the merits."[26] Unless the inmate can convince the court that he or she has a reasonable chance of proving his or her case at trial, the representatives of the corrections system do not have to reply to a pro se inmate's complaint.

In another provision, PLRA restricts the ability of inmates to file cases in forma pauperis (without paying filing fees) by requiring proof of the balance of the inmate-plaintiff's prison account to show indigency and structuring payments in installments, usually in increments of 20 percent of the previous month's account balance.[27] A prisoner with no assets may still file without fee, but a prisoner who has had three or more prior actions dismissed as frivolous or malicious or for failure to state a claim cannot proceed in forma pauperis unless "under imminent danger of serious physical injury."[28] In appropriate cases, this standard could be met in a medical care claim.

Finally, most of the provisions of PLRA do not apply to lawsuits brought by prisoners after their release. Thus, inmates whose lawsuits would be restricted by PLRA can wait to sue for damages until after they are discharged from custody.

PLRA restrictions have so far been declared constitutional. In June 2000, the U.S. Supreme Court determined that the PLRA automatic stay provisions, which allow termination of previous court orders without formal judicial hearing, do not violate principles of separation of powers between Congress and the courts *(Miller v. French)*. The Court, however, did not decide whether PLRA time limits were so short that they violated inmates' due process rights.

3. Sexual Predator Laws

In 1997, the U.S. Supreme Court upheld the constitutionality of a Kansas statute (the Sexually Violent Predator Act) that authorized the involuntary continued institutionalization of persons who had served their entire criminal sentence if they were deemed likely to reoffend when released to the community and even if the offenders did not meet state standards for civil commitment *(Kansas v. Hendricks)*. The Court's decision thus gave a "green light" to the preventive detention of persons based not on what they have done in the past (the historical basis of incarceration), but upon what it is predicted they will do in the future—which up to this time had been largely unheard of in this country. The decision has numerous serious implications for mental health professionals in corrections, as many other states have now adopted such measures (Cohen, 1998).

No consensus exists, however, in the mental health community about the amenability to treatment for some sexual offenders or the ability to predict their future "dangerousness." Justice Anthony M. Kennedy wrote in concurring with the opinion in *Kansas v. Hendricks* (1997:372), "At this stage of medical knowledge, although future treatment cannot be predicted, psychiatrists or other professionals engaged in treating pedophilia may be reluctant to find measurable success in treatment even after a long period and may be unable to predict that no serious danger will come from release of the detainee." Ethical questions thus arise regarding how one can evaluate future "dangerousness," such as whether a practitioner can use information gleaned in therapy to report on the patient for purposes of future civil confinement (Rold, 1999).

The diversion (in effect, "transinstitutionalization" from correctional to civil confinement) of sex offenders raises issues of profound concern. It diverts scarce mental health resources to deal with this difficult population when there is no psychiatric consensus on how to treat them, and it may well place more vulnerable mental patients at risk in the less secure setting of a mental institution. It certainly requires mental health providers—both in and out of corrections—to wear several hats as they attempt to balance the legal, ethical, and practical issues that will undoubtedly arise.

M. CONCLUSION

"No serious student of American correctional history can deny that litigation has provided the impetus for reform of medical practice in prisons and jails" (Nathan, 1985:1). Yet, as resources become increasingly scarce, government officials are continually asked to do more with less, and the expense of litigation should not divert funds meant to upgrade delivery of services. Voluntary adoption of community standards and accreditation are a less tortuous road to reform and, in the long run, are likely to be more successful and less divisive.

The protection of basic rights to access to care, to the care that is ordered, and to professional judgment can be achieved without litigation where correctional administrators and health care professionals work together from within to promote excellence and strive continually to upgrade the quality of the care that is delivered.

NOTES

1. State constitutional or statutory provisions may provide additional rights. This chapter deals mainly with federal judicial precedent and the minimal rights afforded by the U.S. Constitution. Readers are encouraged to seek legal advice from their respective local counsel regarding state laws and the proper application in their jurisdiction of the case law discussed in this chapter.

2. The eighth amendment, by its terms, applies only to persons convicted of crimes. Pretrial inmates, immigration detainees, and juveniles, however, whose rights are adjudicated under the due process clauses of the 5th and 14th amendments, have rights at least

as great as those protected by the 8th amendment (*City of Revere v. Massachusetts General Hospital,* 1983; *Bell v. Wolfish,* 1979).

3. Interestingly, Mr. Gamble actually lost his claim. Because he had been seen on some 17 occasions over a 3-month period for what amounted only to soft tissue injuries, the Court found that a constitutional violation did not occur (*Estelle v. Gamble,* 1976:107-108).

4. This important distinction survives today and must be kept in mind: one may escape constitutional liability and yet be responsible for damages under state law for simple negligence.

5. Numerous other examples are found in the case law: *Thomas v. Pate* (1974), in which a doctor injected penicillin with the knowledge that the prisoner was allergic and refused to treat the allergic reaction; *Rogers v. Evans* (1986), in which a psychiatrist avoided a prisoner after complaints were made about the treatment; *Wells v. Franzen* (1985), in which a shackled inmate was deprived of exercise, clothing, and showers and was required to eat with his fingers next to his 2-day old urine; and *Jones v. Johnson* (1986), in which the inmate was denied treatment for a painful condition for budgetary rather that medical reasons.

6. The American Correctional Association standards recommend that sick call be held once a week for a population of less than 100 and 4 times a week for a population of more than 300. The National Commission on Correctional Health Care specifies 3 times a week for a population of less than 200, 5 times a week for a population of more than 500 for jails, and 5 times a week for prisons regardless of size. The American Public Health Association standards mandate sick call 5 times a week regardless of population size or the nature of the institution.

7. A second, revised edition of the American Public Health Association standards was published in 1986 (Dubler, 1986). The National Commission on Correctional Health Care currently has published standards for prisons (1997), jails (1996), and juvenile detention facilities (1999b).

8. As of June 2001, the National Commission on Correctional Health Care (NCCHC) had accredited 238 jails and immigration detention facilities, 264 prisons, and 50 juvenile facilities. Personal communication, Judith Stanley, NCCHC's Director of Accreditation, June 2001.

9. Although the U.S. Supreme Court referred to United Nations standards in *Estelle v. Gamble* (1976), it did not base its decision on this ground. Later, in *Rhodes v. Chapman* (1981), the Court upheld double-celling at the Southern Ohio Correctional Facility at Lucasville, even though the space per inmate was less than the 60 to 80 square feet specified in the standards of the American Correctional Association.

10. *Casey v. Lewis* (1993). The National Commission on Correctional Health Care standards also were adopted by the court in a consent decree regarding the care of HIV-positive jail inmates in Georgia in *Foster v. Fulton County* (1999).

11. See *Williams v. Ceorlock* (1998) and *Tumath v. County of Alameda* (1996).

12. See *Reynolds v. Wagner* (1996).

13. See *Grubbs v. Bradley* (1993) and *Morales Feliciano v. Rosello Gonzalez* (1998).

14. State facilities receiving federal financial assistance (as most do), however, must still comply with the needs of the disabled, including nondiscrimination, under the Rehabilitation Act of 1973, 29 U.S.C. 701 et seq (1994).

15. Additional protections may exist under state law; also see *Rivers v. Katz* (1986).

16. See, generally, Cohen (1998), McShane (1989), and Toch (1982).

17. See *Hopper v. Davis* (1999), *cert. denied sub nom. Davis v. Hopper* (2000).

18. See, e.g., 45 C.F.R. 46.301–.306 (2000).

19. *Id.*

20. American Public Health Association and National Commission on Correctional Health Care

standards restrict the use of health care staff, particularly treating staff, for such forensic purposes.

21. 18 U.S.C. § 3626(a)(1)(A).

22. 18 U.S.C. § 3626(b)(3). See also the *New York Times* (January 30, 2000:A-1). Under the PLRA, a 22-year-old consent decree is in jeopardy in New York City, and numerous other court injunctions have been vacated.

23. 18 U.S.C. §§ 3626(a)(1) and (c)(1).

24. 42 U.S.C. § 1997e(a).

25. 42 U.S.C. § 1997e(e).

26. 42 U.S.C. § 1997e(g).

27. 28 U.S.C. § 1915(b).

28. 28 U.S.C. § 1915(g).

REFERENCES

Articles and Books

American Civil Liberties Union
1995 "Status report." Washington, DC.

American Public Health Association
1976 Standards for Health Services in Correctional Institutions. Washington, DC.

Anno, B. Jaye
1991 Prison Health Care: Guidelines for the Management of an Adequate Delivery System. Chicago: National Commission on Correctional Health Care.

Blackstone, William
1769 4 Commentaries on the Laws of England (first edition) 377.

Brazier, Margaret
1982 "Prison doctors and their involuntary patients," Publication Law 282, 285.

Bureau of Justice Statistics
1991 "Jail inmates, 1990." Bureau of Justice Statistics Bulletin. Washington, DC: U.S. Department of Justice (June).

1994 "Prisoners in 1993." Bureau of Justice Statistics Bulletin. Washington, DC: U.S. Department of Justice (May).

1999 "Prison and jail inmates at midyear 1998." Bureau of Justice Statistics Bulletin. Washington, DC: U.S. Department of Justice (March).

Byland, William
1983 "Dental care in prisons: Quality assurance of dental programs." Address to Second World Congress on Prison Health Care. Ottawa.

Cohen, Fred
1998 The Mentally Disordered Inmate and the Law." Kingston, NJ: Civic Research Institute.

Contact Center, Inc.
1985 "Inmate lawsuits." Lincoln, NE.

Conte, Thomas
1983 "Dental treatment for incarcerated individuals: For whom? How much?" 3 Journal of Prison and Jail Health 3:25-33.

Criminal Justice Institute, Inc.
1998 Corrections Yearbook. South Salem, NY.

Criminal Justice Newsletter
1981 "25 states now under prison court orders." Volume 12, Number 6:6-7 (February 16).

Ditton, Paula M.
1999 "Mental health and treatment of inmates and probationers." Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Dubler, Nancy N.
1986 Standards for Health Services in Correctional Institutions. Washington, DC: American Public Health Association.

1998 "The collision of confinement and care: End-of-life care in prisons and jails." 26 Journal of Law, Medicine & Ethics 149-156.

Dubler, Nancy N., and Victor W. Sidel
1989 "On research on HIV infection and AIDS in correctional institutions." 67 The Milbank Quarterly 2:171-207.

Ellis, James W., and Ruth A. Luckasson
1985 "Mentally retarded criminal defendants." 53 George Washington Law Review 414.

Epilepsy Foundation of America
1992 The Legal Rights of Persons with Epilepsy (sixth edition). Landover, MD.

Faiver, Kenneth L.
1998 Health Care Management Issues in Corrections. Lanham, MD: American Correctional Association.

Howell, Thomas B., and Thomas Jones Howell [compilers]
2000 A Complete Collection of State Trials and Proceedings for High Treason and Other Crimes and Misdemeanors from the Earliest Period to the Year 1783, with Notes and Illustrations . . . And continued from the Year 1783 to the Present Time. . . . (fifth edition) 1816-1828. Reprint, Buffalo: William S. Hein.

Kay, Susan L.
1991 "The constitutional dimensions of an inmate's right to health care." Chicago: National Commission on Correctional Health Care.

King, Lambert N., and Desai Young
1978 "Increased prevalence of seizure disorders among prisoners." 239 Journal of the American Medical Association 2674 (June 23).

Koren, Edward I.
1993 "Status report: State prisons and the courts." 8 The National Prison Project Journal 1 (January).

May, John P. (Ed.)
2000 Building Violence: How America's Rush to Incarcerate Creates More Violence. Thousand Oaks, CA: Sage Publications, Inc.

McShane, Marilyn D.
1989 "The bus stop revisited: Discipline and psychiatric patients in prison." 12 Journal of Psychiatry and the Law 413.

Miller, Kent S., and Michael L. Radelet
1993 Executing the Mentally Ill. Thousand Oaks, CA: Sage Publications, Inc.

Nathan, Vincent M.
1985 "Guest editorial." 5 Journal of Prison and Jail Health 1:3-12.

National Commission on Correctional Health Care
1996 Standards for Health Services in Jails. Chicago.

1997 Standards for Health Services in Prisons. Chicago.

1999a Correctional Mental Health Care: Standards and Guidelines for Delivering Services. Chicago.

1999b Standards for Health Services in Juvenile Detention and Confinement Facilities. Chicago.

Neisser, Eric
1977 "Is there a doctor in the joint? The search for constitutional standards for prison health care." 83 Virginia Law Review 921:956-957.

New York State Commission on Quality of Care for the Mentally Disabled
1991 "Inmates with developmental disabilities in New York State correctional facilities." Albany, NY.

New York Times
1997 "In 90s, prison building." (August 8:A-14).

1999 "Prisons brim with mentally ill, study finds." (July 12:A-10).

2000 "States and cities removing prisons from courts' grip." (January 30:A-1).

Puisis, Michael (Ed.)
1998 Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Rold, William
1988 "Legal developments in the constitutional right to dental care." 7 Journal of Prison and Jail Health 1:8-14.

1992 "Consideration of mental health factors in inmate discipline." 11 Journal of Prison and Jail Health 1:41-49.

1995 "Another perspective on inmate lawsuits." 9 CorrectCare 4:4.

1996 "Charging inmates for medical care: A legal, practical, and ethical critique." 3 Journal of Correctional Health Care 2:129-144.

1997 "An examination of medical necessity and the law." 11 CorrectCare 1:6,14.

1999 "Civil commitment of sexually violent offenders: Some legal, ethical, and practical considerations." 13 CorrectCare 3:6.

Steadman, Henry J., Stanley Fabisiak, Joel Dvoskin and Edward J. Holohean, Jr.

1987 "A survey of mental disability among state prison inmates." 38 Hospital and Community Psychiatry 10:1086-1090.

Teplin, Linda A., and James Schwartz

1989 "Screening for severe mental disorder in jails." 13 Law and Human Behavior 1.

Thomas, Jim

1989 "The 'reality' of prison litigation: Repackaging the data." 15 Criminal and Civil Confinement 27.

Toch, Hans

1982 "The disturbed disruptive inmate: Where does the bus stop?" 10 Journal of Psychiatry and the Law 327.

Tucker, Bonnie P.

1989 "The Americans with Disabilities Act: An overview." University of Illinois Law Review 923.

Washington Post

1999 "Old men behind bars." (July 25:B-8).

Weiland, Carolyn

1996 "Fee-for-service programs: A literature review and results of a national survey." 3 Journal of Correctional Health Care 2:145-158.

Winner, Ellen

1981 "An introduction to the constitutional law of prison medical care." 1 Journal of Prison Health 1:67-84.

Court Cases

Ancata v. Prison Health Services, 769 F.2d 700 (11th Cir. 1985).

Balla v. Idaho Board of Corrections, 595 F. Supp. 1558 (D. Idaho 1984).

Ballard v. Woodard, 641 F. Supp. 432 (W.D.N.C. 1986).

Bell v. Wolfish, 441 U.S. 520 (1979).

Berrios-Berrios v. Thornburg, 716 F. Supp. 987 (E.D. Ky. 1989).

Bishop v. Stoneman, 508 F.2d 1224 (2d Cir. 1974).

Board of Trustees of the University of Alabama v. Garrett, 531 U.S. 356 (2001).

Booth v. Churner, 532 U.S. _____, 121 S.Ct. 1819 (2001).

Boswell v. Sherburne County, 849 F.2d 1117 (10th Cir. 1988).

Casey v. Lewis, 834 F. Supp. 1477, 1483-84 (D. Ariz. 1993).

City of Revere v. Massachusetts General Hospital, 463 U.S. 239 (1983).

Commissioner of Correction v. Myers, 399 N.E.2d 452 (Mass. 1979).

Cruzan v. Missouri Department of Health, 497 U.S. 261 (1990).

Cummings v. Roberts, 628 F.2d 1065 (8th Cir. 1980).

Davis v. District of Columbia, 158 F.3d 1342 (D.C. Cir. 1998).

Dean v. Coughlin, 623 F. Supp. 392, 404 (S.D.N.Y. 1985).

Delker v. Maass, 843 F. Supp. 1390, 1400 and n. 6 (D. Or. 1994).

Doe v. City of New York, 15 F.3d 264 (2d Cir. 1994).

Doe v. Coughlin, 697 F. Supp. 1234 (N.D.N.Y. 1988).

Dunn v. White, 880 F.2d 1188 (10th Cir. 1989).

Duran v. Anaya, 642 F. Supp. 510, 524 (D.N.M. 1986).

Eng v. Kelly, Civ. 80-0385T (W.D.N.Y., January 27, 1987).

Estelle v. Gamble, 429 U.S. 97 (1976).

Farmer v. Brennan, 511 U.S. 825 (1994).

Fields v. Gander, 734 F.2d 1313 (8th Cir. 1984).

Ford v. Wainwright, 477 U.S. 699 (1986).

Foster v. Fulton County, 99-CV-0900 (N.D. Ga. 1999).

Glick v. Henderson, 885 F.2d 536 (8th Cir. 1988).

Green v. Carlson, 581 F.2d 669 (2d Cir. 1978), aff'd, 446 U.S. 14 (1980).

Grubbs v. Bradley, 821 F. Supp. 496 (M.D. Tenn. 1993).

Guthrie v. Evans, Civ. A. No. CV3068 (First Report of the Special Master) (S.D. Ga., Savannah Div., 1987).

Hamilton v. Landrieu, 351 F. Supp. 549 (E.D. La. 1972).

Harris v. Thigpen, 727 F. Supp. 1564 (M.D. Ala. 1990).

Hopper v. Davis, 171 F.3d 1289 (11th Cir. 1999), *cert. denied sub nom. Davis v. Hopper,* 120 S. Ct. 931 (2000).

Hoptowit v. Ray, 682 F.2d 1237 (9th Cir. 1982).

Jacobson v. Massachusetts, 197 U.S. 11 (1905).

Johnson v. Bowers, 884 F.2d 1053 (8th Cir. 1989).

Johnson v. Hardin County, 908 F.2d 1280 (6th Cir. 1990).

Johnson-El v. Schoemehl, 878 F.2d 1043 (8th Cir. 1989).

Jones v. Johnson, 781 F.2d 769 (9th Cir. 1986).

Kansas v. Hendricks, 521 U.S. 346 (1997).

Kelley v. McGinnis, 899 F.2d 612 (7th Cir. 1990).

Knecht v. Gillman, 488 F.2d 1136 (8th Cir. 1973).

Langley v. Coughlin, 888 F.2d 252 (2d Cir. 1989).

Lightfoot v. Walker, 486 F. Supp. 504 (S.D. Ill. 1980).

Louisiana v. Perry, 610 So. 2d 746 (1992).

Martinez v. Mancusi, 443 F.2d 1192 (2d Cir. 1970).

Miller v. French, 530 U.S. 327 (2000).

Mitchell v. Aluisi, 872 F.2d 577 (4th Cir. 1989).

Monmouth County Correctional Institution Inmates v. Lanzaro, 834 F.2d 326 (3d Cir. 1987).

Morales Feliciano v. Rosello Gonzalez, 13 F. Supp. 2d 151 (D.P.R. 1998).

Newman v. Alabama, 503 F.2d 1320, 1324, 1330 (5th Cir. 1974).

Pennsylvania Department of Corrections v. Yeskey, 524 U.S. 206 (1998).

People ex rel. Reed v. Scully, 140 Misc. 2d 379, 531 N.Y.S.2d 196 (Sup. Ct. 1988).

Perry v. Louisiana, 498 U.S. 538 (1992).

Powell v. Schriver, 175 F.3d 107 (2d Cir. 1999).

Ramos v. Lamm, 639 F.2d 559, 575 (10th Cir. 1980).

Ramsey v. Ciccone, 305 F. Supp. 600 (W.D. Mo. 1970).

Reynolds v. Wagner, 930 F. Supp. 1216, 1222 (E.D. Pa. 1996).

Rhodes v. Chapman, 452 U.S. 337, 343 (1981).

Rivers v. Katz, 67 N.Y.2d 485, 504 N.Y.S.2d 74 (1986).

Rogers v. Evans, 792 F.2d 1052 (11th Cir. 1986).

Ruffin v. Commonwealth, 62 Va. (21 Gratt.) 790 (1871).

Ruiz v. Estelle, 503 F. Supp. 1265 (S.D. Tex. 1980), *aff'd in part and rev'd in part,* 679 F.2d 1115 (5th Cir. 1982).

Sanders v. Elyea, 1998 WL 67615 (N.D. Ill. 1998).

Schloendorff v. Society of New York Hospitals, 211 N.Y. 125, 129 (1914).

Smith v. Jenkins, 919 F.2d 90 (8th Cir. 1990).

Spicer v. Williamson, 191 N.C. 487, 490 (1926).

Tarasoff v. Regents of the University of California, 551 P.2d 334, 337 (Cal. 1976).

Thomas v. Pate, 493 F.2d 151 (7th Cir. 1974).

Thompson v. City of Los Angeles, 885 F.2d 1439 (9th Cir. 1989).

Tillery v. Owens, 719 F. Supp. 1256, 1286 (W.D.Pa. 1989), *aff'd,* 907 F.2d 418 (3d Cir. 1990).

Todaro v. Ward, 431 F. Supp. 1129 (S.D.N.Y.), *aff'd* 565 F.2d 48, 54 n. 7 (2d Cir. 1977).

Tumath v. County of Alameda, 1996 WL 660611 (N.D. Cal. 1996).

United States v. Michigan, 680 F. Supp. 928 (W.D. Mich. 1987).

Vega v. Sielaff, 82 Civ. 6475 (S.D.N.Y.) (Opinion of 4/22/92; Order of 5/11/92).

Vitek v. Jones, 445 U.S. 480 (1980).

Washington v. Harper, 494 U.S. 210 (1990).

Wells v. Franzen, 777 F.2d 1258, 1264-65 (7th Cir. 1985).

West v. Atkins, 487 U.S. 42, 57 n. 15 (1988).

West v. Keve, 541 F. Supp. 534 (D. Del. 1982).

White v. Napoleon, 897 F.2d 103, 113 (3d Cir. 1990).

Williams v. Ceorlock, 993 F. Supp. 1192 (C.D. Ill. 1998).

Williams v. Vincent, 508 F.2d 541, 544-45 (2d Cir. 1974).

Wilson v. Seiter, 501 U.S. 294 (1991).

Woods v. White, 689 F. Supp. 874 (W.D. Wisc. 1988).

Zaire v. Dalsheim, 698 F. Supp. 57 (S.D.N.Y. 1988).

Zehner v. Trigg, 133 F.3d 459 (7th Cir. 1997).

Statutes

Civil Rights of Institutional Persons Act. 42 United States Code Sections 1997-1997j (1994 Supplement 5).

Health Insurance Portability and Accountability Act of 1996, Pub. L. No. 104-191. Statutes at Large 110:1936-2103 (August 21, 1996).

Prison Litigation Reform Act of 1995, Pub. L. No. 104-134, Sections 801-810. Statutes at Large 110: 1321, 1321-66 to 1321-77 (April 26, 1996).

Rehabilitation Act of 1973, 29 United States Code Sections 701-796*l* (1994).

Regulation

Subpart C—Additional Protections Pertaining to Biomedical and Behavioral Research Involving Prisoners as Subjects. 45 Code of Federal Regulations 46.301-306 (2000).

Proposed Regulation

Notice of Proposed Rulemaking, Security and Electronic Signature Standards, 45 Code of Federal Regulations Part 142, Federal Register 63 (155): 43241-43280 (August 12, 1998).

Ethical Considerations and the Interface With Custody

Chapter IV

Chapter IV

Ethical Considerations and the Interface With Custody

A. Introduction

Like their peers in the community, correctional health providers are bound by the ethics of their particular professions. The ethical imperatives (e.g., protection of confidentiality, integrity of the provider-patient relationship, centrality of the patient's interests, and respect for informed consent) remain the same regardless of the setting. There are circumstances, however, in which the correctional setting poses ethical dilemmas for the correctional health provider that have no parallels in the community (e.g., requests to perform body-cavity searches, witness use of force, or pronounce death at an execution). There also may be times—despite restrictions imposed by the doctrine of confidentiality—when it may be appropriate for correctional health professionals to disclose limited medical information about a specific inmate to correctional authorities.

This chapter explores some of the ethical issues that should be considered by correctional health professionals. It introduces a number of the basic ethical principles in medicine, describes some of the unique ethical dilemmas posed by the correctional setting, and discusses circumstances under which it is appropriate to share limited medical information with custody staff. Specifically, sections B and C briefly sketch how ethical issues are framed and presented in general bioethics and contrast this usual analysis with the particular conditions, strictures, and laws that apply in correctional institutions. Section B addresses issues and principles in biomedical ethics, including special characteristics of the correctional setting, the doctor-patient relationship, informed consent and the right to refuse care, confidentiality, research, and terminal care and advance directives. Section C presents bioethical issues unique to correctional settings such as participation in body-cavity searches, collecting forensic information, witnessing use of force, using restraints for nonmedical reasons, monitoring disciplinary segregation inmates, managing hunger strikes, and participating in executions. Section D discusses the role of health services with respect to other custody functions such as classifying, disciplining, and transferring inmates. A brief summary statement is included in section E.

B. Issues and Principles in Biomedical Ethics

Biomedical ethics dates at least from the time of Hippocrates, but as a scholarly field of inquiry, it has been honed largely over the past two decades and developed from combining explorations of moral philosophy and ethical principles, case law opinions, and clinical commentaries based on real-life cases. It has investigated, among other areas, the nature of the doctor-patient relationship; the quality, extent, and power of patient authority; the process of informed consent and refusal; physician beneficence; and the use, misuse, control, and possible abuse of medical technology. In addition, bioethical analyses,

This chapter was developed by B. Jaye Anno and Nancy Nevloff Dubler. The authors are grateful to William J. Rold, JD, CCHP-A, for his thoughtful comments on this chapter.

both legal and ethical, have explored specific areas in depth, such as a woman's right to control her body (including abortion, maternal-fetal conflict, and forced cesarean sections), neonatology, the ethics of treatment for children and adolescents, research on human subjects with particular emphasis on especially vulnerable populations including prisoners, new reproductive technologies, termination of care, access to care, justice and fairness, and, increasingly, genetics and cloning.

This select list illustrates some of the issues, populations, and processes that have been the focus of bioethical scholarship. A vast literature provides the background for this discussion of ethical dilemmas in correctional health care.

1. Special Characteristics of the Correctional Setting

Much of this particular ethics discussion is new to the literature, but it is certainly not new to the field of correctional health care in which practitioners struggle to define and fulfill their ethical obligations to patients in an atmosphere that sometimes threatens or attempts to intimidate or affect professional judgment. Care providers report that it requires constant vigilance, self-awareness, and periodic reexamination to avoid being co-opted by and developing an identification with correctional authorities, their goals, modes of thinking, and conception of and relationship to inmates. This feeling of alliance with correctional authorities is problematic because the medical model often is fundamentally at odds with the correctional model. This dissonance should be recognized and respected. Both points of view should be taken into account when making policy.

The purpose of medicine is to diagnose, comfort, and cure; the purpose of correctional institutions, although sometimes rehabilitative, is to punish through confinement. These often mutually incompatible purposes provide the background for the interaction of correctional and health professionals and help explain why ethical dilemmas, even in well-managed correctional settings, are inevitable. They must be anticipated and examined thoughtfully by professionals in structuring and supervising health services and providing care to inmates. Medicine generally is practiced in an office, clinic, or hospital, where the goals of patient care should define the administration, organization, and process of that care. Correctional medicine is practiced in alien space, where the custody philosophy is predominant and the practice of medicine is often viewed, at best, as a necessary support for good administration and, at worst, as a barely tolerated interference with the ultimate authority of the warden or jail manager. Furthermore, neither prisons nor jails are organized for the public health issues that frequently confront correctional health staff.

Respect for patients and regard for their well-being must be the primary posture for health care providers. Biomedical ethics is based on patient choice because the patient has the overwhelming moral authority in matters affecting his or her body and mind. But the very foundation of correctional philosophy is that someone other than the inmate has the ultimate say over his or her behavior, movement, and personal decisions. It would require a perverse genius to construct a setting, as well as a philosophy, operation, and mechanism for staffing and control, as inimical to the assumptions of medical ethics as a correctional facility.

Ethical behavior is required of all clinicians, including physicians, nurses, physician extenders, dentists, and psychologists. Inmates, moreover, are not passive in this process. They regularly press for access to the health unit as a noncorrectional and therefore theoretically more humane activity. Not only are health care staff expected to respond to requests for primary and ambulatory care and make appropriate referrals to clinical specialists, but they also often are asked to evaluate and respond to other inmate requests that have nothing to do with health services (e.g., requests for different shoes, religious or ethnic diets, or intervention with custody staff).

Although this happens in the "free world" as well, inmates often turn to health care staff to express

emotions that they are unwilling or unable to share with correctional staff. Inmates may visit a health care facility to escape boredom, meet friends in a relaxed and less-supervised setting, or relieve the monotony of work and programs that limit individual daily choices. A health service not only treats the sick but also provides the possibility, as many inmates see it, for the exercise of individualism, autonomy, and choice. This identification of the health service as a place different from others in an institution puts a great burden on health staff.

Health care providers are asked to address an overwhelming list of needs and wants that inmates present to them, many of which they realistically cannot meet. Given budgetary realities and the often forced alliance between health care professionals and correctional authorities, the usual dilemmas of medical care are exacerbated by security limitations. Often both groups—caregivers and inmates—are frustrated and disappointed. Inmates feel their needs are unmet; health staff feel inappropriately used or perhaps manipulated by inmates whose treatable medical problems may not always be the primary reason for requesting assistance.

There is another reason for tension between inmates and caregiving staff. Although important federal court opinions and the work of professional associations have provided the basis for vastly improved quality in correctional health services in many parts of the country, the quality of care remains low in some institutions. Many inmates know that they are entitled to health care, but they fail to understand how that right has been explained and limited by the U.S. Supreme Court and the other federal courts. Furthermore, overcrowding exacerbates all existing problems. As prisons and jails are filled far beyond their planned capacity, the population produces more sick call visits than can be handled by the health care staff. Many medical facilities simply are overwhelmed by the large numbers of individuals seeking care. This explains, but does not excuse, turning away a medically needy inmate, delaying followup or consultant care, or doing only a cursory assessment when a more thorough evaluation is indicated.

Finally, and perhaps most important, in the words of a lifer, "everything hurts more in prison." As connections with the outside world are severed, the individual's focus naturally turns inward. Ailments and discomforts, which may provide only a moderate distraction outside of prison or jail, become overwhelming and all important for inmates. Why should an inmate struggle to continue working or meet a deadline when the usual rewards and benefits that promote this behavior in society are absent? Inside the walls, there is no reason for an inmate to ignore whatever symptom is causing stress; "muddling along" and fighting against symptoms to keep going frequently make no sense in prison or jail.

2. The Doctor-Patient Relationship

The doctor-patient relationship—and its extension to all providers—is defined by mutual respect and, on the part of the patient, by confidence and trust. This trust is grounded in the most basic ethic of medicine, *primum non nocere* (first, do no harm), and the physician's advocacy for what is in the best interest of the patient. Problems often arise when the physician's judgment regarding what is in the best interest of the patient conflicts with the patient's preference and choice. Patient self-determination, as an aspect of medical ethics, means that the patient's wishes prevail over the physician's advice, even if the patient's choice is a foolish one. Absent special circumstances, this is the general rule outside of corrections.

The problem with adherence to these principles in a correctional institution is immediately apparent. There are no equal and mutually respectful relationships between correctional personnel and inmates. By definition, the inmate is a person of lesser status and value and with fewer rights and privileges than administrators, officers, and health care providers. The essence of the relationship between inmates and correctional employees is hierarchical, not equal.

To act within the ethic of their professions, health care providers are frequently challenged by attitudes

and policies of the institution that are countertherapeutic. Mutual trust and respect must exist between provider and patient for the relationship to work (i.e., to provide the support for diagnosis, care, and treatment). The inmate must trust that the physician will act only in the inmate's best interest and will advocate and place the patient's health needs above all other considerations. Most providers enter correctional health care with these values, but they are challenged immediately and constantly by the overriding assumptions and norms of corrections.

Providers naturally tend to identify with other noninmates; all employees leave at the end of their shift to lead lives defined by the privileges and freedoms of society. In addition, distinctions of class and race may complicate the picture. Inmates tend to be poor and are overwhelmingly persons of color. Thus, classism and racism—acknowledged problems in American society—further complicate provider-inmate relationships. A goal of the correctional health professional must be to make the provider-inmate relationship as close to the doctor-patient relationship as possible. This requires constant vigilance to recognize and counteract the natural shift to correctional attitudes and mores.

3. Informed Consent and the Right to Refuse Care

Informed consent is the process of ensuring that the patient's values and preferences govern the care provided. The informed consent process requires that the doctor share with the patient sufficient information to permit the patient to choose among medical options. The physician must provide information about the diagnosis, prognosis, alternative available treatments, risks and benefits of those treatments, and possible outcomes if medical suggestions are refused. The patient must then apply his or her personal history, private values, ability to withstand pain and suffering, and religious beliefs to reach a personally appropriate (even if idiosyncratic), voluntary, uncoerced, informed, and comfortable decision.

Once stated, the problem is immediately apparent. Some scholars argue that prisons and jails are places of such systematic deprivation and repression that voluntary behavior is precluded, although others disagree.[1] Correctional facilities are the paradigm of the "total institution"[2] and work to destroy individual self-evaluation and independent behavior. Others argue that despite the nature of incarceration, inmates still can provide "good enough" consent[3] and that the alternative (i.e., consent by others) is even less appropriate. Structural supports may be required, however, to permit, buttress, and facilitate the voluntariness of inmate choice.

The process of informed consent has been defined as the ability to understand the information provided, measure the information against personal values and preferences, and communicate the ultimate decision.[4] Outside of prison or jail, this process often involves discussion with and consideration of the interests of others: "What will it cost?" "What will be the impact on my family?" "How will others react?" In prisons and jails, these questions are both harder to ask and harder to answer because they are more abstract.

Informed consent is a process and not a piece of paper. The requirement for obtaining informed consent or eliciting refusal is not satisfied by producing a document signed by the inmate. Informed consent describes the dialogue by which provider and patient share information, answer questions, hone the issues, and decide on the steps to be followed in providing care. Especially in complicated medical situations, this may take time, many visits, and additional tests or data to reach a satisfactory conclusion. Time, respect, communication, and trust are all central to the adequacy of this dialogue.

The rule outside of correctional facilities is clear: With few exceptions,[5] adults who are capable of making health care decisions have the right to consent to or refuse care, even if the result of that refusal is death. This rule is based on three common law conceptions: any touching without consent and without legal justification is a battery; every individual has a

right to the possession and control of his or her own person free from interference except by legal authority; and individuals possess a right of bodily integrity.[6] The last rule was stated most clearly in *Schloendorff v. Society of New York Hospitals* (1914) by Judge Cardozo, who said, "Every human being of adult years and sound mind has a right to determine what shall be done with his own body." These rules were further buttressed by the U.S. Supreme Court in the *Cruzan* case (*Cruzan v. Missouri Department of Health*, 1990), which stated that "a competent person has a constitutionally protected liberty interest in refusing unwanted medical treatment."[7]

The law and the ethical analysis of informed consent and refusal inside corrections are, not surprisingly, far more complicated. The legal rule appears to be that inmates have the right to consent to care, but do not have equally extensive rights to refuse care. One key case, *Commissioner of Correction v. Myers* (1979), held that an inmate who was attempting to refuse dialysis for his renal failure could have his right to refuse care overridden if his refusal and subsequent death could affect the administration of the prison. In this case, the court found that his refusal was not a genuine refusal of care but rather an attempt to manipulate the system to obtain a transfer; therefore, the court overruled his refusal of dialysis.

Another reason to be leery of refusals of care in corrections is the often difficult task of distinguishing between refusal of care and possible denial of care. In *White v. Napoleon* (1990), the behavior of an allegedly brutal and sadistic physician led inmates to refuse care.[8] These inmates stated that they did not truly want to suffer from their underlying medical conditions but preferred that suffering to the deliberately painful and ineffective alternatives provided by the physician. When inmates fail to appear for treatment, someone must determine whether they decided not to come because the symptoms abated,[9] because of conflicting programs or family visits, or because they were prevented from coming.

Practical ways of grappling with some of these ethical concerns include structuring a system for inmate access to and refusal of ambulatory care that helps to ensure that any refusal is genuine and informed. Such refusals should be in writing and should occur in the health unit after inmates have been counseled regarding the possible consequences of their refusals of care.[10] When refusals might significantly affect health or be life threatening, the corrections staff may wish to establish an interdisciplinary committee composed of health professionals, correctional officials, and clergy. This ad hoc group could meet with the inmate and discuss the refusal to ensure that it is informed and voluntary.

This discussion should not be construed to imply that every "no show" at sick call requires such extensive measures. As noted previously, the course of many illnesses is self-limiting. Written refusals should be required whenever there are potentially serious consequences of that refusal. Similarly, health staff should be required to follow up with "no shows" only when inmates' failure to appear may have an adverse effect on their health.

4. Confidentiality

Confidentiality is central to the doctor-patient relationship. It is based on a number of ethical principles (most prominently, respect for people and their privacy) and the utilitarian principle of encouraging full disclosure. It also is based on the legal concept of "privileged relationships," which protect discussions between a husband and wife, priest and penitent, lawyer and client, and doctor and patient. This privilege is limited and means only that otherwise relevant information sometimes can be excluded in court. The privilege, however, reflects a societal policy that fostering open and honest communication in these relationships is so important that it justifies some sacrifices in the judicial process. Confidentiality generally is required of health personnel in their professional oaths and state licensing statutes.

Arrayed against these protections is a vast number of processes and procedures which, together, render the principle fragile and frayed: A hospital chart is a means of communication and open to all caregivers—it supports the sharing of information, which permits continuity of care across shifts and among different professions; third-party reimbursement opens charts generally to the scrutiny of other professionals; and the computerization of medical information makes personal data easily accessible to many more eyes.

Despite this picture, the general ethic in medicine is that a patient's statements uttered in confidence must be guarded by the physician or other health care provider. There are some exceptions to this rule, and confidentiality is never absolute; for example, a breach may be permitted for the good of the public (such as in mandatory reporting laws) or for the protection of a specifically endangered individual.[11] In general, however, the aura of confidentiality permeates health care interactions.

The principle of confidentiality should equally guide the provider-patient relationship within correctional facilities. However, in prisons and jails, the public health imperatives and the need to protect others from illicit drugs or weapons may conflict more often with the health care practitioner's duty of confidentiality. Outside of corrections, providers generally do not have conflicting loyalties. Inside they do, and that ongoing tension affects how the principle of confidentiality is employed in practice.

Maintaining confidential communication within correctional facilities is a monumentally difficult task. Some breaches may be unavoidable; for example, medical information may be surmised from an inmate's pattern of movement or schedule of visits to the health unit. The rumor mill in corrections is busy and surprisingly accurate. In spite of this, every effort should be made to adhere to the principle of confidentiality. Sick call screening and triage should not be performed in dormitory units or within earshot of other inmates or correctional personnel. Health staff should not discuss one patient in front of another. Medical records should be protected and should not be available to correctional staff. They should be stored in space that is protected from officer or inmate access.[12] When health records are transported by officers (e.g., during interunit transfers of inmates), the records should be placed in sealed envelopes or containers and delivered unopened to health staff.

Confidentiality is important not only to the privacy of an inmate, but also as an underpinning for the truth-telling necessary for an adequate history and physical assessment. Histories of drug and alcohol abuse as well as incidents related to trauma or sexual attack or behavior are far more likely to be explained accurately to a provider if the inmate is sure of the privacy of the communication. If the provider acquires information that indicates an immediate danger to the inmate (e.g., suicidal intent) or an immediate danger to others (e.g., the possession of weapons), that information must be communicated to correctional authorities. Absent such identifiable dangers, inmates' privacy regarding their health should be protected and guarded.

That said, there are some circumstances when custody staff have access to inmates' health information. For example, correctional staff are often present during health encounters with individuals who have exhibited violent behavior against staff or others, or who are a high security risk. Even in these situations, though, every effort should be made to provide auditory privacy. In addition, correctional staff observing such health encounters should be instructed to keep any health information obtained confidential.[13]

A more troubling circumstance exists when correctional staff members participate in group discussions regarding the health status of particular inmates. A number of correctional systems use a case management or treatment team approach to provide care, particularly in mental health or substance abuse programs. Clearly, the observations and input of correctional staff can be very valuable to the treatment team in deciding how to care for and

manage particular patients, but the patients' confidentiality of health information is likely to be violated when nonclinical staff participate in such discussions. One solution might be to require these correctional staff members to sign a statement agreeing not to disclose or use any of the information that they acquire as a result of their participation in a treatment team or case management group. A better solution, however, may be to devise a form that solicits information regarding inmates' day-to-day activities and behavior from correctional staff, but not to include these staff members in the discussions of the treatment team. In this way, the input of correctional staff members is available, but the inmates' rights to confidentiality of their health information is preserved.

5. Biomedical and Behavioral Research in Correctional Settings

The modern evaluation of the ethics of research began with the Nuremburg trials of Nazi doctors and officials that followed the Second World War. In those trials, observers and some participants described the so-called "experiments" (in reality, torture) that Nazis had imposed on inmates of slave labor and concentration camps. Their claim that the inmates had consented was not credible and the revulsion that these descriptions engendered led the worldwide research community to rethink obligations to human subjects. What resulted were The Nuremburg Code of 1949, which stated that "the voluntary consent of the human subject is absolutely essential" to the conduct of research, and later, in 1964, the Declaration of Helsinki, which set forth the basic principles that should govern all research, including provisions for the quality of the science; the competency of the researchers; the importance of the subject; and the voluntary, informed, and capacitated consent of the person targeted as a potential human subject.

Research with human subjects in prisons and jails has a long history of abuse in this and other countries.[14] In the past, prisoners often were used to test cosmetics, new vaccines, or new drugs without adequate prior informed consent. Even when there was ostensible consent, some argued that the systematic and profound deprivations of institutional life vitiated the consent because there was not a sufficient degree of voluntariness.[15]

In 1976, the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (NCPHSBBR) addressed the problem of research involving prisoners. Some experts argued that prisoners gain a wide variety of benefits from participating in experiments, including much greater financial reward than otherwise obtainable in prison; improved physical surroundings, which provide greater comfort and safety; and relief from boredom. The proponents of involving prisoners in research also argued that society as a whole gains from the increased scientific knowledge.[16]

These arguments reflected the fact that historically prisoners involved in biomedical research were treated more humanely, given better living conditions and shielded from some of the boredom, danger, and fear of prison life. Many inmates valued these benefits and sought to continue as subjects in research and drug protocols. Nonetheless, members of NCPHSBBR were concerned about the risks of research and the compromised ability of an inmate to provide an adequate, uncoerced informed consent, given the continuous emotional and material poverty of their surroundings.

These concerns led the commission to recommend general restrictions on the conduct of research in prisons. Following these recommendations, the federal government adopted regulations governing research on human subjects in general[17] and on prisoners in particular. The special section on prisoners[18] stated that the purpose of the regulations was "to provide additional safeguards . . . inasmuch as prisoners may be under constraints because of their incarceration, which could affect their ability to

make a truly voluntary and uncoerced decision whether or not to participate in research."

The regulations identify four categories of permitted research:

- Study of the possible causes, effects, and processes of incarceration and criminal behavior. The study must present no more than inconvenience and minimal risk to the subjects.
- Study of prisons as institutional structures or prisoners as incarcerated persons. The study must present no more than inconvenience and minimal risk to the subjects.
- Research on conditions particularly affecting prisoners as a class; for example, vaccine trials and other research on hepatitis, which is much more prevalent in prisons than elsewhere, and research on social and psychological problems, such as alcoholism, drug addiction, and sexual assaults. The study may proceed only after the Secretary of the U.S. Department of Health and Human Services (DHHS) has consulted with appropriate experts, including experts in penology, medicine, and ethics, and published notice in the *Federal Register* (1978) of his or her intent to approve such research.
- Research on practices, both innovative and accepted, which have the intent and reasonable probability of improving the health or well-being of the subject. In cases in which those studies require the assignment of prisoners in a manner consistent with protocols approved by an institutional review board (IRB) to control groups that may not benefit from the research, the study may proceed only after the Secretary of DHHS has consulted with appropriate experts, including experts in penology, medicine, and ethics, and published notice in the *Federal Register* of his or her intent to approve this research.

Note, though, that research in these categories can proceed only when approved by a specially organized IRB with a prison advocate present who is charged under the regulations with reviewing all research involving human subjects.

The Code of Federal Regulations continues to govern all research conducted with federal funds or organized through institutions that receive those funds. Its provisions had sway with the research community until the late 1980s when the HIV epidemic became the basis for prisoners agitating to participate in research protocols. From the mid-1980s until the development of multiple-antiretroviral therapies as standard protocols, most HIV treatment was provided under research protocols and within randomized clinical trials. Prisoners and their advocates wanted access to these treatments.

In 1989, a working group under the direction of Nancy Dubler, LLB, and Victor Sidel, MD, with the participation of representatives from the Office for the Protection from Research Risks (as delegated by the Secretary of DHHS to monitor the federal regulations) argued that under certain circumstances, prisoners should be able to participate protocols. The report presented the consensus that under these circumstances—a life-threatening disease with no effective treatments—it was acceptable for prisoners to have access to these trials as long as no part of the trial involved a placebo.[19]

A more recent discussion about clinical trials in prisons conducted in October 1999 by the HIV Education Prison Project at Brown University seemed to indicate the willingness of experts, advocates, and ex-inmates to extend participation in trials to inmates when—

- The inmate was offered the standard accepted treatment outside of the clinical trial.
- Good clinical practice at the site had been documented.
- Protections were in place to ensure that prisoners, who are a vulnerable population, were not subject to undue coercion or influence.
- Prisoners did not have to sign onto protocols to receive the best care.

- Inmates were not the sole group participating in such trials.

These sorts of prospective guidelines are still in process. In the meantime, any permissions for research in prisons should ensure that the consent to research is based on an understanding of the risks and benefits of the protocol in a context in which adequate care is available outside of the protocol.

6. Terminal Care, End-of-Life Care, and Advance Directives

The aging of the inmate population, longer sentences, and the devastation of AIDS among former drug users in prisons has greatly increased the number of health-related deaths in correctional facilities. According to Hammett and his colleagues (1995:4), inmate AIDS deaths increased by 1,311 percent from 1985 to 1994. The cohort of dying patients will necessarily grow in the future as the graying of correctional systems accelerates. In the mid-1990s, approximately 3,000 prisoners died each year of AIDS or other acute or chronic illnesses (Stephan and Wilson, 1996:85). As "three strikes and you're out" laws, mandatory minimum sentences, and determinate sentences increase, the number of inmates older than 55 will escalate and the percentage of chronic life-impairing and life-threatening conditions, such as congestive heart failure, cancers, and other conditions of aging, will come to dominate some systems. This will require instituting palliative care programs in addition to end-of-life and hospice protocols.

Caring for the terminally ill requires compassion, skill in providing comfort and support, knowledge of pain management and the ability to help, and permitting the dying patient to experience the stages of death from denial to acceptance. It is difficult to provide for an acceptable quality of death in a correctional setting where comforts are limited, providers skilled in dealing with the terminally ill may be scarce, and family and loved ones generally are excluded from intimate, continuous participation. The needs of dying patients and the requirements of security rules are often mutually conflicting.

Compassionate release or medical furlough programs[20] are one important answer to this dilemma, but only a few programs exist for the many inmates who might use them. Many judges and state officials are reluctant to release inmates until it is clear that their physical disabilities will preclude their return to antisocial behavior. Often, by the time that marker is reached, inmates may be too sick to benefit from their release and too needy to be cared for by their family, if they are still available for and interested in the task. Arranging for release also requires the tenacious supervision of a medical person willing to negotiate with state officials, judges, community care facilities, and family; all too often, such a person is lacking. A few prisons have a thanatologist on staff to work with terminally ill inmates,[21] and a few systems have a hospice program,[22] but the needs far outweigh the available services.

Caring for the terminally ill inmate is likely to be extremely expensive. Estimates for the overall care and custody of an elderly inmate range from $60,000 to $69,000 per year, in contrast to about $20,000 per year for nonelderly prisoners and non-HIV-infected inmates (Ornduff, 1996). The physical structures of most correctional settings do not make caring an easy matter. The institutions almost always contain many steps and long passageways. The rooms are either too hot or too cold and are difficult to regulate. There is little place for meetings with family and clergy and few facilities for preparing and serving the sorts of drinks and meals that the inmate might need at the time these are required. The barriers are formidable.

There is a final barrier to decent end-of-life care. The judgment to place an inmate in end-of-life care must be based on a review of his or her medical status following a vigorous and medically aggressive course of interventions designed to preserve and extend life. Despite the progress that has been made in correctional health care over the past two decades, systems that do not deliver adequate care

remain. In addition, these systems experience new pressures as managed care increasingly dominates the philosophy, sets the financing strategies for health care delivery, and limits the funds available to treat any particular inmate. If inmates have not received adequate aggressive acute care, it is a violation of their human rights and their constitutional right to health care to place them in a program for end-of-life care.

When it is determined that end-of-life care is appropriate, it should contain the following elements:

- Education for correctional and health staff to help them shift the focus of their interactions from patients as prisoners undergoing punishment to patients as individuals who must be helped to resolve issues related to dying, including attachments, regrets, denials, and spiritual and emotional leavetaking.
- Palliative care protocols for the care team to accurately assess the level of physical discomfort and provide effective responses to pain and suffering.
- A formulary stocked with adequate pharmaceuticals to address the needs of inmates. These medications should be secure but available when needed by the care team.
- Special foods and fluids as needed to support medication regimens or when wanted by the inmate.
- Special rules for family, loved ones, and clergy that permit extended visits at times not normally permitted.
- Outreach to family members who might have been estranged from the inmate to give them the chance for reconciliation.
- Attempts to work with family, clergy, or special organizations to ensure a burial fund that will permit the interment of the inmate in a cemetery.
- A variation of the general rules about shackling that permit the dying patient to be moved outside of the facility without unnecessary restraint.
- Services to commemorate those who have died so that care providers, family, and others may remember and mourn the deceased. Without ritual, deaths become numbing and dehumanizing for the staff and other inmates.

Whether care at the end of life should be provided in special settings or hospice units depends on the structure of the prison or jail system and the needs of the particular inmate. If the units are dedicated to those who have received state-of-the-art aggressive care and whose medical status has been reviewed by experts, either inside or outside the system, the services provided are likely to be helpful. The danger is that transfer to such a unit might be a substitute for cure-oriented care—an inappropriate use of this service. Additionally, inmates may see this transfer as a "death sentence" and feel that the facility has given up caring about them. It also may be the case that these units have less access to spiritual and educational programming, the library, and other activities that make life more meaningful.

One intervention that must be considered for care at the end of life is advance directives: living wills, proxy appointments, and do-not-resuscitate orders. These tools have been helpful for some individuals outside of correctional settings, although it is becoming increasingly clear that despite extraordinary efforts, the vast majority of people, including physicians, do not employ them. When they *are* capable of making health care decisions, people indicate through advance directives their preferences and values if decisions need to be made when they are no longer able. They are, at least in theory, value neutral, and patients can use them to request or refuse care; in fact, most people use them to prospectively refuse care. In prisons and jails, the use of advance directives should include (1) a review of the quality of care that the inmate is receiving and has received to inform his choices and (2) the presence of an outside person or clergy to ensure that

the inmate's choice is informed and voluntary and reflects his values.

Decent and humane end-of-life care and ongoing protocols for palliative care (care intended to provide comfort to the patient and improve his or her quality of life) will become increasingly important as prisons and jails contain greater numbers of older and chronically ill persons. These are difficult programs for health service administrations to initiate because they require the intimate cooperation of the custody staff and variation of the usual rules and regulations. Nonetheless, they will be the moral responsibility of the health staff and will mark the presence or the absence of genuinely patient-centered care.

7. Other Issues

A number of other ethical issues could be addressed here. Two that require mention are (1) financial incentives for physicians not to refer patients for additional consultations or tests and (2) organ donation. Because of the advent of managed care and increased technology, these issues are likely to become more prominent in the 21st century.

During the 1990s, some managed care firms in the community provided bonuses to primary care physicians who reduced the number of outside referrals they made to specialists and diagnostic facilities. Within corrections, this practice was adopted in several systems—particularly where health services were provided by private contractors and for-profit firms. Such bonuses set the stage for a potential conflict between the patients' best interests and the self-interest of the physician.[23] As such, bonuses should not be permitted.

As advances in medical technology have increased the success rate of organ transplants, ethical issues concerning organ donations have resurfaced. In the general community, one of the current controversies concerns those who want to sell and those who want to buy organs.[24] Within corrections, some prison systems already permit an otherwise healthy inmate to donate organs or tissue not necessary to sustain life (such as one of two kidneys, or bone marrow) to a family member. Limiting donations to family members provides maximum protection to living inmates, who otherwise could be subject to improper pressures to donate (or even sell) organs. Other ethical issues arise because of the nature of the setting in which donation would occur. Donations from inmates who are near death, are under death sentence, or want to donate to someone unknown may be subject to pressure that cannot be fully controlled. A full exploration of these issues is beyond the scope of this chapter, but great caution should be used before authorization is given beyond donation to family members.[25]

C. Bioethical Issues Unique to Correctional Settings

Health care professionals working in corrections are bound by the same code of ethics as their peers on the outside. The basic issues and principles of ethical conduct discussed in the prior section apply within a prison or jail as much as in other settings. Nonetheless, it is more difficult to adhere to ethical principles within a correctional environment due to two factors: the attitudes of some correctional personnel and the behavior of some inmates.

Correctional officers may feel that some or all inmates are undeserving of good health care, particularly those who have committed heinous crimes or who are "troublemakers" within the institution. Correctional administrators—especially if they control the health budget—may believe that a required treatment is too costly and may pressure health providers to alter medical orders or alternatively, may seek to delay carrying out that order. If the inmate is classified as an especially high security risk, the challenges to the health professional's judgment are likely to be even more adamant, especially if proper care requires the inmate to be transferred out of the facility.

On the other side are the inmates, some of whom may be extraordinarily demanding and manipulative. As noted previously, a number of secondary gains beyond seeking needed care can accrue to an inmate by visiting the health services area. Inmates may press health professionals for services or medications that are not required. It is a rare prison or jail physician (especially one new to corrections) who has not received repeated requests from inmates for medications for "nerves" or "sleeplessness" or "pain." Some inmates continue to test providers until they determine that their efforts will not be automatically rewarded. Providers should recognize that these inmate tactics are not directed at them personally and that they need to be dealt with in a professional manner. Health providers must ensure that their patients receive the care they need. At the same time, they must recognize that succumbing to inmate demands for unnecessary care may do as much harm as acquiescing to the improper requests of correctional administrators. Additionally, correctional health professionals must guard against burnout, which usually emerges as a belief that many or most inmates are faking. That, too, can do harm by causing the health professional to ignore valid symptoms and deny or delay needed treatment.

In balancing inmates' needs and wants against institutional demands, both inmates and correctional staff must be clear about the centrality of medical autonomy. Both must understand that a health provider decides what medical behaviors are permissible based on their relationship to accepted medical goals. Medical autonomy means that the professional judgment of clinicians regarding their patients' needs cannot be overruled by nonmedical personnel. This principle is explicitly recognized in National Commission on Correctional Health Care (NCCHC)[26] and American Correctional Association (ACA)[27] standards. Its observance in correctional facilities is crucial because of the special pressures in this environment.

There is, however, one caveat. Medical autonomy relates solely to clinical decisions regarding patient care. Some correctional health professionals are quick to invoke the principle of medical autonomy whenever any of their decisions are overruled by the administration. This is comparable to correctional staff who hide behind "security reasons" as an explanation for their decisions and actions. Both are inappropriate.

Administrative matters, such as when to schedule sick call, should be decided jointly by the facility manager and the unit health authority. Clinicians may prefer to work from 9 a.m. to 5 p.m., but the needs of the institution may dictate a different schedule. Health services is a support albeit a paramount function within an institution. Correctional health professionals would do well to accommodate custody staff whenever they can do so without compromising their ethics or jeopardizing the health of their patients. In this way, the respect of correctional officials for legitimate areas of medical autonomy will be fostered.

To be effective, correctional health professionals should be neutral in nonmedical matters. If they align themselves with security staff, they risk losing their effectiveness with their patients. If they are perceived as uncritical inmate advocates for other than health reasons, they risk losing the respect and cooperation of their correctional coworkers. Compounding this balancing act are the unique ethical dilemmas encountered in a correctional environment, some of which are described below.

Where useful and appropriate, national standards and other authorities are cited on particular issues. At times, though, they do not agree. Also, because the listing is illustrative, not exhaustive, there are sure to be situations confronting correctional health professionals that are not addressed here. In these instances, the solution for the individual practitioner lies in the general obligations inherent in the doctor-patient relationship. If practitioners perceive that what they are asked to do might compromise that relationship, they should not do it.

1. Body-Cavity Searches

Searching body orifices for contraband usually is done solely for custodial purposes. Nonetheless, correctional health personnel sometimes are asked to perform this function. The question of when such searches may be conducted is a legal one, whereas the question of who should conduct them is a professional one that may have an impact on the provider-patient relationship. At first glance, it may seem appropriate that body-cavity searches be conducted by the facility's health professionals because they are more likely to be adept and considerate of the inmate's feelings. However, doing so compromises the health professional's neutral role with respect to correctional functions and may jeopardize subsequent health encounters with the inmate. It is especially problematic if contraband is found because the health professional would be asked to testify against the inmate in a disciplinary hearing.

Both NCCHC (1996, 1997) and American Public Health Association (APHA) (Dubler, 1986) standards explicitly recognize this ethical dilemma for correctional health professionals and state that their participation in such searches is inappropriate if they are (or could be) in a therapeutic relationship with the inmate. ACA (1990) standards permit health personnel as well as trained correctional staff to conduct body-cavity searches, whereas Joint Commission on Accreditation of Healthcare Organizations (JCAHO) standards are silent on this issue.

Certainly, there are occasions when body-cavity searches may be justified to protect the inmate or other inmates or staff, especially if someone suspects a weapon has been secreted. For other types of contraband, correctional personnel should consider the option of placing the inmate in a dry cell (i.e., one without a regular toilet). When it is necessary to conduct a cavity search, the American Medical Association (AMA) (1980) suggests that—

- Nonmedical persons who conduct searches should receive training from a physician or other qualified health care provider regarding how to avoid injuries and infections from unsanitary conditions.
- Instruments should not be used in searches.
- Searches should be conducted in privacy by a person of the same sex as the inmate.

One solution is to use trained nonmedical personnel to conduct body-cavity searches. Another (although often less feasible) solution is to use community health providers who do not have a direct provider/patient relationship with inmates. Although either of these options is acceptable under NCCHC and APHA standards, they still may not be satisfactory solutions for the wardens or jail administrators who do not understand why the health professionals they employ cannot perform this procedure.

Faiver (1998) suggests that facility health staff can perform body-cavity searches if the inmate voluntarily consents to the procedure and is aware of the potential consequences. However, he also suggests a better practice: The agency modifies its policy and procedures regarding such searches to ensure they are ordered only when there is probable cause and no other less invasive alternative exists. He states, "If all of these safeguards are in place, the actual use of body cavity searches may become so rare that they easily can be handled by outside medical personnel without a major cost burden (1998:240)."

Anno and Spencer take a somewhat different approach. They state that:

> In larger facilities, the solution may be to find a correctional practitioner in the same institution who is not in a therapeutic relationship with the inmate. If that is not possible, the next best solution may be to transport the inmate to a neighboring correctional facility. Correctional administrators still may not be happy having to transport the inmate, but at least they will not have to pay for the services of a community physician. (1998:36)

2. Collecting Forensic Information

There are a number of other circumstances in which correctional health professionals may be asked to collect information for forensic purposes, including performing mental health evaluations of inmates for use in adversarial proceedings, conducting blood tests to determine drug and/or alcohol use or for DNA analysis, and using radiological equipment to discover contraband. These situations pose special ethical dilemmas for correctional health professionals because, unlike body-cavity searches, they involve medical procedures and require qualified health staff to carry them out.

The consistent ethical approach is for correctional health staff to refuse to participate in this type of evidence collection, requiring custody staff to seek these services in the community. Recognizing the impracticality of such a requirement in all circumstances, however, both APHA and NCCHC standards allow for some compromise. Although APHA standards (Dubler 1986:113) do not specify the exact situations in which it is permissible for medical personnel to gather evidence for court hearings, the permission of the inmate and defense attorney must be obtained if this is to occur. NCCHC standards (1996:85; 1997:85) prohibit correctional health staff from conducting psychological evaluations for use in adversarial proceedings but permit them to perform court-ordered laboratory tests or radiology procedures with the consent of the inmate. Similarly, in cases of sexual assault, NCCHC standards permit health professionals to gather forensic evidence if requested by the inmate-victim. Neither of the two sets of standards permit these activities to be carried out by correctional health staff without the inmate's consent, and the exceptions to the general ethical rule of nonparticipation are very narrow. Neither ACA (1990) nor JCAHO (1990) standards address these issues.

Drawing blood specimens for DNA analysis warrants separate discussion. Like the blood-alcohol test example above, this is done solely for forensic purposes and requires a medical person to draw the blood. Unlike blood-alcohol tests, though, that are drawn on specific inmates presumably when there is cause, many of the state laws mandating blood specimens for DNA analysis require them to be collected on large groups of inmates, such as "all convicted sex offenders" or even "all convicted felons," which would be everyone in a prison. NCCHC prison standards are the only national standards that specifically address the role of correctional health staff in collecting blood for DNA analysis. The NCCHC standard on forensic information states that the use of health services staff for collecting specimens for DNA analysis is appropriate under the following conditions:

- A therapeutic relationship does not exist between the health services staff member and the inmate.
- The inmate has given voluntary consent.
- The health services staff are not involved in any punitive action taken as a result of an inmate's nonparticipation in the collection process.[28]

Alternatively, a community health provider could be used to draw the blood, or if the volume warrants it, the department of corrections could hire someone (e.g., a phlebotomist) specifically for this purpose.[29]

3. Witnessing Use of Force

Correctional officials may request that health personnel act as observers at planned use-of-force incidents, such as moving a recalcitrant inmate to a new cell or a different facility, in the belief that a neutral witness could refute any subsequent claims by the inmate that the force used was excessive. Inmates, too, may ask that a health professional be present in the hope that this will curtail extreme behavior. Again, however, this is a purely custodial function. In any event, in the midst of a conflict, it is unlikely that the presence of a health professional will affect the behavior of either the inmate or the correctional staff. Health staff should be readily available, though, to respond in case of injury.

Where correctional policies require a neutral witness in planned use-of-force incidents, it is recommended that a nonmedical person be selected. Staff who are not in a provider-patient relationship with inmates are not confronted with the same ethical conflict as health professionals. This recommendation is consistent with APHA standards. The other three sets of national standards do not specifically address the role of health professionals in use-of-force incidents, although the 1990 ACA manual has several standards designed to ensure that force is used only as a last resort.

In many facilities, finding a neutral witness to observe planned use-of-force incidents is no longer an issue. Many correctional agencies' policies and procedures now require that all planned use-of-force incidents be videotaped. This provides a permanent record of the event without relying on eyewitness testimony (assuming, of course, that the entire incident is accurately recorded).

4. Use of Restraints for Nonmedical Purposes

Correctional health personnel should not participate in either the decision to restrain someone or in the placement of such restraints for nonmedical reasons. NCCHC standards[30] explicitly prohibit health care staff from participating in this activity but recommend they monitor the health status of individuals placed in security restraints. If they observe conditions or practices that threaten an inmate's health, their concerns should be communicated to the prison or jail administrator as soon as possible.

This is a troubling ethical dilemma for correctional health professionals. Although it is clear that health staff should not participate in any form of punishment of inmates, some correctional staff would argue that restraints are not being used to discipline an inmate but only to protect the inmate and others from violent behavior or to reduce the risk of escape. Indeed, ACA standards[31] prohibit the use of restraints as punishment. On the other side, some experts have argued that monitoring the health status of individuals in nonmedical restraints is tantamount to participating in their punishment and should be condemned.[32] JCAHO standards do not address this issue, and neither the ACA nor APHA provide any guidance regarding whether monitoring by medical staff of a restrained inmate's health status is appropriate if the restraints are not for medical purposes.

This may be a situation in which the underlying ethical principal is one of "doing the least harm." While some may argue that any involvement of health professionals in any aspect of punishment, including monitoring their health, is inappropriate, others would argue that health professionals have a moral responsibility to ensure the well-being of their patients in all situations and particularly when they are being disciplined, when deterioration of health is most likely to occur. Until this issue is settled, it appears that NCCHC's position is the more reasonable approach because it is likely to result in less harm to the inmate. It is acknowledged, however, that "certifying wellness" can be a troubling position for correctional health professionals; each case should be judged on its own merit.

Clearly, the ethical issue discussed above revolves around the use of nonmedical restraints on inmates. When a patient is restrained for medical purposes, three of the sets of national standards (all except JCAHO) require written guidelines specifying the types of restraints that may be used; who may order them; and when, where, how, and for how long they may be used.[33]

5. Disciplinary Segregation

Health staff should not be involved in any way in the decision to place an inmate in disciplinary segregation.[34] Once the decision is made, the ethical issue of whether health staff should monitor the inmate's health status is similar to that regarding their role in monitoring the health status of inmates placed in nonmedical restraints. NCCHC's position is consistent in that its standards mandate daily

evaluation of such individuals by a qualified health professional and appropriate documentation in the patient's medical record.[35] With respect to medical monitoring, neither ACA[36] nor APHA[37] standards distinguishes between the different types of segregation and both require daily visits by health staff for all inmates whose movement is restricted.[38] JCAHO standards do not address this issue.

If the ethical dilemma involved only monitoring inmates' health status, it could be resolved along the same lines as the prior discussion; namely, that it is less harmful to inmates for health professionals to monitor their health status while they are in disciplinary segregation than it would be to ignore them until they are released back to the general population. NCCHC standards add another factor: the requirement that inmates' health records be reviewed by a health professional to determine whether there are any contraindications to placing specific individuals in disciplinary segregation. This appears to be at odds with the APHA statement that "medical staff must refuse to participate in certifying that an inmate is free of illness and disease and therefore may be punished. The certification of wellness for punishment is a nonmedical function" (Dubler, 1986:113).

In NCCHC's view, health professionals are not asked to certify wellness so that an inmate may be punished but rather to determine whether the inmate is not well. As stated in the standards, "The intent of this standard is to ensure that inmates who are placed in disciplinary segregation do not have any [health] conditions contra-indicating such placement" (NCCHC, 1997:50-51). Again, ACA and JCAHO standards do not cover this matter. Until a clearer consensus is reached by the standard-setting bodies or by professional health associations, correctional health authorities will have to determine for themselves and their staff which set of principles to follow on this issue.[39]

6. Other Punishment Modes

Occasionally, health staff may be asked to participate in other punishment activities and it may seem reasonable to do so. For example, health staff may want to "write up" or "ticket" inmates for institutional rule violations such as swearing at staff, particularly if they have been the recipient of such behavior. This should be avoided, except when the rule violation jeopardizes the safety or security of the facility and its occupants. Health professionals are not police and should not behave as such. Their education and training should provide them with other ways to deal with abusive patients.

Similarly, some institutions list "malingering" or being a "no show" for sick call as disciplinary offenses. Health staff should be very cautious about a diagnosis of malingering, and even when they believe an inmate has no legitimate medical problems, that information should never be given to correctional staff as a basis for disciplining the inmate. Instead, if the medical staff decides that no further treatment is needed, it is up to the health professionals to manage the problem.

Health staff should work with correctional officials to ensure that inmates are not being punished for refusing treatment. An inmate has a right to refuse sick call. If the correctional concern is that the inmate was given a medical pass and instead went somewhere else, then he or she should be ticketed for being out of place, not for being a medical no-show. This problem could be alleviated to a large extent if health units had a way for inmates to cancel their medical appointments.[40]

Another example of a punishment unique to corrections is ordering a "food loaf" for inmates who throw their food at correctional staff. These food loaves are supposedly nutritionally adequate, but their preparation and presentation may keep someone from eating them. These are not special diets in the medical sense and health professionals should refrain from devising or prescribing them.

7. Hunger Strikes

None of the sets of national standards specifically addresses hunger strikes. Although they are rare in corrections, health professionals often seek guidance when confronted with them. The ethical dilemma for correctional health staff is posed not by hunger strikers who may be mentally ill (community standards permit caregivers to decide, in an emergency, what is in the best interests of patients who are not competent to decide for themselves) but by those who are mentally competent. More often than not, inmates who are not mentally ill participate in hunger strikes for political and/or manipulative reasons. The well-publicized hunger strike of the Irish Republican Army's (IRA) members held in British prisons comes immediately to mind. In general, inmates who have the capacity to make health care decisions have a right to refuse care and treatment even when doing so is injurious to their health or threatens their lives.[41] Presumably, that right may be extended to the refusal of nourishment required to sustain life. In the absence of specific case law or professional ethical guidelines, though, the brief discussion below should be viewed only as a departure point for further study and examination.

It is recommended that serious hunger strikes (i.e., those lasting more than 2 or 3 days) be supervised by an interdisciplinary committee of correctional and noncorrectional personnel. A committee formed to scrutinize life-threatening refusals of care also might be appropriate for this task. If the committee agrees that the inmate has made a careful, considered, voluntary decision based on a principled position—and not as a response to mental illness—the inmate should be permitted to continue. At this point, the inmate should be moved to a medical setting. The task of the physician is then to keep the inmate apprised of his or her health status and the likely consequences of change or deterioration. The provider is the health consultant to the inmate. Force-feeding the inmate clearly would violate his or her wishes and concepts of patient autonomy discussed previously.

Up to this point, there is likely to be agreement among correctional health experts in terms of the proper management of hunger strikers. The dilemma occurs when the hunger strike continues to the point that the inmate becomes comatose. It is not clear whether an inmate who refuses sustenance should be allowed to die without interference from correctional or medical authorities, as occurred with some of the IRA prisoners; whether that is ethically appropriate is an open question. There is related case law in some states (e.g., *Commissioner of Correction v. Myers, State ex rel. White v. Narick*[42]) and several suicide cases that suggest the contrary; i.e., that correctional officials have a duty not to allow an individual to die. Until this issue is settled, correctional and medical authorities would do well to have a prior written policy and to seek a court order when confronted with a serious hunger-striking inmate.[43]

8. Executions

Health personnel should not take part in any stage of the process of execution, which is the most clear and most direct violation of the principle "do no harm;" death is the ultimate harm. This is explicitly stated in APHA standards[44] and in NCCHC prison standards (1997:86). Additionally, a number of other health organizations including the American College of Physicians, AMA, American Nurses Association (ANA), and APHA issued a joint statement in 1994 opposing health professionals' participation in executions and urging that all professional societies impose sanctions on any of their members who do participate.[45]

In many states, a physician is required to certify death, and although this is not unethical in usual circumstances in the free world, it poses an ethical problem for correctional physicians—particularly regarding how they may be perceived by other inmate patients. Occasionally, there may be a botched execution, such as in Florida in 1990 and again in 1997 when problems occurred with the electric chair.[46] This places the physician in attendance in

the untenable position of having to determine that the inmate is not dead yet—so that he or she may be "killed again." Additionally, some correctional physicians object to capital punishment on personal moral grounds. Thus, community physicians should be utilized to pronounce death subsequent to executions.

Despite the restriction not to participate in executions, health staff have an obligation to care for the physical and psychological needs of death row inmates to prevent suffering. A very difficult issue is presented if the inmate is mentally ill, especially if he or she is not suffering and if treatment might result in the inmate's being declared "competent," thus eligible for execution. This is a true dilemma faced by mental health professionals: two conflicting "goods"—one to alleviate the inmate's illness and the other to prevent the inmate's death. NCCHC (1995a) recommends in its position statement on competency for execution that—

> [T]he determination of whether an inmate is "competent for execution" should be made by an independent expert and not by any health care professional regularly in the employ of, or under contract to provide health care with, the correctional institution or system holding the inmate. This requirement does not diminish the responsibility of correctional health care personnel to treat any mental illness of death row inmates.

It should be clear that it is unethical to force-medicate an inmate to restore competency so that he or she can be executed.

9. Mental Health Evaluations

Psychologists and psychiatrists working in correctional facilities often are asked to provide other types of mental health evaluations for use in court proceedings (e.g., presentence evaluations, competency hearings) or parole hearings. Obviously, such evaluations are useful to judges and parole boards who are faced with the responsibility of deciding whether the individual should be incarcerated or released to the community. An ethical conflict arises, however, when the mental health practitioner conducting such evaluations was, is, or could be in a therapeutic relationship with the offender. The element of trust that is paramount in the provider-patient relationship is likely to be missing when (1) the person who completed the presentence report becomes the therapist for the offender who is now incarcerated or (2) the psychologist who wrote a report for the parole board must continue as the offender's therapist after parole is denied. The NCCHC standard on forensic information for both jails and prisons prohibits mental health staff who are in a therapeutic relationship with offenders from performing psychological evaluations of them for adversarial proceedings.[47]

In large systems, one solution to this dilemma is to designate one or more clinicians to conduct such evaluations but not treat patients. Because they are never in a therapeutic relationship with offenders, there is no ethical conflict. In smaller systems, the services of an outside clinician should be sought when such reports are required.

A new ethical dilemma for some mental health professionals emerged when, in 1997, the U. S. Supreme Court upheld the constitutionality of a Kansas statute *(Kansas v. Hendricks,* 1997*)* that permitted the civil commitment of sexually violent offenders after they had completed their criminal sentence. According to Rold (1999:6):

> The Court's 5/4 decision thus gave a "green light" to the preventive detention of persons based not on what they have done in the past (the historical basis of incarceration) but upon what it is predicted they will do in the future—which heretofore had been largely unheard of in this country.

In some states with similar laws regarding the civil commitment of sexually violent offenders, mental

health staff at the correctional institutions where such offenders are housed are asked to write a report that predicts the likelihood of their committing another sexually violent offense. At first glance, this seems permissible because any therapeutic relationship would terminate upon the offender's release, and thus there would be no conflict of interest. There *would* still be an ethical conflict, however, because the mental health staff member would be breaching the inmate's confidentiality. Additionally, in some states, mental health units for released sexual offenders are annexed to existing prison facilities where it is possible that the same mental health provider may be treating the inmate both before and after the civil commitment. Rold (1999:6) argues:

> [S]ince inmates will inevitably learn that such reports *can* be made, the provider-patient relationship will always at least possibly be jeopardized, because inmates may be reluctant to participate fully and be forthcoming in treatment if the consequences could be an indefinite institutionalized diversion.

Thus, the treating provider should not be the one to complete a psychiatric report that predicts the "future dangerousness" of sexually violent predators. Again, the services of an outside clinician should be obtained—or at least someone who is not currently and is not likely to be in a therapeutic relationship with the offender in the future.

D. Interacting With Custody Staff

The prior section reviewed situations that limited the participation of health professionals in custodial functions. There are several other circumstances, though, when it is appropriate for health personnel to interact with custody staff regarding individual inmates. Providing certain health information to classification committees, disciplinary hearing boards, and institutional transfer groups are some examples discussed below.

1. Classification Committees

Most, if not all, correctional agencies have a systemwide classification board that makes initial unit assignments and reviews transfer requests and unit classification committees that determine housing, program, and work assignments for inmates. In order for these groups to be fully effective, they must have some basic information about inmates' medical and mental health needs. For example, in many systems, not all facilities are equally equipped to address special health needs. An inmate with a chronic illness may require placement in a unit with an infirmary. Another may need to be assigned to a facility with programs and resources for the developmentally disabled, handicapped, or aged and infirm. For others, the geographic location of the prison or jail is important if they require frequent transportation to a tertiary care facility. In the absence of some information about inmates' health status, systemwide classification boards are not able to ensure that inmates' special health needs will be met.

Similarly, unit classification committees should be aware of certain health conditions of inmates that may affect where they are housed or assigned to work. An inmate who is exhibiting signs of withdrawal or depression generally should not be single celled. One with epilepsy will require a lower bunk. An amputee may need to be placed on the ground floor. Other medical and mental conditions may restrict inmates' assignments to particular jobs.

The issue for health professionals is how to provide important information to classification groups about inmates' health conditions without violating the inmates' right to confidentiality. The solution is relatively simple: a form can be devised that summarizes any medical restrictions regarding unit housing or job placement without revealing the inmate's precise condition or diagnosis. (See the Health Summary for Classification form from the Texas Department of Criminal Justice in appendix A, along with the policy and procedure explaining its use.)

In the past, some classification groups were given access to inmates' medical and mental health

records during their deliberations. This should never be permitted. The goal should be to provide classification committees with only that health information required for them to make appropriate decisions regarding inmates' placements.

All three sets of national standards designed for corrections (i.e., those from APHA, ACA, and NCCHC) recognize the importance of input from health staff to classification committees' deliberations (although the ACA's focus is on mental as opposed to both medical and mental conditions).[48]

2. Institutional Transfers

As classification committees continuously juggle custody and health classifications of inmates with institutional work force requirements and available space, interunit transfers are inevitable. In most institutions, a list of the next day's transferees is provided to the health staff so that they can assemble the inmates' health records. It is important that health staff review each record to ensure that the receiving unit has the requisite health resources to continue to meet the patient's needs. If not, a "medical hold" should be placed on that transfer and the matter brought immediately to the attention of the appropriate authorities. The importance of consultation between health and custody staff prior to interunit transfers is recognized in NCCHC[49] and ACA[50] standards.

Furthermore, each department of corrections should have a policy that permits health staff to put a medical hold on any interunit transfer of an inmate; this is imperative for both inter- and intraunit transfers of inmates who are currently medical or psychiatric inpatients. Decisions regarding admission to and discharge from inpatient facilities are the sole province of clinicians, a fact explicitly stated in the NCCHC essential standard governing skilled nursing and infirmary care.[51]

It should be clear that the interunit transfers referred to above are those for routine, nonmedical reasons. Medical transfers are a separate issue. They are initiated by medical staff and transportation is often by medical conveyance (e.g., ambulance, special van).

3. Disciplinary Hearings

In general, health staff should not participate in disciplinary hearings and they should never take part in punishment decisions. There are occasions, however, when information from health staff may be helpful in protecting the inmate from unjust discipline. For example, medication side effects may cause an inmate to behave in an abnormal fashion. Similarly, inmates who are mentally ill or developmentally disabled may not be responsible for their behavior or comprehend that what they did was wrong or against institutional rules. When inmates' actions are attributable to medical or mental conditions, they should not be punished for it. Again, NCCHC standards explicitly recognize the importance of consultation with health professionals on disciplinary matters for those inmates with significant medical or mental impairments.[52] The term "consultation" means that the treating clinician must be notified before disciplinary action is imposed on certain patients. If there are any medical needs that cannot be met in a disciplinary segregation setting or any explanations of behavior that should be taken into account by the disciplinary committee, the clinician has an opportunity to voice them. Beyond that, the clinician should not be involved.

There are two exceptions to this general rule. One is if the patient himself requests the assistance of a health provider in a disciplinary hearing. (The patient's waiver of confidentiality should then be documented.[53]) The other is if a health provider has been threatened or victimized by an inmate. The health provider obviously may serve as a witness against the inmate in this particular case.

One practical way to notify correctional staff of health concerns that may need to be considered in a disciplinary action against an inmate is to develop a form for this purpose. It can be a special form or part of another form containing information about

inmate's medical needs that is routinely provided to correctional staff. For example, the Texas Department of Criminal Justice includes this information on its Health Summary for Classification form (see appendix A). The information given to correctional staff is very limited.

4. Sharing Other Information

Beyond that provided to disciplinary boards or classification committees, limited information about inmates' health conditions may be useful to line correctional staff. For example, housing and work supervisors may be alerted to inmates with certain chronic conditions, mental instability, or physical limitations, or those on medications with potential side effects. Such information should be provided only with the inmate's permission—despite the fact that the sole purpose of sharing the information is for the inmate's protection. Such information can help correctional staff respond appropriately in the event of a medical crisis.[54]

Similarly, when an inmate has a communicable disease, correctional officers should be informed about special precautions in handling the inmate. For example, if an inmate has active tuberculosis, correctional staff and others who interact with the inmate should be told what precautions they need to take against airborne infections. Again, it is not necessary or even appropriate to reveal the inmate's diagnosis. The intent is to provide only as much health information as is necessary for correctional staff to ensure the health and safety of the inmate, other inmates, and themselves.

E. CONCLUSIONS

This chapter has explored some of the basic ethical imperatives that should guide health care providers regardless of the setting (e.g., informed consent, confidentiality, doctor-patient relationship). Here, the parallel is clear: if professional ethics prohibit a particular action in a community setting, they should prohibit it in a correctional setting as well. There are, however, certain ethical dilemmas that are unique to the correctional environment. In these instances, guidance on what constitutes ethical behavior can be sought from the two professional health associations that have drafted correctional health standards (i.e., APHA and NCCHC).[55] For the most part, the standards of NCCHC and APHA are in agreement on ethical issues, but occasionally, they are not. Sometimes, the issue is too new or too controversial (e.g., whether to allow a hunger-striking inmate to die) to be included in the standards.

Two other professional organizations have developed ethical guidelines for their members. The American Correctional Health Services Association adopted a code of ethics (1995), and the Society of Correctional Physicians adopted the same code for its members with minor changes. ANA also has ethical standards for its members who practice in corrections.[56]

These and other standards are useful contributions to the ongoing dialogue as practitioners search for ethical guidelines for professional conduct in this challenging area. Not surprisingly, there is not yet (and may never be) consensus on all issues; reasonable people can disagree. But ethical considerations between patient and provider do not stop at prison walls. Adherence to ethical standards is more, not less, important when practicing in a setting not designed for health care and with patients who are sometimes quite difficult. Meeting this challenge in this unique environment is in the highest tradition of the health care professions.

NOTES

1. See, e.g., National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (1976).

2. See Goffman (1961).

3. See, e.g., Dubler and Sidel (1989); Wishart and Dubler (1983).

4. See President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research (1983).

5. Pregnant women and the parents of dependent children are exceptions to the rule, by case law, in some jurisdictions.

6. See, e.g., *Cruzan v. Missouri.*

7. See, however, the discussion in chapter III regarding *Washington v. Harper,* which held that an inmate's constitutionally protected liberty interest in refusing psychotropic medications could be limited to some degree by the state's interest in institutional safety.

8. The federal district court had agreed with the defendant's motion to dismiss the complaint for its failure to state a sufficient cause of action under the federal court rules. At this point, neither allegation of fact nor the merits of the case had been tested. The appellate court reversed and remanded, saying the complaint, taken on its face, had sufficient allegations to require the action to proceed.

9. Refusals of care may reflect the self-limiting course of many illnesses. The disappearance of symptoms removes the need to seek care.

10. See Dubler (1986:109-110) and National Commission on Correctional Health Care (1996:85-86) and (1997:86-87) for more information on informed consent and refusal. See American Correctional Association (1990:125) on informed consent.

11. See, e.g., *Tarasoff v. Regents of the University of California.*

12. For more information on maintaining confidentiality of medical records, see American Correctional Association (1990:177), Dubler (1986:100), and National Commission on Correctional Health Care (1996:76-77) and (1997:78-79).

13. See National Commission on Correctional Health Care standards on privacy of care (1996:10) and (1997:11-12).

14. See, e.g., Dubler and Sidel (1989); Hammett and Dubler (1990).

15. See National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (1976).

16. See Branson (1976).

17. See Code of Federal Regulations (1981), Title 45, Section 46.301-06.

18. See Subpart C of the Regulations on the Protection of Human Subjects, Code of Federal Regulations (1981).

19. See Dubler and Sidel (1989).

20. See also the discussion in chapter VIII on addressing the needs of the terminally ill inmate.

21. For example, the Connecticut Correctional Institution in Somers has a thanatologist who works with the terminally ill. For a description of this program, see Gross (1990).

22. For more information on hospice programs, see the section on the terminally ill in chapter VIII.

23. See Anno (1997:6).

24. See Goodman (1999) and *USA Today* (1999).

25. See "The organ donor" in Journal of Prison and Jail Health (1992:74-78). See also the section on executions in section C-8 of this chapter.

26. See National Commission on Correctional Health Care (1996:3-4) and (1997:5).

27. See American Correctional Association (1990:109).

28. See also National Commission on Correctional Health Care (1995b).

29. See National Commission on Correctional Health Care (1997:85).

30. See National Commission on Correctional Health Care (1996:83) and (1997:83).

31. See American Correctional Association (1990:60).

32. See, e.g., Costello and Jameson (1987).

33. See American Correctional Association (1990:122), Dubler (1986:41-42), and National Commission on Correctional Health Care (1996:83) and (1997:83).

34. The American Correctional Association refers to it as "disciplinary detention," others call it "solitary confinement," and still others may refer to it as "the hole" or "jail." Regardless of the exact term used elsewhere, "disciplinary segregation" as used here refers to the circumstance in which an individual is locked down for punishment purposes and has certain privileges restricted. It is generally a housing designation of fixed duration for disciplinary rule violations as opposed to administrative segregation or protective custody, which may be permanent housing assignments.

35. See National Commission on Correctional Health Care (1997:50-51).

36. See American Correctional Association (1990:81).

37. See Dubler (1986).

38. The National Commission on Correctional Health Care standards for jails (1996:54) and prisons (1997:55) require health staff to visit all inmates who are segregated from the general population (whether for administrative or protective reasons) a minimum of three times per week. Daily evaluation is required only for prison inmates in disciplinary status.

39. For accreditation purposes, the National Commission on Correctional Health Care defines health evaluation of inmates in disciplinary segregation as an essential standard and thus requires both a record review to determine whether there are contraindications to such placement and daily health evaluations. The American Correctional Association requirement of daily visits by health staff to segregated inmates is designated as a nonmandatory standard.

40. See the discussion on sick call in chapter VII and the sample Health Services Request form in appendix F.

41. See the prior section in this chapter on the right to refuse care for a fuller discussion.

42. However, *Zant v. Prevette,* decided in that same year (1982), reached an opposite conclusion.

43. For additional discussion of hunger strikes and how to manage them, see the Journal of Prison and Jail Health (1992).

44. See Dubler (1986:114).

45. See "Health care associations . . ." (National Commission on Correctional Health Care, 1994).

46. See the article in the Criminal Justice Newsletter (1990) and Santa Fe New Mexican (1999).

47. See National Commission on Correctional Health Care (1996:84-85) and (1997:84-85).

48. See American Correctional Association (1990:97 and 124); compare with Dubler (1986:8) and National Commission on Correctional Health Care (1996:9-10) and (1997:10).

49. See National Commission on Correctional Health Care (1996:9-10) and (1997:10).

50. See American Correctional Association (1990:122).

51. National Commission on Correctional Health Care (1996:64-65) and (1997:66-67). See also the section on infirmary care in chapter VII for a discussion of the use of inpatient beds for nonmedical reasons.

52. See National Commission on Correctional Health Care (1996:9-10) and (1997:10).

53. For a discussion of the legal issues to be considered when mentally ill patients are charged with violating institutional rules in prison and jail disciplinary systems, see Rold (1992).

54. See National Commission on Correctional Health Care (1996:76-77) and (1997:79).

55. As stated previously, American Correctional Association standards generally do not address ethical issues for health professionals, and when they do (e.g., body-cavity searches), they are at odds with the national standards of the two health bodies (i.e., the American Public Health Association and National Commission on Correctional Health Care).

56. See American Nurses Association (1985).

REFERENCES

Articles and Books

American Correctional Association

1990 Standards for Adult Correctional Institutions (third edition). Laurel, MD.

American Correctional Health Services Association

1995 "Code of ethics." Lanham, MD.

American Medical Association

1980 "Searches of body orifices." Report EE of the Board of Trustees. Chicago.

American Nurses Association

1985 Standards of Nursing Practice in Correctional Facilities. Kansas City, MO.

Anno, B. Jaye

1997 "Correctional health care: What's past is prologue." 11 CorrectCare 3:6-11.

Anno, B. Jaye, and Steven S. Spencer

1998 "Medical ethics and correctional health care." Pp. 32-40 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Branson, Roy

1976 "Philosophical perspective on experimentation with prisoners." Appendix to Research Involving Prisoners, National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. U.S. Department of Health, Education, and Welfare, Publication No. (OS) 76-132.

Code of Federal Regulations

1981 Title 45. Sections 46.101-124 (Basic HHS Policy for Protection of Human Research Subjects); Sections 46.301-306. 46 Federal Register 16, January 26.

Costello, Jan C., and Elizabeth J. Jameson

1987 "Legal and ethical duties of health care professionals to incarcerated children." 8 Journal of Legal Medicine 2:191-263.

Criminal Justice Newsletter

1990 "Florida electric chair fixed; inmate executed without incident." Volume 21, Number 15:7 (August 1).

Dubler, Nancy N. (Ed.)

1986 Standards for Health Services in Correctional Institutions (second edition). Washington, DC: American Public Health Association.

Dubler, Nancy N., and Victor W. Sidel

1989 "On research on HIV infection and AIDS in correctional institutions." 67 The Milbank Quarterly 2:171-207.

Faiver, Kenneth L.

1998 Health Care Management Issues in Corrections. Lanham, MD: American Correctional Association.

Federal Register

1978 Additional protection pertaining to biomedical and behavioral research involving prisoners as subjects. Volume 43, Number 22, (November 16).

Goffman, Erving
1961 Asylums: Essays on the Social Situation of Mental Patients and Other Inmates. Garden City, NY: Doubleday and Company, Inc., Anchor Books.

Goodman, Ellen
1999 "Putting price tag on human organs?" Santa Fe New Mexican (June 1:A-7).

Gross, Donalyn A.
1990 "Thanatology—Help for the terminally ill inmate." 4 CorrectCare 2:4,13.

Hammett, Theodore M., and Nancy N. Dubler
1990 "Clinical and epidemiologic research on HIV infection and AIDS among correctional inmates. Regulations, ethics and procedures." 14 Evaluation Review 5:482-501. Beverly Hills, CA: Sage Publications (October).

Hammett, Theodore M., Rebecca Widom, Joel Epstein, Michael Gross, Santiago Sifre and Tammy Enos
1995 1994 Update: HIV/AIDS and STDs in Correctional Facilities. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Joint Commission on Accreditation of Healthcare Organizations
1990 Ambulatory Health Care Standards Manual. Oakbrook Terrace, IL.

Journal of Prison and Jail Health
1992 "Special forum: Ethical issues in correctional health care." Volume 11, Number 2.

National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research
1976 Report and Recommendations: Research Involving Prisoners. Washington, DC: U.S. Department of Health, Education, and Welfare, Publication No. (OS) 76-131.

National Commission on Correctional Health Care
1994 "Health care associations join to oppose participation in executions." 8 CorrectCare 2:5.

1995a "Position statement on competency for execution." 2 Journal of Correctional Health Care 1:75.

1995b "Position statement on DNA analysis." 2 Journal of Correctional Health Care 1:77.

1996 Standards for Health Services in Jails. Chicago.

1997 Standards for Health Services in Prisons. Chicago.

Ornduff, Jason S.
1996 "Releasing the elderly inmate: A solution to prison overcrowding." 4 Elder Law Journal 173-200.

President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research
1983 Making Health Care Decisions: A Report on the Ethical and Legal Implications of Informed Consent in the Patient-Practitioner Relationship. Washington, DC.

Rold, William J.
1992 "Consideration of mental health factors in inmate discipline." 11 Journal of Prison and Jail Health 1:41-49.

1999 "Civil commitment of sexually violent offenders: Some legal, ethical, and practical considerations." 13 CorrectCare 3:6.

Santa Fe New Mexican
1999 "Bloody Florida execution spurs questions." (July 9:A-3).

Stephan, James J., and Doris J. Wilson
1996 Correctional Populations in the United States. 1994. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

USA Today

1999 "Today's debate: Organ donations." (June 2: A-14).

Wishart, Margaret D., and Nancy N. Dubler

1983 Health Care in Prisons, Jails and Detention Centers: Some Legal and Ethical Dilemmas. Bronx, NY: Department of Social Medicine, Montefiore Medical Center.

Court Cases

Commissioner of Correction v. Myers, 399 N.E.2d 452 (Mass. 1979).

Cruzan v. Missouri Department of Health, 497 U.S. 261(1990).

Kansas v. Hendricks, 521 U.S. 346 (1997).

Schloendorff v. Society of New York Hospitals, 211 N.Y. 125,129 (1914).

State ex rel. White v. Narick, 292 S.E.2d 54 (W.Va. 1982).

Tarasoff v. Regents of the University of California, 551 P.2d 334, 337 (Cal. 1976).

Washington v. Harper, 494 U.S. 210 (1990).

White v. Napoleon, 897 F.2d 103, 113 (3d Cir. 1990).

Zant v. Prevette, 248 Ga. 832, 286 S.E.2d 715 (1982).

The Organizational Structure of Correctional Health Services

Chapter V

Chapter V

The Organizational Structure of Correctional Health Services

A. Introduction

The organizational structure within which a correctional health care delivery system operates has a major impact on its ability to attain its goals. The location of the health services program within the department of corrections (DOC) is often a reflection of the perceived importance of health care in relation to the department's total mission.

In the past, health professionals typically were responsible to the correctional administrator of individual prisons or jails. Custody administrators operated their institutions autonomously, and frequently the policies and procedures governing health services were not consistent among the various institutions in a correctional system. Additionally, there were seldom any health care staff at the DOC's central office responsible for overseeing or coordinating health services in the separate correctional units. At best, an individual at the central office (usually with a correctional background) was responsible for "programs," which may have included food service, social services, education, and religious services in addition to medical, dental, and mental health care. Further, even at the unit level, health services often were not organized under a single health authority. In particular, mental health was usually separate from the medical program.

Such an organizational pattern presents a number of difficulties. One of the more obvious is that the success of the health services program is dependent upon the goodwill of the correctional administrators. Nonmedical administrators might not understand the need for more positions, expensive equipment, or outside specialty services. More important, the health staff may be too easily diverted from their primary objective of providing adequate care to inmates.

All health professionals working in correctional institutions must be aware of the potential for being co-opted by the custody administration.[1] Some health professionals are tempted (or in some cases coerced) to align themselves with correctional officials either by participating in nonmedical matters (e.g., disciplinary actions against inmates)[2] or by siding with the custody staff to the detriment of their patients' welfare (e.g., deciding that an inmate in segregation does not need an outside consultation because transferring the patient to another facility creates a security risk). It is difficult enough on a day-to-day basis for institutional health professionals to withstand the pressures placed on them by custody officials even in those systems that have a health director in a central office with line authority over health staff. In systems without central health directors—where unit health professionals work directly for the custody administrators of individual facilities—it is virtually impossible.

On the other hand, a correctional administrator who wants to provide adequate health services to inmates is at the mercy of the health staff. Without a central office health director, the lay administrator has no way to judge the competency of the health staff or the adequacy of the delivery system. As noted by Brecher and Della Penna (1975:45):

> While health care personnel at the institutional level are impotent, and know they are impotent, with respect to planning and carrying out improvements under this organizational pattern, they are free to let things slide with little or no fear of supervisory intervention. . . . Health care personnel in such an organizational structure are at the same time impotent to foster improvement and free to tolerate deterioration. This is a recipe for chaos. A change in this organizational structure is the most important initial step which any state can take toward improving correctional health care—more important even than increasing appropriations.

Other problems result when correctional health services are placed under the control of individual facility directors—not the least of which is that it is not cost effective. Clearly, unit costs can be lowered when such items as medications and supplies are ordered in bulk for the system as a whole, rather than in smaller amounts by individual institutions. Additionally, when health services are organized under a central health authority, cost savings can occur by sharing personnel and resources. The traditional organizational model of correctional health services does not serve anyone well—not the correctional administrator who wants to provide good health care, not the health professional who wants to serve patients' needs, not the director of the DOC who wants to avoid lawsuits, not the taxpayer who wants the most efficient utilization of public funds, and not the inmate who is less likely to have his or her health needs adequately served under this model.

If the traditional organizational model noted above is not recommended, what *is* the best organizational model for correctional health services? To answer this question, it may be instructive to review the various organizational models used in prison and jail systems and examine the components of each.

B. Organizational Models

During the summer and fall of 1999, the National Commission on Correctional Health Care (NCCHC) conducted a survey to determine the organizational structure of health services within the 50 state departments of correction, the federal Bureau of Prisons (BOP), the District of Columbia, and the 30 largest jail systems in the country. Even after extensive telephone followup, responses were received from only 28 (54%) prison systems and 8 (27%) large jail systems. Although the response rate was less than optimal, the responses received are instructive. The structure of health services in the responding prison and jail systems is discussed below.

1. Prison Health Care

The most striking result of this survey was the diversity of the models used by the 28 responding systems. Although none operated under the traditional model discussed above, six used a variation of this model:[3] Full-time personnel at the central office had responsibility for some aspects of health services systemwide (e.g., administering the budget, developing policies and procedures), but line supervision of health professionals still rested with the wardens at individual institutions. In one system (BOP), mental health care was operated by a separate division, not health services.

Of the 28 responding prison systems, 21 operated health services with staff other than their own. Systems in eight states[4] used national for-profit firms to provide health services in all their prisons, while a ninth (in Texas) contracted with two universities to provide care in its units. In five of these nine systems, the contract included medical, dental, and mental health care, and in two instances (Missouri and Vermont), only medical and dental services were contracted out and the state DOCs continued to operate their own mental health services. The Pennsylvania contracts excluded dental care, whereas Maryland used state employees and contract personnel to provide mental health services.

All of these systems had at least one full-time DOC health employee in a central office who was responsible for monitoring the health services contracts.

Eleven systems[5] had a mixed model in which health care was provided in at least one institution by a privatized prison or by a contract firm and at others by the DOC's own employees. In nine of these systems, mental health care was part of health services at specific institutions, and in two (BOP and South Carolina) it was not. Five of the systems had a strong central office health staff, with a health services director (HSD) who monitored the performance of the contractor and had line authority over health professionals working in the institutions operated by the DOC.[6] In four systems,[7] less than 10 percent of their institutions contracted out for health services, whereas the other seven systems had several facilities at which health care was provided by an outside firm.

Minnesota used another version of a mixed model: medical and psychiatric services were contracted to a national for-profit firm, but dental and mental health care were not.[8] The central office health staff were headed by a statewide director who oversaw the medical/psychiatric contract and had line authority over unit dental and mental health staff who were also DOC employees. Mental health care was under the direction of a separate mental health chief, who reported to the statewide HSD. (Both the mental health chief *and* the statewide HSD have line authority.)

Only 7 of the 28 responding prison systems operated health services solely with their own employees.[9] Those seven state systems each had at least one person in the central office who served as the statewide HSD and had line authority over the unit health professionals. Health services included mental health care in four of these states.[10]

In addition to the diversity in organizational structure of correctional health services, other differences among these prison systems were reported; for example, the placement of health services in the DOC's central office, the position to which the systemwide HSD reported, and the credentials of the individuals serving as the HSD. Exhibit V-1 summarizes the placement of prison health services within the DOC central offices in selected states. The systems are divided into those that used their own staff solely, contracted care solely, and a combination of the two. For this exhibit, a *division* is defined as the level immediately below the head of the DOC, a *section* is the second level below, and a *group* is the third level below. Although virtually every system had some professional services contracts with, for example, laboratories or pharmacies, the term *contract care* refers only to instances in which health services for an entire DOC or for certain institutions within a DOC were operated by an outside (usually for-profit) firm or in which one or more prisons were wholly operated by a private company.

In interpreting exhibit V-1, one caveat should be kept in mind. The categorization of prison systems was based on information provided by individuals responding to NCCHC's survey on organization and staffing. Respondents were asked to describe the organizational structure of health services in their DOC and, based on their responses, each system was classified according to the categories defined above. Although every attempt was made to ensure that there was shared understanding of the term *line supervision,*[11] there is no guarantee this was the case. A more detailed onsite study of the organizational structure of prison health services might reveal that fewer central office health staff had line supervision than reported here.

Exhibit V-1 shows that of the seven state DOCs that managed their own health services, three of the central health offices had division status, two had section status, and two were at the group level. All of these systems reported that they had line supervision over unit health personnel. For the nine systems that contracted out their health services statewide, all but South Dakota had at least one full-time health staff member in the central office to monitor the contract. None of these systems had line supervision over contractor personnel. Of the 12 systems with mixed models (using contract firms

EXHIBIT V–1.
Organizational Structure of Prison Health Services in the DOC Central Office, by State[1] (*N* = 28)

DOC Provided Health Services			Contract Care Health Services Provided Systemwide	Mixed Model (Contract Care and DOC Provided Health Services)[1]		
Separate Division	Separate Section	Separate Group		Separate Division	Separate Section	Separate Group
DC[2]	MT[2]	OR[2,3]	ID	AZ[2]	MI	OH
NY[2,3]	NE[2,3]	WA[2]	KS	BOP[3]	MN[2,5]	WI
UT[3]			MA	FL[2]	OK[2]	
			MD	NC	TN[6]	
			MO[3]	SC[2,3]	VA[2]	
			PA[4]			
			SD			
			TX			
			VT[3]			

Note: Includes the federal Bureau of Prisons (BOP).

[1] In these states, either some institutions' health services are contracted and some are run by the department of corrections (DOC), or certain services (e.g., medical) are contracted statewide and other services (e.g., dental and mental health) are run by the DOC.

[2] Central office health staff have line supervision over unit health staff.

[3] Mental health care is not part of health services. It is provided by either a separate area of the DOC or an outside agency.

[4] Pennsylvania excludes dental staff.

[5] Medical and psychiatric services are contracted systemwide. Mental health and dental services are run by the DOC.

[6] Psychiatric services are contracted statewide to a separate vendor.

in some capacity and managing some health services with their own employees), 5 had division status, 5 had section status, and 2 had group status. In all 12 systems, central office health staff monitored the contracts for those institutions whose health services were operated by outside firms; in half of them, the systemwide HSD had line authority over unit health professionals working in institutions whose health services were run by the DOC. Six systems reported that their central office health staff did not have line supervision over unit health personnel.[12]

Exhibit V-2 presents these data somewhat differently by indicating the position to which the full-time systemwide HSD reported. Of the 27 systems with full-time HSDs, 10 (37%) reported directly to the head of the DOC, 13 (48%) reported to the second-level position, and 4 (15%) reported to the third-level position.

EXHIBIT V–2.
Position to Which Full-Time Health Services Director of the DOC Reported, by State (*N* = 27)

Head of DOC (First Level)	Deputy (Second Level)	Assistant (Third Level)
AZ	ID	OH
BOP	MA	OR
DC	MD	WA
FL	MI	WI
KS	MN	
NC	MO	
NY	MT	
SC	NE	
TX	OK	
UT	PA	
	TN	
	VA	
	VT	
10	**13**	**4**

Note: Includes the federal Bureau of Prisons (BOP).

Exhibit V-3 presents the credentials of the individuals heading up correctional health services. In nine states (32%), the HSD was a physician. Another three states (11%) hired other clinicians as HSDs. In the remaining 16 states (57%), the HSD was an administrator with a health (10) or a corrections (6) background.

As noted in exhibit V-4, health services were unified in 19 states (68%), whereas in 9 states (32%), either

EXHIBIT V–3.
Type of Professional Serving as the Correctional Health Services Director, by State (*N* = 28)

State	Physician	Other Clinician	Health Administrator	Corrections Administrator	Reports to
AZ	•				Director of DOC
BOP				•	Director of DOC
DC	•				Director of DOC
FL	•				Secretary of DOC
ID		Physician Assistant			Division director of institutional services
KS				•	Secretary of DOC
MA				•	Deputy commissioner
MD	•				Department director
MI			•		Deputy director of administration
MN			•		Deputy commissioner
MO			•		Division director
MT	•				Administrator, professional services division
NC	•				Director of DOC
NE			•		Assistant director of administrative services
NY	•				Commissioner
OH			•		Assistant director
OK	•				Associate director
OR			•		Assistant director of correctional programs
PA				•	Deputy secretary
SC			•		Director of DOC
SD				•	Secretary of DOC
TN			•		Deputy commissioner
TX	•				Executive director
UT				•	Director of DOC
VT		Psychologist			Deputy commissioner
VA			•		Deputy director of administration
WA			•		Assistant deputy secretary
WI		Registered Nurse			Assistant administrator, division of adult institutions
Total	**9**	**3**	**10**	**6**	

Note: Includes the federal Bureau of Prisons (BOP).

mental health services or dental services or both were operated separately from medical services by another department of the DOC. New York was the only system where mental health care was provided by another state-level agency.

The prison systems also differed regarding the number of health staff working in the central office. As shown in exhibit V-5, the number ranged from zero in South Dakota to 94 in Texas. Of the 27 systems with central office health staff, 9 averaged 4.3 staff, 8 averaged 16 staff, 4 averaged 24.5 staff, 2 averaged

EXHIBIT V–4.
Unified and Nonunified Health Services, by State (*N* = 28)

State	Includes Medical, Dental, Psychiatric, and Other Mental Health Care?		If No, Explain
	Yes	No	
AZ	●		
BOP		●	Mental health care is provided by another DOC department.
DC	●		
FL	●		
ID	●		
KS	●		
MA	●		
MD		●	Contracts are comprehensive, but some mental health care is provided by DOC staff.
MI	●		
MN	●		Medical and psychiatric care are contracted. Dental care and mental health care are provided by the DOC.
MO		●	Psychiatric and other mental health care are provided by another DOC department.
MT	●		
NC	●		
NE		●	Mental health care is provided by another DOC department.
NY		●	Mental health care is provided by the state mental health agency.
OH	●		
OK	●		
OR		●	Mental health care is provided by another DOC department.
PA		●	The contract does not include dental care.
SC		●	Mental health care is provided by another DOC department.
SD	●		
TN	●		
TX	●		
UT	●		
VT		●	Psychiatric and other mental health care is provided by another DOC department.
VA	●		
WA	●		
WI	●		

Note: Includes the federal Bureau of Prisons (BOP).

EXHIBIT V–5.
Number of Central Office Health Staff, by State (*N* = 28)

	None	1–10	11–20	21–30	31–45	46–60	61–75	76+	Total
State	SD (0)	ID (1) KS (3.5) MA (8) MN (5.8) MO (4) MT (4) NE (4) TN (5) VT (3)	DC (15) MD (20) OK (20) OR (14) PA (19) VA (13) WA (12) WI (15)	MI (22) NY (30) OH (24) UT (22)	AZ (44) SC (36)	FL (49)	BOP (63)	NC (85)* TX (94)	
Total States	**1**	**9**	**8**	**4**	**2**	**1**	**1**	**2**	**28**
Average Staff	**0**	**4.3**	**16.0**	**24.5**	**40.0**	**49.0**	**63.0**	**89.5**	**22.7**

Note: Includes the federal Bureau of Prisons (BOP).
*Includes a large central office pharmacy.

40 staff, 1 (Florida) had 49 staff, BOP had 63 staff, North Carolina had 85 staff (including those working in a large central pharmacy), and Texas had the highest number of staff with 94. The mean number of central office health staff for the 28 systems reporting was 22.7.

More than half (15) of the 28 prison systems reporting had regional office health staff, as shown in exhibit V-6. If central and regional staff are combined (see exhibit V-7), the average numbers change. Although the range is still from zero to 94, the mean number of central and regional health staff for the 28 systems reporting increases to 28.6. More information on staffing ratios is presented in chapter VI.

EXHIBIT V–6.
Number of Regional Office Health Staff, by State (*N* = 15)

	1–5	6–10	25+	Total
State	AZ (2) FL (4) MA (5) PA (3) SC (2) VA (4) WI (4)	BOP (6) KS (8.5) MD (7) NC (10) NE (9)	MI (28) NY (30) OH (43)	
Total States	**7**	**5**	**3**	**15**
Average Staff	**3.4**	**8.1**	**33.7**	**11.0**

Note: Includes the federal Bureau of Prisons (BOP).

2. *Jail Health Systems*

Only 8 of the 30 largest jails responded to the organizational survey. Of these, six operated their own health services program (see exhibit V-8). Health services had division status in all six of these jail systems. In the remaining two systems, health services were contracted to a private, for-profit vendor in Hillsborough County, Florida, and to the public health department in King County, Washington.

A physician served as the health services director in Bexar and Dallas Counties, Texas, and a corrections administrator was in charge of health services in Harris County, Texas. In the remaining five counties, a health administrator was in charge (see exhibit V-9). The HSD reported to the head of the agency in all six systems operating their own health services.

EXHIBIT V–7.
Number of Central and Regional Office Health Staff, by State (*N* = 28)

	None	1–10	11–20	21–30	31–45	46–60	61–75	76+	Total
State	SD (0)	ID (1) MN (5.8) MO (4) MT (4) TN (5) VT (3)	DC (15) KS (12) MA (13) NE (13) OK (20) OR (14) VA (17) WA (12) WI (19)	MD (27) PA (22) UT (22)	SC (38)	AZ (46) FL (53) MI (50) NY (60)	BOP (69) OH (67)	NC (95) TX (94)	
Total States	1	6	9	3	1	4	2	2	28
Average Staff	0	3.8	15.0	23.7	38.0	52.3	68.0	94.5	28.6

Note: Includes the federal Bureau of Prisons (BOP).

EXHIBIT V–8.
Organizational Structure of Jail Health Services, by County (*N* = 8)

DOC Provided Health Services	Contract Care Provided Health Services
Bexar County, TX Dallas County, TX* Harris County, TX Maricopa County, AZ Miami-Dade County, FL San Bernardino County, CA*	Hillsborough County, FL (private company) King County, WA (public health department)

*Mental health care is not part of health services; it is provided by another county department.

In the two systems that used contractors, the HSD reported to a second-line supervisor.

Health services were unified in all but two of these counties (see exhibit V-10). In Dallas County, Texas, and San Bernardino County, California, mental health care was provided by the county public health agency.

In none of these eight jail systems was any facility operated by a private firm.

3. Summary

The previous discussion reflects the extensive diversity in the organization of health services in various prison and jail systems in 1999. The individual descriptions of organizational structure contained in appendix B show even greater differences than when the data are grouped, as in the exhibits. A review of the components of the organizational structure will help determine the best model for correctional health services.

EXHIBIT V–9.
Type of Professional Serving as the Correctional Health Services Director, by County (*N* = 8)

County	Physician	Health Administrator	Corrections Administrator	Reports to
Bexar County, TX	●			Senior executive vice president/ chief operating officer
Dallas County, TX	●			Medical director for health and human services
Harris County, TX			●	Sheriff
Hillsborough County, FL		●		Detention major/contract monitor
King County, WA		●		Public health community-oriented primary care provider
Maricopa County, AZ		●		County chief health officer
Miami-Dade County, FL		●*		Director of DOC
San Bernardino County, CA		●		Sheriff's deputy chief

*Shared position with corrections administrator.

EXHIBIT V–10.
Unified and Nonunified Health Services, by County (*N* = 8)

County	Includes Medical, Dental, Psychiatric, and Other Mental Health Care?		If No, Explain
	Yes	No	
Bexar County, TX	●		
Dallas County, TX		●	Mental health care is provided by another county department.
Harris County, TX	●		
Hillsborough County, FL	●		
King County, WA	●		
Maricopa County, AZ	●		
Miami-Dade County, FL	●		
San Bernardino County, CA		●	Mental health care is provided by the county mental health department.

C. COMPONENTS OF THE ORGANIZATIONAL STRUCTURE

In creating a correctional health service or changing the structure of an existing one, several decisions must be made about the various components of a model structure.

1. Need for a Systemwide Health Services Director

Every state DOC—no matter how small—and all large jail systems should have at least one full-time employee who is responsible for health services systemwide. The HSD should oversee delivery systems at the unit level as well as develop systemwide policies and procedures. HSDs should approve the health

services budget and serve as a resource person for the director of corrections at legislative budget hearings. When outside contractors provide care, the HSD also should oversee contract monitoring.

2. Reporting Structure for the Systemwide Health Services Director

The HSD should report directly to the head of the department of corrections. Health care is one of the most crucial and most costly services provided to inmates. With the exception of overcrowding, it is estimated that more prisons and jails are sued over inadequate health services than any other single condition of confinement.[13] Some DOCs organizationally place health services with programs such as food services, religious activities, and library services, but this is not recommended. The importance of health services in the DOC's total mission—as well as the technical expertise required to make appropriate administrative decisions regarding personnel, service levels, equipment, and supplies—argues for a separate division with direct access to the head of the DOC.

3. Type of Professional Serving as the Systemwide Health Services Director

The credentials of the individual serving as the HSD are as important as the level to which the position reports. About 40 percent of the states and counties with systemwide HSDs were using clinicians to fill this position; this is not sufficient by itself. It is imperative that systemwide HSDs have administrative skills because it is an administrative, not clinical, job. Clinical training usually does not include information on budgeting, finance, staffing patterns, matériel management, or working with intragovernmental agencies, skills needed by the systemwide HSD. An individual with a master's degree in health administration is much better equipped to make the correct administrative decisions than is a clinician without such training.

However, some people believe that the HSD position is so important that only a physician should fill it. According to Start (1988:17), "only a physician has the power, ability and skill to obtain the necessary resources to operate an honorable system and to serve as an advocate for adequate and necessary services." This is consistent with American Public Health Association standards, which state that there should be a designated physician "serving as the responsible and principal health authority" (Dubler, 1986:105). However, as Brecher and Della Penna (1975:46) note:

> This pattern goes back to the days when hospitals and mental hospitals also had physicians in charge, and when it was commonly believed that only someone with an MD after his name could administer a health care institution. As physicians became busier and as health care administration became more complex, however, lay administrators have gradually taken over administrative responsibilities from physicians. A new profession of health care administrator has arisen, and has proved its usefulness. Sometimes, too, authority is lodged in a team—a physician in charge of professional matters plus an administrator for other affairs. We recommend that state departments of correction take one of these routes and lodge overall responsibility for health care in the hands of a professional administrator or of a physician-administrator team.

The latter suggestion of a physician-administrator team is perhaps the best solution. A professional health administrator will need a physician acting as clinical director to oversee professional matters, and as noted previously, a physician serving as the HSD is likely to require a professional administrator to assist in decisionmaking. It does not matter whether the clinical director reports to the health services administrator or vice versa as long as one of them is the final administrative authority. NCCHC standards (National Commission on Correctional Health

Care, 1996:3 and 1997:3) and the health section of American Correctiional Association (ACA) standards (American Correctional Association, 1990:109) patterned after them allow either model. A physician who also is trained and experienced as an administrator could serve in both capacities. The physician's status in the community is an added advantage when approaching state legislatures or county boards for funding.

4. Areas Included Under Health Services

It is recommended that the health services program include medical, dental, and mental health care under the same organizational umbrella. Although each service may require a systemwide clinical director, all three positions ultimately should report to the systemwide HSD. NCCHC's 1999 survey found that when health services were split up, mental health care always was operated separately. Because inmates' minds and bodies are combined in single entities, it is much more logical for the health services treating these minds and bodies to be combined. It is also more cost effective because some staff and resources can be shared, and ordering items such as medications, supplies, and medical records can be completed more efficiently. Additionally, combining these services under a single health authority helps to improve the quality of care by ensuring that all providers have access to information regarding patients' allergies, current medications, and overall health status.

For systems that use an outside agency to provide mental health services, coordination of these services with the DOC health program is imperative. The DOC HSD should coordinate mental health services and work with representatives of the outside agency to ensure that services are not duplicated and that patient information is shared. Similarly, where one or more services are contracted systemwide and the DOC operates the remaining services, there still needs to be a single, designated HSD who oversees contract services and supervises DOC services.

5. Health Services Operated by the DOC Versus Privatization

During the past two decades, much has been written about the privatization of correctional facilities,[14] but much less about the privatization of health services within those facilities.[15] This is understandable because the legal questions raised by contracting for a traditionally governmental function (i.e., the operation of prisons or jails) are much different from those raised by contracting for specific services. The legal issues of contracting for the operation of prisons and jails include:

> . . . whether government [can] delegate a function such as corrections to private industry, what the implications of such a delegation would be for liability if negligence or constitutional deprivation occurred, what the standards of performance should be, how performance should be monitored, and what would happen if there were breaches of contract or if a private correctional entity declared bankruptcy. (Sheldon Krantz in Robbins, 1988:iii)

With respect to correctional health services, the basic legal issue is whether the care provided is adequate regardless of who provides it. As *West v. Atkins* (1988) made clear, government agencies are responsible for their health services whether they are supplied by government employees or by consultants under contract.

Additionally, although the issue of privately run prisons and jails is relatively new, the use of contracts per se in correctional health care is not. For years, DOCs have contracted with pharmaceutical companies and medical supply houses for products. Also, DOCs have used contracts to obtain specific services such as laboratory analyses, radiological services, hospital care, emergency transportation, and specialty care for their inmates. Further, virtually every system has at least some professional services contracts with individual providers.[16]

The concept of contracting out all health services at specific institutions or all institutions within a state or county to a private, for-profit firm is newer. The first jail to do so was the Delaware County Prison in Chester, Pennsylvania, (Pennsylvania calls its jails "prisons") in 1976 (Moore, 1998:43), and it was only in 1978 that the first of this type of contract occurred in a state correctional facility.[17] By 1985, three states were using all-contract services, five more had some institutions under contract, and in Arkansas' case, only medical services were contracted statewide.[18] NCCHC's organizational survey of 28 prison systems revealed that in 1999, 9 states used all-contract services and in 12 prison systems a contractor provided health services to at least one institution (exhibit V-1). Only seven (25%) of these prison systems operated their own health services in all of their facilities.

The use of contract firms to provide health care for correctional institutions has increased over time. In 1989, NCCHC conducted its first organizational survey of prison health systems. With all 50 state DOCs reporting, only 119 (13%) of the 918 state prisons contracted health care to an outside firm.[19] If institutions providing their own mental health and dental care were not counted, the number of institutions whose total health services were contracted out by fall 1989 dropped to 88 (10%). Ten years later, with only 27 prison systems reporting, about one-third (36.4%) of the 861 prisons contracted their health services (see exhibit V-11). Even with fewer systems reporting, this represents a true increase in the privatization of health services; several systems that reported contracting health services in at least one facility in 1999 were not doing so 10 years earlier (Arizona, Idaho, Massachusetts, Michigan, Missouri, North Carolina, Ohio, Oklahoma, South Dakota, Texas, Vermont, Virginia, and Wisconsin).[20]

To date, no controlled research compares contract versus noncontract correctional health care with respect to quality, efficacy, or cost, although opinions regarding which is "better" abound. Proponents of for-profit contract firms claim that they can deliver quality care at a reduced cost to the government entity. Their detractors claim that public-operated health care can be equally cost effective and that any cost savings by contract firms are realized at the expense of a reduction in the extent or quality of care provided to inmates. In her article discussing contract health care, Alexander (1990:7) concludes:

> Contract health care providers continue to merit close scrutiny. In comparison to a prison that offers no organized health care, contract providers tend to put basic protocols and organization in place. They generally use only licensed staff, and at least develop a paper plan for the delivery of health care. But too often, the existence of appropriate policies on paper may not translate into quality health care. As happens with traditional prison health care, too often the only criteria for filling physician positions will be that the candidate is licensed and still breathing. No matter how good a contract care system, or any other system, looks on paper, it must be evaluated in practice, particularly as it responds to medically difficult cases, before we can determine that it provides adequate health care.

Although no consensus exists on the merits of contract health care by for-profit firms, DOCs should follow the guidelines of the Prison and Jail Problems Committee of the American Bar Association (ABA) if they decide to contract their health services. These guidelines, adopted by the ABA House of Delegates in February 1990, cover the privatization of whole facilities and include contract health care. The ABA guidelines relevant to health services are summarized below:[21]

- Clearly state that the contract is to be cost effective and provide for proper care.
- Make the length of the contract fair to both parties; 3 years is a good balance of the interests of both parties.

EXHIBIT V–11.
Prisons With Health Services Operated by Private or Contract Firms in 1999, by State (*N* = 27)

State	Total Prisons (*n*)	Prisons Operated by Private Firms (*n*)	Prisons Operated by Private Firms (%)	Prisons With Health Services Provided by Outside Contract Firm (*n*)	Prisons With Health Services Provided by Outside Contract Firm (%)	Privatized Facilities (*n*)	Privatized Facilities (%)
AZ	13	3	23.1	0	0.0	3	23.1
BOP	94	2	2.1	1	1.1	3	3.2
FL	60	5	8.3	10	16.7	15	25.0
ID	7	0	0.0	7	100.0	7	100.0
KS	8	0	0.0	8	100.0	8	100.0
MA	21	0	0.0	21	100.0	21	100.0
MD	26	0	0.0	26	100.0	26	100.0
MI	54	1	1.9	0	0.0	1	1.9
MN	9	0	0.0	9	100.0	9	100.0
MO	21	0	0.0	21	100.0	21	100.0
MT	8	0	0.0	0	0.0	0	0.0
NC	84	2	2.4	2	2.4	4	4.8
NE	9	0	0.0	0	0.0	0	0.0
NY	70	0	0.0	0	0.0	0	0.0
OH	31	0	0.0	3	9.7	3	9.7
OK	31	0	0.0	6	19.4	6	19.4
OR	13	0	0.0	0	0.0	0	0.0
PA	25	0	0.0	25	100.0	25	100.0
SC	32	0	0.0	10	31.3	10	31.3
SD	3	0	0.0	3	100.0	3	100.0
TN	14	2	14.3	3	21.4	5	35.7
TX	113	12	10.6	101	89.4	113	100.0
UT	2	0	0.0	0	0.0	0	0.0
VA	52	1	1.9	7	13.5	8	15.4
VT	8	0	0.0	8	100.0	8	100.0
WA	30	0	0.0	0	0.0	0	0.0
WI	23	7	30.4	7	30.4	14	60.9
Total	**861**	**35**	**4.1**	**278**	**32.3**	**313**	**36.4**

Note: Includes the federal Bureau of Prisons (BOP).

- Mandate that the contractor meet the percentage of NCCHC standards required for accreditation of its health services. If the whole facility is contracted to a private provider, it should be required to meet ACA standards as well.
- Offer contract employees the same quality and quantity of training required for public employees. A private contractor also should comply with ACA and NCCHC standards on training if they are more stringent than government requirements.

- Give the contract monitor access to any and all information from the contractor "that the monitor determines to be necessary to carry out the monitoring responsibilities" (p. 9). The monitor should issue reports on the contractor's performance at least annually. "Effective monitoring of a private contractor's performance under the contract is a sine qua non of any system that seeks to assure accountability" (p. 9).
- Ensure that the contractor assumes "all liability arising under the contract and [is] prohibited from using immunity defenses" (which are available to government agencies) to limit such liability.
- Require that "private contractors . . . provide adequate insurance coverage, specifically including insurance for civil rights claims" (p. 10).
- Develop "a comprehensive plan—in advance of entering into a contract—for assuming control of a facility immediately" if it becomes necessary to terminate a contract on short notice. The plan should include "the transfer of title to the contractor's files and records" (p. 10).

The last point deserves further comment. The contract should specify clearly that any written materials developed under the contract (such as policies, procedures, and statistical and administrative reports) as well as certain files and the health records themselves belong to the DOC and must remain with the DOC when the contract terminates. More than one correctional administrator has had the unhappy experience of finding the health services area virtually stripped of administrative records at the end of a contract.

Another important consideration is to note in the contract that the DOC (through its contract monitor, HSD, or agency head) must approve all health services policies and procedures developed or used by the contractor as well as all forms used for statistical and administrative reports or for health records. Standardization of health record forms is particularly desirable and the DOC may wish to require that the contract firm use the DOC's forms rather than those developed by the firm's corporate office (especially in systems where only some institutions are to be contracted). Similarly, the DOC may want to specify that the contract firm abide by the DOC's health services policy manual; if the contract firm's corporate policy manual is to be used, the DOC should require that this manual be tailored to reflect the correctional system's needs.

Finally, it would be wise for the DOC to ensure that the contractor cannot prohibit health personnel from continuing to work at the facility when the contract terminates. Regardless of whether the DOC resumes providing its own health services at the termination of the agreement or (in the more likely case) another firm assumes the contract, the exclusion of the current health professionals would make it very difficult to restaff. It may be appropriate for the contract firm to exclude rehiring its top supervisory personnel, but not other health staff.

To ensure that these recommendations are incorporated into the agreement between the state and the contracted firm, they also should be a part of any request for proposal (RFP) or bid specifications. It goes without saying that such RFPs also should include very detailed descriptions of the types and amounts of services to be provided by the contract firm.

6. Line Authority Over Unit Health Personnel

The HSD must have line authority over unit health staff to ensure that systemwide policies and procedures are implemented at individual facilities and that professional standards of care are followed. To place the HSD in the capacity of consultant to the unit health personnel is only a slight improvement over those systems that have no HSD. Without the authority to enforce compliance with systemwide policies and practices and to hire and fire health staff when necessary, the HSD (and other central office health staff) cannot be totally effective. Line authority also provides the HSD with greater flexibility in staffing. Certain positions can be shared by

institutions and health staff can be reassigned on a temporary or permanent basis as the system's needs dictate.

Some systems use a concept of "dual supervision," in which unit health personnel are clinically and professionally responsible to the systemwide HSD but are responsible administratively to the head of the prison or jail in which they work. Again, this is an improvement over the traditional model, but it is less than ideal. The areas of authority are seldom well defined, allowing conflicts to develop between the facility administrators and the systemwide health services director. Additionally, the individual employee is placed in a potential bind, having to choose between two loyalties and, at times, conflicting orders. Under this system, more often than not, it is the facility director's orders that are followed because that individual's supervision is immediate and daily and the systemwide HSD's supervision is remote and occasional.

While any model can work, depending on the personalities involved and the degree of leadership exercised at the top, it is recommended that the systemwide HSD have line authority over unit health staff. This model is simple and avoids the problems of conflicting loyalties of unit health staff and blurred areas of supervision. The HSD's authority should not be absolute, however. It is important to coordinate personnel decisions with the unit facility administrators because their observations can be useful. Decisions regarding hiring, firing, and disciplining unit health staff should be made only after input has been solicited from the facility administrator, the chief of health services at the unit, and other relevant supervisory staff.

If the DOC uses a contract firm, the HSD ordinarily will not have line authority over contract health employees.[22] Nonetheless, the HSD can make recommendations to the chief contract administrator regarding the performance and suitability of specific contract personnel.

7. The Role of Central Office Health Staff

Because of differences in the size, organizational structure, and complexity of various DOCs' health services, it is difficult to specify the number of positions needed in the central office. A better approach may be to discuss the types of activities that should be centralized and let each system determine the number of people it will take to perform these tasks in its own state or county. It has been stated already that every system—no matter how small—should have at least one full-time HSD. Furthermore, if there is to be only one health person in the central office, both clinical and administrative skills are required. The reasons for these recommendations should become clearer after reviewing the activities listed below that should be performed by central office health staff.

a. Fiscal Management[23]

One of the most important roles of the health services central office is to develop the budget for health services and to approve expenditures and contracts. It does not matter whether each facility's health services section develops its own budget (which is then consolidated in the central office with other units' requests) or whether the central office health staff develop a budget for the system as a whole with input from unit staff. It is important that the budget is approved by the HSD before being submitted to the director of the DOC and the funding source. Similarly, health services expenditures should be reviewed and approved by the HSD prior to payment.

The HSD also should approve all contracts for health providers, services, and products used at the units. In most systems, it is more cost effective if the purchase of medical supplies and pharmaceuticals is centralized.

b. Standardization of Documentation[24]

Standardizing certain types of written materials will ensure consistency in care and administrative effectiveness. Paramount among these is a systemwide policy and procedures manual. It should specify the levels of care and types of treatment provided and cover administrative matters, personnel issues, and medical and legal concerns. The basic elements of care and the policies under which staff operate should be the same for all facilities in the correctional system, although there may be some procedural differences from unit to unit. For example, the systemwide sick call policy may specify the level of staff conducting sick call and how the encounters are to be recorded, but the time and frequency of sick call may vary with the facility's needs and size. In addition to the basic health services policy manual, larger systems will want to develop separate procedural manuals for certain services such as nursing, laboratory, radiology, and physical therapy.

All forms used in the health record also should be standardized throughout the system. This not only ensures that the same types of information are collected on each patient, but it also facilitates use of the record by staff—both of which are important for continuity of care. In most correctional systems, inmates are transferred so often to other prisons and jails that staff refer to it as "bus therapy." Transfers occur daily for security and medical reasons and to regulate population overflow at particular units. If the same forms are used systemwide and all units follow the same chart order, it is much easier for health staff to review the records of transferred inmates and to ensure that their care is not interrupted. Furthermore, it is more cost effective to print multiple copies of one set of forms than to print smaller quantities of different sets of forms developed by each unit.[25] It is recommended that correctional systems with mixed organizational models require their contract firms to use the same health record forms as do the rest of the prisons or jails.

Certain forms used for administrative and statistical purposes should be standardized as well. For unit data to be used appropriately for system planning and decisionmaking, they must be collected the same way and reported in the same format.

c. Staffing Issues[26]

Certain staffing activities are handled best on a centralized basis. The development of staffing ratios and decisions regarding shared positions and the placement of staff are more likely to be realistic if made by someone in the central office who can view the system's needs as a whole. Additionally, the HSD can transfer staff and positions as the requirements of the units change.

Staff development is another area that often benefits from centralized planning. Continuing education is required for most health professionals by both licensing bodies and standard-setting agencies. Centralization of this activity may include developing curriculums, conducting training, or simply coordinating schedules and keeping the documentation for individual units. Similarly, most national standards mandate that correctional personnel receive health-related training on both a preservice and an ongoing basis. Central health staff should assist custody staff in this endeavor as well.

d. Quality Improvement and Risk Management[27]

Another important role of the HSD (or other central office health staff) is to oversee ongoing quality improvement activities. A plan should be developed that specifies the type of unit monitoring and evaluation that will occur, the criteria that will be used, the frequency of such monitoring, and who will conduct it. Clinical supervision of unit health professionals and constant review of health care processes are imperative if quality of care is to be maintained and liability reduced.

In the larger correctional systems, unit personnel should be required to conduct quality improvement

studies of issues that need resolution in their units, while central staff concentrate on monitoring implementation of systemwide policies, uniform documentation, and special reviews. In the smaller systems, the systemwide clinical director may undertake most quality assessments. For those systems using contract firms, the HSD not only should monitor adherence to the terms of the agreement but also should conduct quality improvement studies of the contractor's performance in specific areas.

Responding to inmate grievances on health matters is another activity that can be centralized. If inmates are not satisfied with the answers provided at the unit level, it is important to have a health professional outside the unit to whom they can appeal. The systemwide HSD or designee should be in the best position to determine the merits of inmates' complaints and to decide what remedies, if any, are needed.

e. *Health Resources*

Many other decisions need to be made on a systemwide basis, including those on unit equipment needs, repair and renovation of clinical facilities, and planning for new health services units. The HSD also must determine for each prison or jail unit as well as for the system as a whole which services it will be more cost effective to provide in house and which will be better to purchase from community providers. Some of these services (such as inpatient hospitalization, emergency medical transportation, and dialysis) are very costly and require careful cost-benefit analysis of all available options.

Clearly, the increasing costs of providing correctional health care[28] coupled with the increasing level of sophistication required to cope with specific diseases and an aging correctional population[29] mandate the services of a systemwide professional health administrator and a systemwide clinical director at a minimum for each DOC. As noted previously, the smaller states may wish to look for one individual who can serve in both capacities, if two full-time positions are not justified.

8. *The Role of Regional Health Staff*

Regional health staff may be required in systems with the largest inmate populations or those whose geographic spread or high number of units make it necessary to add another personnel layer. Regional staff generally provide clinical supervision along professional lines. Only a limited number of programs, such as dentistry, medicine, and mental health, may require a regional supervisor. The number of unit staff in support programs (e.g., lab, medical records, and physical therapy) is likely to be too small even in the largest systems to warrant a regional supervisor.

The primary role of regional staff is to serve as a clinical resource for unit staff and to monitor the quality of care provided by individuals in the program they supervise, although some administrative tasks (e.g., staffing decisions) may be included also. Within a regional office, it is not necessary for one individual to be designated the "regional director" because regional staff should report along clinical lines to the chief of their program in the central office.

In the largest systems, one other regional position may prove useful—that of a regional administrator. The complexity of budget preparation, matériel management, reporting requirements, and related tasks in a given system will determine the need for this position.

There is another type of regional office personnel that bears mentioning. Sometimes, the demand for specific services does not warrant full-time staff at the unit level and it may be more effective to provide services on a regional basis; for example, laboratory, pharmacy, and radiology. The HSD should consider the potential cost benefits of this type of regional structure versus having each unit make arrangements for these services with local providers.

9. Organization of Health Services at the Unit Level

At the unit level, the most important consideration is to ensure that health services are organized under a single health authority. Both the facility administrators and the systemwide HSD need someone that they can hold accountable for the operation and management of the units' health delivery systems. As with the systemwide HSD position, the unit health authority (UHA) can be a professional health administrator or a physician. If filled by the former, a clinical director should be appointed as well, and if filled by the latter, an administrator usually will be required also. For professional supervision, all unit clinical positions should report to the clinical director, who reports through the unit health administrator or directly to the systemwide HSD (whether through regional staff or not). The sample organization charts provided in appendix C may help to clarify the recommended lines of authority.

D. CONCLUSIONS

This chapter explored a number of options for organizing health services within state and county DOCs. In choosing among these options, some basic principles should be kept in mind. First, it is important to protect the autonomy of the health providers regarding clinical decisions. Second, the organizational structure should enhance continuity of care. Third, the structure should facilitate quality improvement and monitoring activities.

Although any organizational model can work—depending on the good will and rationality of the participants—some models are less likely to work well than others. The simplest model and the one with the most likelihood of success is one in which health services include medical, mental health, and dental care and have division status within the DOC. The systemwide HSD has line authority over unit health staff, controls the health services budget, and reports directly to the head of the DOC. This professional model (for lack of a better term) reflects the principles noted above and avoids the problems of the traditional model described at the beginning of the chapter.

NOTES

1. For a fuller treatment of co-optation and "burnout" of health staff, see chapter VI.

2. See chapter IV for more information on the ethics of health staff participating in nonmedical functions.

3. Federal Bureau of Prisons, Michigan, North Carolina, Ohio, Tennessee, and Wisconsin.

4. Idaho, Kansas, Maryland, Massachusetts, Missouri, Pennsylvania, South Dakota, and Vermont.

5. Arizona, BOP, Florida, Michigan, North Carolina, Ohio, Oklahoma, South Carolina, Tennessee, Virginia, and Wisconsin.

6. Arizona, Florida, Oklahoma, South Carolina, and Virginia.

7. BOP, Michigan, North Carolina, and Ohio.

8. "Psychiatric services" refers only to care provided by psychiatrists. In some systems (e.g., Minnesota and Tennessee), the psychiatrists are contractors, but other mental health care is provided by DOC employees (e.g., psychologists, social workers, and psychiatric nurses).

9. District of Columbia, Montana, Nebraska, New York, Oregon, Utah, and Washington.

10. District of Columbia, Montana, Utah, and Washington.

11. The term "line supervision" is intended to reflect the situation in which the central office health staff have the authority to hire, fire, and discipline unit health professionals.

12. BOP, Michigan, North Carolina, Ohio, Tennessee, and Wisconsin.

13. See National Prison Project (1995).

14. See Robbins (1988) and the extensive bibliography contained therein. More recent articles include Brister (1996), Ogle (1999), National Sheriffs' Association (2000), National Prison Project (1999), Shichor and Sechrest (1995), Stoltz (1997), and Thomas (1996).

15. The few articles found that discuss this issue include Alexander (1990), Faiver (1998), Ingalls and Brewer (1988), McCarthy (1982), and Moore (1998).

16. See the descriptions contained in appendix B from the 1999 National Commission on Correctional Health Care (NCCHC) survey. A 1985 survey found similar results ("Prison health care," 1986), as did NCCHC's 1989 survey (Anno, 1991a).

17. According to McCarthy (1982:9), "In response to a federal court order, Delaware became in January 1978 the first state to move wholly to contract prison health care." Alabama followed in November 1979.

18. See "Prison health care" (1986).

19. See Anno (1991b:82).

20. Ibid.

21. See American Bar Association (1990) for the full text.

22. One notable exception is the degree of control exercised by the medical director of the Illinois Department of Corrections over contract employees. Each Illinois prison where health services are contracted has a state employee serving as the health services administrator. This individual is responsible for the operation of the health services unit, including supervising contract personnel.

23. See chapter XIV for more information on fiscal issues.

24. See chapter XII for more information on the development of policy and procedures manuals and the standardization of data collection activities.

25. The impracticality of allowing each institution to develop its own forms was brought home to the author when she served as the assistant director of health services for the Texas Department of Criminal Justice (TDCJ) during the mid-1980s. Each of TDCJ's (then) 27 prisons had its own forms made up at the system's print shop. There were endless variations of sick call slips, administrative forms, and health record forms with the result that the print shop had hundreds of masters to catalog and store. The establishment of a forms committee to standardize and approve all forms used in the system reduced the number of masters to a manageable number, decreased the reproduction costs, and earned the everlasting goodwill of the print shop manager.

26. See chapter VI for more information on staffing issues.

27. See chapter XIII for a full discussion of quality improvement activities.

28. See the National Commission on Correctional Health Care (NCCHC) comparative cost survey reported in chapter XIV.

29. See chapter VIII.

REFERENCES

Articles and Books

Alexander, Elizabeth

1990 "Can contract care cure prison health ailments?" Journal of the National Prison Project 22:5-7.

American Bar Association

1990 "Guidelines concerning privatization of prisons and jails." Washington, DC: Prison and Jail Problems Committee, Criminal Justice Section.

American Correctional Association

1990 Standards for Adult Correctional Institutions (third edition). Laurel, MD.

Anno, B. Jaye

1991a "Organizational structure of prison health care: Results of a national survey." 10 Journal of Prison and Jail Health 1:59-74.

1991b Prison Health Care: Guidelines for the Management of an Adequate Delivery System. Chicago: National Commission on Correctional Health Care.

Brecher, Edward M., and Richard D. Della Penna

1975 Health Care in Correctional Institutions. Washington, DC: U.S. Department of Justice, Law Enforcement Assistance Administration.

Brister, Richard C.

1996 "Changing of the guard: A case for privatization of Texas prisons." 76 The Prison Journal 3:310-330.

Dubler, Nancy N. (Ed.)

1986 Standards for Health Services in Correctional Institutions (second edition). Washington, DC: American Public Health Association.

Faiver, Kenneth L.

1998 Health Care Management Issues in Corrections. Lanham, MD: American Correctional Association.

Ingalls, Warren J., and T. Fordham Brewer

1988 "Contract health care: A cure for ailing services?" 50 Corrections Today 1:56-58.

McCarthy, John J.

1982 "Contract medical care: Prescription for change." 8 Corrections Magazine 2:6-17.

Moore, Jacqueline

1998 "Considering the private sector." Chapter 3 in Kenneth L. Faiver (Ed.), Health Care Management Issues in Corrections. Lanham, MD: American Correctional Association.

National Commission on Correctional Health Care

1996 Standards for Health Services in Jails. Chicago.

1997 Standards for Health Services in Prisons. Chicago.

National Prison Project

1995 "Status report: State prisons and the courts." Washington, DC.

1999 "Congressman challenges privatization trend." 13 Journal of the National Prison Project 1 & 2:1-2.

National Sheriffs' Association

2000 "NSA files *amicus curiae* brief with Oklahoma Supreme Court against jail privatization." 52 Sheriff 1:52.

Ogle, Robbin S.

1999 "Prison privatization: An environmental catch-22." 16 Justice Quarterly 3:579-600.

"Prison health care."

1986 XI Corrections Compendium 1:7, 13-14.

Robbins, Ira P. (Ed.)

1988 The Legal Dimensions of Private Incarceration. Washington, DC: American Bar Association.

Shichor, David, and Dale K. Sechrest

1995 "Quick fixes in corrections: Reconsidering private and public for-profit facilities." 75 The Prison Journal 4:457-478.

Start, Armond H.

1988 "Correctional health care programs: Properly designed, properly administered." 50 Corrections Today 1:16-18.

Stoltz, Barbara Ann

1997 "Privatizing corrections: Changing the corrections policy-making subgovernment." 77 The Prison Journal 1:92-111.

Thomas, Charles W.

1996 "Correctional privatization: The issues and the evidence." Toronto, Canada: The Fraser Institute.

Court Case

West v. Atkins, 487 U.S. 42, 57 n.15 (1988).

Staffing Considerations

Chapter VI

Chapter VI

Staffing Considerations

The effectiveness of any correctional health care system is largely dependent on staffing considerations: Are there enough staff of the right types? Are they knowledgeable about their work environment? Are they clinically competent? Do they suffer from "burnout"? Where can new staff be found? Much of an administrator's time is spent answering these and other questions related to staffing issues.

This chapter discusses some of the staffing concerns that require special consideration in a correctional environment. It is not intended to be a personnel manual, but it is hoped that the following sections will provide administrators with sufficient information to address staffing questions methodically. Topics include developing staffing patterns; recruiting, selecting, and retaining staff; and inservice training and continuing education.

A. Staffing Patterns

Deciding how many health staff of each type are needed is probably an administrator's most difficult task. Unlike the organizational structure or the service components of a correctional health system, there is no national prison or jail "health staffing model" that can be adapted to fit all institutions. National organizations that have developed correctional health care standards have shied away from specifying exact staffing ratios—and with good reason. The factors that influence the decision regarding the number and types of health staff needed are many and varied.

By way of example, the results of a National Commission on Correctional Health Care (NCCHC) survey may be instructive. As part of its 1999 study to determine the organizational structure of state and county correctional health services,[1] questions were included regarding the number of full-time equivalents (FTEs) represented by central office, regional office, and unit health staff and the number of inmates in each correctional system in 1999. The survey results for prison and jail systems are discussed below.

1. Survey Results

a. Prison Systems

As indicated in exhibit VI-1, the staffing ratios among the 28 prison systems reporting showed tremendous variability. The ratio of central and regional office health staff to prison unit health staff (see exhibit VI-1, part A) ranged from a low of 1:119 in Missouri to a high of 1:7 in Nebraska. The average ratio was 1:29. Similar variation was found in the ratio of unit health staff to prison inmates served (see exhibit VI-1, part B). It ranged from a low of 1:76 in Arizona to a high of 1:16 in Utah. The mean ratio across the 28 prison systems was 1:35.

In 3 of the 28 prison systems reporting (Idaho, Nebraska, and Vermont), some or all mental health staff were not included in staffing totals. For comparative purposes, these three states were excluded and the staffing ratios were computed again for the 25 prison systems that reported staffing totals that included mental health staff as well as medical and dental personnel. As shown in exhibit VI-2, the average ratio of central and regional staff to unit staff (1:29) and the average ratio of unit health staff to inmates served (1:35) did not change much by

EXHIBIT VI–1.
Prison Health Staffing Ratios in 1999, by State (*N* = 28)

A. Ratio of Central and Regional Office Health Staff to Unit Health Staff				B. Ratio of Unit Health Staff to Inmates Served			
State	Central and Regional Health Staff	Unit Health Staff	Ratio	State	Unit Health Staff	Inmates in the DOC	Ratio
AZ	46	343	1:8	AZ	343	26,169	1:76
BOP	69	2,393	1:35	BOP	2,393	105,735	1:44
DC	15	108	1:7	DC	108	4,000	1:37
FL	53	2,600	1:49	FL	2,600	68,500	1:26
ID*	1	102	1:102	ID*	102	3,758	1:37
KS	12	295	1:25	KS	295	8,300	1:28
MD	27	935	1:35	MD	935	25,501	1:27
MA	13	590	1:45	MA	590	10,600	1:18
MI	50	1,000	1:20	MI	1,000	40,508	1:41
MN	6	194	1:33	MN	194	6,000	1:31
MO	4	476	1:119	MO	476	25,322	1:53
MT	4	52	1:13	MT	52	2,799	1:54
NC	95	1,300	1:14	NC	1,300	31,000	1:24
NE†	13	86	1:7	NE†	86	3,567	1:42
NY	60	2,211	1:37	NY	2,211	70,000	1:32
OH	67	1,737	1:26	OH	1,737	47,500	1:27
OK	20	328	1:16	OK	328	20,654	1:63
OR	14	227	1:16	OR	227	9,000	1:40
PA	22	857	1:39	PA	857	36,000	1:42
SC	38	346	1:9	SC	346	21,855	1:63
SD	0	83	0:83	SD	83	2,424	1:29
TN	5	473	1:95	TN	473	16,500	1:35
TX	94	4,356	1:46	TX	4,356	147,000	1:34
UT	22	314	1:14	UT	314	5,064	1:16
VT†	3	43	1:15	VT†	43	1,250	1:30
VA	17	800	1:47	VA	800	30,000	1:38
WA	12	494	1:41	WA	494	13,000	1:26
WI	19	361	1:19	WI	361	14,756	1:41
Total	**801**	**23,101**		**Total**	**23,101**	**796,762**	
Average	**29**	**825**	**1:29**	**Average**	**825**	**28,456**	**1:35**

Note: Includes the federal Bureau of Prisons (BOP).

*Excludes psychologists who are state employees.

†Excludes all mental health staff.

excluding the three small prison systems from the analysis, although the states differed significantly in their staffing ratios. The range of central and regional health staff to unit health staff was from 1:7 in the District of Columbia to 1:119 in Missouri, and the range of unit health staff to prison inmates served was from 1:16 in Utah to 1:76 in Arizona. (Both Utah and Arizona operate their own health services, indicating tremendous variability within similar organizational structures.)

EXHIBIT VI–2.
Prison Health Staffing Ratios for States Reporting Mental Health Positions in 1999, by State (*N* = 25)

A. Ratio of Central and Regional Office Health Staff to Unit Health Staff				B. Ratio of Unit Health Staff to Inmates Served			
State	Central and Regional Health Staff	Unit Health Staff	Ratio	State	Unit Health Staff	Inmates in the DOC	Ratio
AZ	46	343	1:8	AZ	343	26,169	1:76
BOP	69	2,393	1:35	BOP	2,393	105,735	1:44
DC	15	108	1:7	DC	108	4,000	1:37
FL	53	2,600	1:49	FL	2,600	68,500	1:26
KS	12	295	1:25	KS	295	8,300	1:28
MD	27	935	1:35	MD	935	25,501	1:27
MA	13	590	1:45	MA	590	10,600	1:18
MI	50	1,000	1:20	MI	1,000	40,508	1:41
MN	6	194	1:33	MN	194	6,000	1:31
MO	4	476	1:119	MO	476	25,322	1:53
MT	4	52	1:13	MT	52	2,799	1:54
NC	95	1,300	1:14	NC	1,300	31,000	1:24
NY	60	2,211	1:37	NY	2,211	70,000	1:32
OH	67	1,737	1:26	OH	1,737	47,500	1:27
OK	20	328	1:16	OK	328	20,654	1:63
OR	14	227	1:16	OR	227	9,000	1:40
PA	22	857	1:39	PA	857	36,000	1:42
SC	38	346	1:9	SC	346	21,855	1:63
SD	0	83	0:83	SD	83	2,424	1:29
TN	5	473	1:95	TN	473	16,500	1:35
TX	94	4,356	1:46	TX	4,356	147,000	1:34
UT	22	314	1:14	UT	314	5,064	1:16
VA	17	800	1:47	VA	800	30,000	1:38
WA	12	494	1:41	WA	494	13,000	1:26
WI	19	361	1:19	WI	361	14,756	1:41
Total	**784**	**22,871**		**Total**	**22,871**	**788,187**	
Average	**31**	**915**	**1:29**	**Average**	**915**	**31,527**	**1:35**

Note: Includes the federal Bureau of Prisons (BOP).

The three states that reported only the number of medical and dental staff (see exhibit VI-3) show a wide variation in their staffing ratios. Nebraska, which operates its own health services, has the most central office staff but has a proportionately higher ratio of unit health staff to inmates than the other two states that contract out their health services. Of the two states using for-profit contractors, Vermont's unit staffing ratio exceeds that of Idaho's by 28.5 percent.

The extent of variability in unit health staff to prison inmate ratios is seen best by comparing states of similar size of inmate populations. Arizona, Maryland, and Missouri each have approximately 25,500 inmates, yet Maryland has almost three times the number of unit health staff as does Arizona and almost twice as many as Missouri (see exhibit VI-2, part B).

b. Jail Systems

Only 8 of the 30 largest jail systems responded to the organizational and staffing survey. As seen in exhibit VI-4, King County, Washington, had the highest staffing ratio at 1 health staff person for every 16 inmates. This was almost three times greater than the staffing ratio in Dallas County, Texas, at 1:44. The *average* health staffing to inmate ratio for jails, though, was comparable to that for prisons (1:33 and 1:35, respectively). The slightly higher ratio for jail staffing may reflect the fact that in jails, central office and regional

EXHIBIT VI–3.
Prison Health Staffing Ratios for States Not Reporting Mental Health Positions in 1999, by State (*N* = 3)

A. Ratio of Central and Regional Office Health Staff to Unit Health Staff				B. Ratio of Unit Health Staff to Inmates Served			
State	Central and Regional Health Staff	Unit Health Staff	Ratio	State	Central and Regional Health Staff	Unit Health Staff	Ratio
ID	1	102	1:102	ID	102	3,758	1:37
NE	13	86	1:7	NE	86	8,567	1:42
VT	3	43	1:15	VT	43	1,250	1:29
Total	**17**	**231**		**Total**	**231**	**8,575**	
Average	**6**	**77**	**1:14**	**Average**	**77**	**2,858**	**1:37**

Note: Includes the federal Bureau of Prisons (BOP).

EXHIBIT VI–4.
Ratio of Total Jail Health Services Personnel to Inmates Served in 1999, by County (*N* = 8)

County	Health Staff	Inmates in the DOC	Ratio
Bexar County, TX	157	3,900	1:25
Dallas County, TX	158	7,000	1:44
Harris County, TX	248	8,500	1:34
Hillsborough County, FL	120	3,100	1:26
King County, WA	146	2,382	1:16
Maricopa County, AZ	180	7,130	1:40
Miami-Dade County, FL	225	7,000	1:31
San Bernardino County, CA	120	5,100	1:43
Total	**1,354**	**44,112**	
Average	**169**	**5,514**	**1:33**

staff tend to be located in the same facilities as unit health staff rather than at separate locations, and, hence, are indistinguishable from them.

c. Summary

It is impossible to conclude from the data presented above which staffing ratios are "better" or, indeed, whether any of them are adequate. A more detailed staffing survey is needed that provides breakdowns by number and type of health staff and ensures that all prison and jail systems count and report their positions the same way. Even then, though, it would not be possible to determine which prison or jail systems had adequate staffing ratios and which did not because many factors that influence staffing patterns are difficult, if not impossible, to control for in a national survey. The following discussion should help clarify this point and illustrate why national staffing patterns for correctional health care have not been developed.

2. Factors Influencing Staffing Patterns

Many factors determine how many health staff of each type are needed to deliver the services that a correctional system wants to provide. Among these are the characteristics of the institution, the inmate population, the delivery system, and other constraints.

a. Characteristics of the Institution

Various measurements of the size of the individual institutions and the system as a whole should be reviewed. It is not enough to base staffing decisions on average daily population figures alone. The total annual intake, total annual population, and average length of stay are important as well.

Two institutions with the same average daily population can have very different health staffing needs. Suppose, for example, that both institutions have an average daily population of 500 inmates, but prison A is an intake unit and prison B is a prerelease center. The annual intake at prison A is 10,000 with an average length of stay of 2 weeks for 99 percent of that population and 2 years for the 1 percent who are assigned there as workers. At prison B, the annual intake is 500 with a fixed length of stay of 6 months, yielding a total annual population of 1,000. Obviously, the staffing patterns at these two institutions would differ dramatically as would the nature of services required. Such differences are equally apparent in large jails. Two jail systems with the same average daily population can look very different when their total annual population and average length of stay figures are viewed as well.

Another measurement that affects health staffing is the number of inmates at each custody level at each facility. A prison or jail holding a substantial number of maximum security inmates or housing a large segregated population will need a larger health staff than a similarly sized institution with mostly minimum-custody inmates. This is not necessarily a reflection of the greater health needs of individuals in higher custody classes; rather, it may be attributable to security requirements. Often, maximum-custody and segregated inmates must be moved only one at a time and escorted by more than one officer. Even though it is more efficient for the health staff to have a pool of inmates waiting in the clinic to be seen, security regulations may prevent it.

Other security regulations can affect health staffing needs as well. In some institutions, all basic services must be brought to inmates who are segregated. For some health care activities (e.g., medication distribution), such decentralization requires more staff because the same service must be delivered in multiple sites at about the same time.

The size of an institution's segregated population can affect its health staffing needs in other ways. The three sets of national standards developed for corrections (by the American Correctional Association, American Public Health Association, and National Commission on Correctional Health Care) require special monitoring of inmates in segregated status—usually daily.[2] These standards further specify the need to document health rounds in segregation. Obviously, for a large segregated population, full-time health personnel may be required for this function alone.

b. Characteristics of the Inmate Population

The characteristics of the population to be served also must be factored into staffing decisions. For example, the number of inmates in various age groups may affect staffing needs. A prison or jail holding primarily young offenders should require fewer health staff than one with an older population. Similarly, other special health needs of the population to be served will affect the numbers and types of health providers required.[3] A facility housing inmates with, for example, end-stage renal disease will need specially trained staff if dialysis is offered in-house. One holding physically handicapped inmates may need a physical therapist and a physiatrist at least part-time. Rates of communicable diseases such as hepatitis and tuberculosis, as well as terminal illnesses including AIDS and cancer, affect health staffing requirements. The numbers and types of patients with special needs help determine staffing patterns at specific institutions.

The population's gender mix also affects the type of health providers needed because women require access to obstetrical and gynecological services in addition to all other health services.[4] Also, many correctional health administrators find that female offenders utilize health services more than their male counterparts. This is not surprising because women utilize health services more often than men in the community as well.[5]

The reasons for increased utilization among women prisoners are not well understood. Some practitioners believe that female inmates are less healthy as a group than males and, thus, require more care. Others believe that females present more medical complaints and more often use health services for "secondary gain" (e.g., to relieve boredom, visit another part of the facility, receive emotional support) than do male inmates. Neither position is well substantiated by the literature. No published studies could be located comparing health service utilization rates of male versus female offenders in the same system, and only a few studies have compared the health status of male and female offenders in the same system. Data from such studies show that females have higher rates of HIV and sexually transmitted diseases than males in the same prison or jail system.[6] Further, Teplin and her colleagues found that women in jail have higher rates of severe mental disorders (especially depression) than their male counterparts in the same system (Teplin et al., 1997). If such comparisons of male and female inmates' health status and utilization rates have been done elsewhere, publishing these studies would be a useful contribution to the correctional health care literature.

c. Characteristics of the Health Delivery System

The services delivered onsite at the facility obviously affect the numbers and types of health professionals required. Virtually all prisons and jails (except, perhaps, small work camps or trusty units) provide basic ambulatory medical care and, usually, routine dental services and outpatient mental health care as well. Many, though, do not provide inpatient services or may offer bed care only for medical patients and not for psychiatric patients. Specialty services are not offered at every institution, nor are ancillary services such as laboratory, radiology, or pharmacy.

Additionally, some prisons and jails have special missions. A reception/intake facility may provide little in the way of ongoing services because its patient base turns over rapidly. Another facility may house inmates needing dialysis and thus require staff skilled in its application. If an institution houses geriatric inmates or those with physical handicaps (e.g., mobility impaired, blind, hearing impaired), special health services may be needed.

Each service offered at a given institution has implications for staffing, but knowing what services are provided is only part of the formula.

d. Other Considerations

Other factors influence the numbers and types of health staff needed beyond the primary determinants described above. For certain positions, it may

be useful to determine the average time per patient required to perform specific tasks. At a reception center, for example, much of the staff's time is spent conducting repetitive activities: a licensed practical nurse (LPN) may take health histories and vital signs, a registered nurse (RN) may spend the shift giving immunizations or collecting samples for routine lab analysis, and a physician assistant (PA) or physician may perform physical examinations all day. Calculating the average time per patient per provider can help to determine the number of health staff of each type needed to fulfill an institution's health mission.

Health administrators should not rely too heavily on a time and task analysis in the development of staffing patterns without consideration of other factors. To illustrate, the health administrator at a reception center determined that it would take a physician or PA an average of 10 minutes per patient to conduct a routine physical examination. On the basis of an 8-hour shift, the administrator calculates that 48 patients could be seen in a day (6 per hour x 8 hours = 48). The reception center takes in an average of 225 to 250 inmates per week (more than 12,000 per year), so the administrator assumes that only one physician or PA is needed (48 patients per day x 5 days = 240 x 52 weeks = 12,480). The administrator is wrong, and the facility is understaffed.

First, most individuals are not productive for the full 8 hours of their shift. Even if a lunch break is separately accounted for, people still take time to visit with a colleague or to attend to personal needs. A realistic "fudge factor" should be included. Second, correctional institutions have built-in constraints that limit the productivity of clinical staff. Most correctional facilities suspend other activities during counts and meals, creating downtime for the clinical staff. In addition, health staff generally must rely on custody staff to transport patients to and from the health area. If custody is shortstaffed or uncooperative, health services personnel may experience even more downtime. Further, some institutions require *health staff* to be escorted, and all institutions experience emergency lockdowns at unpredictable times.

The architectural layout of the facility also may affect productivity. If the health unit is located deep within the institution, clearing staff coming on and off shift at security checkpoints can take 30 minutes or more. Additionally, a clinician's time is also spent in nonclinical activities. There may be reports to write, meetings to organize, and mandatory inservice training programs to attend. Also, like other personnel, clinicians get sick and take time off for holidays and vacations.

Thus, with the "fudge factor," the physician or PA would see only five patients per hour, and with the institutional time constraints, would have only 6 productive hours during the day. Instead of working 261 days per year (365 minus 104 weekend days) doing physical exams, each would be available only 220 days (assuming 41 days were spent on holiday, on vacation, out sick, in training, or performing nonclinical functions). At this rate, a single physician or PA could perform only 6,600 exams per year instead of the 12,480 projected originally. Two physicians or PAs would be needed rather than one.

Another factor that can influence staffing ratios is the space allocated to the health unit. In the example noted above, there would be no point in having two clinicians on the same shift if there were only one exam room. Either physical exams would have to be performed on two shifts (which is not always feasible given other institutional activities) or a second exam room would have to be constructed. The availability of adequate space is one factor that should be considered in deciding which services will be performed onsite and which will be provided elsewhere. Sharing space is sometimes an option but not if it means that one service must suspend its activities while the other does not.[7] Such an arrangement only decreases staff productivity.

Finally, requirements external to the organization, such as state licensing regulations, national standards, or court orders, can affect staffing patterns. State licensing boards often help define the levels of staff required because they dictate what tasks may be performed by each type of health professional. Generally, they do not specify the staffing ratios needed,

although some states may require a specific level of supervision for physician extenders, which affects the staffing pattern (e.g., a maximum of two PAs supervised by one physician). National correctional health standards also do not set staffing ratios (except perhaps to specify minimum physician time),[8] but their requirements for performing certain services within specified time periods have obvious implications for staffing patterns.

Court orders are a different matter. They may dictate both staffing patterns and staffing ratios, which often have been established by consultant experts who may not be aware of all the factors influencing staffing in a facility. Nonetheless, a paid consultant *will* develop staffing patterns and ratios, and in the absence of a defensible staffing pattern, a court often will order the consultant's recommendations implemented.

The discussion above underscores both the complexity of developing adequate staffing patterns and the necessity for doing so.

3. Methods of Calculating Staffing Patterns

A variety of techniques are used to calculate staffing ratios and patterns, ranging from guesswork to sophisticated formulas. Benton (1981) described some of the more common methods, including task analysis, time-and-motion studies, productivity auditing, outcome analysis, process analysis, and comparative analysis.

Task analysis involves observing individuals at their work, breaking down each job into component parts, and assigning an average time to complete each task. The number of times each task must be done (i.e., the workload) is multiplied by the average time it takes to complete it. The result is the total time required, which is converted into the number of staff needed for that task. Totaling up all of the time for all of the tasks for each position yields the staffing pattern.

Task analysis is a good strategy when the employee repeats the same activity over and over. But as Benton (1981:9-10) notes:

> It has two basic flaws, however. First, it does not work well for more generalized tasks, a type which frequently occur in prisons . . . [and second] the methodology tends to underestimate the amount of staff required to do a job. It tends to assume that optimal levels of worker performance can be generalized, and this is not typically the case.

A *time-and-motion study* represents another technique used to determine staffing needs. It is a more sophisticated version of task analysis and subject to the same flaws. It has the additional disadvantage of being even more time consuming and costly to implement.

Productivity auditing is another variation of task analysis. Benton (1981:14) states that "the main difference between the productivity audit (PA) and the task analysis (TA) is that the TA asks 'How many employees are needed to get this job completed?', whereas the PA asks 'How can this work been done [sic] more efficiently?'" This technique may be the least applicable to corrections because, as noted in the prior section, many aspects of prison and jail life take precedence over the efficiency of clinical staff.

Outcome analysis and *process analysis* are two other staffing pattern strategies discussed by Benton (1981:14-17). Outcome analysis operates on the assumption that the institution with the most problems needs the most staff because it has the poorest outcome. Its sole advantage is that it is an intuitive strategy that requires the least effort on the part of the administrator using it. Its disadvantages are a tendency to reward incompetence and inefficiency and little ability to determine what adequate staffing patterns should be.

Process analysis usually looks toward existing standards to develop staffing patterns and ratios. For example, NCCHC standards or a court order might prescribe the amount of orientation and inservice training that health professionals need annually. This standard would be used to help determine how much time should be deducted annually for each person for training activities. Process analysis can be a useful

technique for those areas where the standards are specific, but in many cases, the standards are too general to provide much guidance.

Comparative analysis is a final technique discussed by Benton (1981:17): it "infers the adequacy of a staffing pattern by comparing it to a comparable situation in another institution. The effectiveness of this approach is dependent upon the appropriateness of the institution selected for comparison." This technique is not useful in developing an initial staffing pattern for a prison or jail of a given size if there is no comparable institution. Some administrators try to use ambulatory care facilities in the community as a guide, but as noted previously, correctional institutions have built-in constraints and inefficiencies that make such comparisons questionable and usually result in understaffing. Others request staffing patterns from institutions of a similar size in neighboring states. Again, unless the administrator knows how those staffing patterns were developed and can be assured that all of the factors on which they were based are similar to those in the local area, this is not a useful approach. Once a rational staffing pattern has been developed, though, comparative analysis can be employed to approximate the staffing pattern for a prison or jail of similar size and characteristics in the same system.

From the above discussion, it should be clear that no single technique will yield the best staffing pattern for a given institution or a correctional system as a whole. Combining elements of task analysis, process analysis, and comparative analysis, though, can be an effective strategy.

4. Steps in Developing Staffing Patterns

Part 2 of this section describes various factors that affect staffing needs. They are not all equally important. The types of health services delivered at the facility are usually the primary determinants of the types of staff needed. Assuming that the decision regarding the types and levels of care to be provided onsite has been made rationally—that is, based on the population's needs and balanced against the cost of and distance to community resources—it is appropriate to allow the services delivered to dictate the types of health professionals required.

The first step in developing health staffing patterns for a correctional system is to determine the health mission of each facility. It may be useful to devise a checklist that summarizes the services provided at each unit (see exhibit VI-5). Its purpose is simply to identify all the services provided onsite at any prison or jail in the system to ensure that no program with staffing implications is omitted. The checklist should be completed for each institution in the system.

The second step is to gather the necessary statistics and other information about each facility and its population. The Sample Facility Profile shown in exhibit VI-6 can be used as a guide. The categories are only suggestive; the actual length-of-stay breakdowns, custody class, housing status, and age breakdowns should reflect the terminology and groupings used in a given state or county system. The information from this profile is used to complete the *# to be served daily* column on the Sample Health Delivery System Profile.

For example, if the facility performs an intake function, the number to be served daily is derived by dividing the *total annual intake* figure on the Sample Facility Profile by the number of days per year the service is offered. An estimated number to be served daily at sick call can be obtained from the previous year's figures on sick call visits if such statistics are kept. If not, it can be estimated by looking at average daily population (ADP) figures and length-of-stay breakdowns. The latter figure is important if most of the population is not staying at the facility a full year. To illustrate, a reception center with an ADP of 1,000 may have only 100 inmates (e.g., assigned workers) staying the full year. Sick call services should be planned against a base of 100, not 1,000, because most of the population does not stay at the facility long enough to use sick call regularly.

EXHIBIT VI–5.
Sample Health Delivery System Profile

Institution name _____ Date _____

Program	Services Offered? Yes	Services Offered? No	Number to Be Served Daily
I. Medical			
A. Basic ambulatory care			
1. Intake			
2. Sick call			
3. Medication distribution			
4. Chronic disease clinics			
a. Diabetes			
b. Hypertension			
c. Other (list)			
5. Special programs			
a. Physical therapy			
b. Respiratory therapy			
c. Other (list)			
B. Specialty care (list each service offered onsite)			
1. Dermatology			
2. OB/GYN			
3. Other (list)			
C. Infirmary care (list type, level, and number of beds)			
1. General medical			
a. Skilled nursing (# of beds ____)			
b. Extended care (# of beds ____)			
2. Special (e.g., geriatric, hospice for terminally ill) (# of beds ____)			
D. Ancillary services			
1. Laboratory			
2. Radiology			
3. Pharmacy			
4. Dietetics			
5. Other (list)			
II. Mental health			
A. Basic care			
1. Intake			
2. Postadmission evaluation			
3. Counseling			
a. Individual			
b. Group			
4. Other therapies			
a. Recreational			
b. Occupational			
c. Other (list)			

Continued on next page

EXHIBIT VI–5 *(Continued)*.
Sample Health Delivery System Profile

Program	Services Offered? Yes	Services Offered? No	Number to Be Served Daily
II. Mental health (continued)			
5. Special programs			
a. Mentally retarded			
b. Crisis intervention			
c. Suicide prevention			
B. Psychiatric consultation			
C. Infirmary care			
1. Acute (# of beds ____)			
2. Extended (# of beds ____)			
III. Dental			
A. Basic care			
1. Intake			
2. Repair and maintenance (e.g., fillings)			
3. Prevention			
4. Prophylaxis			
5. Prostheses			
6. X ray			
7. Lab			
B. Specialty care			
1. Oral surgery			
2. Periodontal care			
3. Other (list)			
IV. Other			
A. General administration			
B. Quality assurance			
C. Health education			
D. Inservice training			
E. Housekeeping			
F. Medical records			
V. Custody			
A. Basic security			
B. Escort (in-house)			
1. Patients			
2. Staff			
C. Transport (outside)			

EXHIBIT VI–6.
Sample Facility Profile

Institution name _____ Date _____

I. General statistics (use most recent data or projections)

A. Total annual intake _____
B. Average daily population (ADP)
C. Total annual population _____
D. Average length of stay (LOS) _____
E. LOS breakdowns (*n* or %)

< 1 month	_____	1–2 years	_____
1–3 months	_____	3–5 years	_____
4–6 months	_____	6–10 years	_____
7–12 months	_____	> 10 years	_____

F. Custody class (*n* or %)

Minimum	_____	Close	_____
Medium	_____	Maximum	_____

G. Housing status (*n* or %)

General population	_____
Special medical/ mental health housing	_____
Protective custody	_____
Administrative segregation	_____
Disciplinary segregation	_____
Other (list _____)	_____

II. Population characteristics

A. Gender (*n* or %)

Male	_____	Female	_____

B. Age (*n* or %)

< 18	_____	41–60	_____
18–25	_____	61–75	_____
26–40	_____	> 75	_____

III. Special considerations

A. Identify any security regulations that affect the delivery of health services (e.g., "administrative segregation inmates may be moved only one at a time" or "disciplinary segregation inmates may be moved only one at a time and require two officers to escort").

_____

_____

_____

B. Identify all decentralized health services (i.e., those provided in inmate housing areas rather than the health services unit); for example, "all medication distributed cellside" or "medication distributed cellside for all segregated inmates," etc.

_____

_____

_____

However, because medication distribution is provided daily regardless of length of stay, it should be projected using the ADP as a base. Similar logic is used to estimate the daily patient load for each service offered. Obviously, this step is much easier to complete if patient utilization figures have been kept regularly.

The next steps are to breakdown each service into specific tasks, decide what level of health professional is needed to complete each task, and develop time estimates. These steps combine elements of process analysis and task analysis. Reviewing state licensing regulations, national correctional health care standards, and court orders (i.e., process analysis) may help define the specific tasks that need to be completed, identify any time elements that should be considered (e.g., "sick call must be held 5 days per week"), and determine the level of staff permitted to accomplish each task. Task analysis then can determine the average time per patient it takes to complete each task. As noted previously, task analysis works well only for those activities that are repetitive and can be quantified against a patient base. A different way to estimate staffing is needed for positions of a more general nature, such as health administrator. Some definition of terms may be useful.

Benton (1981:29) says a *post* is a job "defined by its location, time, and duties, but which may be filled interchangeably by a number of [people]," whereas a *position* "refers to a job which is held by a specific person." Job titles such as *health administrator, quality assurance coordinator,* or *inservice training director* are usually positions, whereas titles such as *infirmary nurse, sick call nurse,* or *segregation nurse* refer to posts. Posts lend themselves to task analysis; positions usually do not.

Positions generally are assigned based on the size of the institution combined with practical considerations. For example, it may be that two facilities with ADPs of 500 and 1,000, respectively, each has a full-time health administrator. The latter may be the optimum workload for an administrator, so it would seem that the smaller unit would need only a half-time administrator. It may be, however, that no other nearby facility also needs a half-time administrator or that it is not possible to hire a person part time. Therefore, practical considerations dictate that both facilities receive a full-time person.

Performing task analysis can be very time consuming because it involves observing individuals at their work, taking repeated measures of the time to complete each task, and computing an average. Accordingly, it is suggested that tasks not be disaggregated too finely. In other words, it is sufficient to define a single patient encounter with a provider as a task without breaking it down further into the time it takes to review the record, provide the treatment, and document the encounter. Additionally, some tasks may require more than one level of staff. For example, both a physician and a nurse or a physician and a clerk may be present for the same sick call encounter.

Another consideration is to identify which tasks are performed by which shift and how often. For example, sick call may be held only on the day shift, Monday through Friday, but outpatient medication distribution occurs twice on the day shift and once on the evening shift, 7 days a week, and nursing rounds of infirmary patients are required on all three shifts, 7 days a week.

Even if task analysis is not actually conducted, it is useful to try to develop some estimates of the time per patient spent by different health professionals in various activities. One alternative is to survey various types and levels of health professionals at different institutions and ask them to account for the amount of time they spend on average in each type of patient encounter or activity.

Once time estimates have been developed for specific tasks, the next step is to assemble the data by the level of health professional required. In other words, all of the tasks performed by LPNs are grouped, all of those by RNs are grouped, and so on. This will help determine shift patterns and coverage requirements.

Any existing task analysis or job survey most likely has been based on *posts*. If not, this is the time to review all the tasks and determine which tasks should be assigned to which shift and which task can be accomplished by which post. Certain activities will occur only on a single shift; others must be repeated on more than one shift. The tasks should be laid out by type of health professional by shift, along with time estimates for the completion of each task. The time estimates are totaled to arrive at workload hours by type of health professional per shift.

Next, the decision regarding coverage comes into play. For the most part, *positions* are filled on a single shift only, 5 days per week, and it is usually not necessary to include a coverage factor for multiple shifts, weekends, or time off. When health administrators are absent (e.g., sick, on vacation), it is assumed that they will catch up on the workload when they return. For certain *posts* (e.g., infirmary nurse), however, coverage is crucial 7 days a week, 24 hours a day. Therefore, regular time off for people filling these posts must be accounted for to ensure continuous coverage.

Coverage factors should be calculated for each prison or jail system. DOC personnel policies generally specify authorized days off for sick leave, vacation, and holidays. Added to these is the average time spent per employee in training, meetings, and so forth. The number of total days off is subtracted from the number of potential annual work days, which is usually 261 (365 days – 2 days off per week x 52 weeks = 365 – 104 = 261). This coverage factor per employee is used to calculate coverage for a post for a single shift, 7 days a week and for a post requiring continuous coverage 24 hours a day, 7 days a week. Benton (1981) has developed a useful chart to calculate coverage factors, which is reproduced in appendix D.

The final step is to total the number of staff of each type required for each post (including the coverage factor) and each position at each institution. This yields the total health staffing complement needed at each facility. The staffing requirements for each facility then can be reviewed to see if any positions reasonably can be shared by neighboring institutions.

Developing rational staffing patterns for correctional health care is a technical and time-consuming activity. They must be created separately for each institution in the system to ensure that inmates' health needs are met. If a correctional system has facilities that are comparable in size and custody class and the health delivery systems are comparable in the types of services offered, the job can be reduced somewhat. Staffing patterns can be developed for prototypes and then adjusted based on special considerations. Comparative analysis can be useful if, in fact, the facilities are similar on relevant variables.

Given the onerous task of developing staffing patterns de novo at different institutions, it is no wonder that individuals charged with this responsibility seek short cuts or that lawyers involved in correctional litigation look for easy answers to what constitutes adequate health staffing. No request is received more often at NCCHC than that for model health staffing patterns. NCCHC has weighed the temptation to create them against the very real dangers of doing so. Whatever staffing models might be developed would be applicable only to facilities that shared all of the assumptions on which such staffing was based. No matter how carefully such assumptions are laid out, some individuals will ignore them and adopt a staffing pattern wholesale, simply because it is easier than developing their own.

There are two potential dangers of a national organization developing sample staffing patterns for different-sized prisons and jails: first, a pattern might not reflect the most efficient utilization of health staff at a given institution, and second, it might not be effective. In the former case, overstaffing would result in unnecessary costs to the taxpayers, and in the latter, understaffing would result in inmates' health needs going unmet. Neither is a desirable outcome. The very complexity of the task and the numerous factors that affect the result argue for creating health staffing patterns on a case-by-case basis.

B. Comparison of National Salaries, Vacancy Rates, and Turnover Rates

As part of the 1999 NCCHC organization and staffing survey, prison and jail systems were asked to provide salary ranges for specific health care positions. They also were asked about their vacancy and turnover rates for health staff positions and which positions were the most difficult to recruit for and retain. As with other items included in this survey, the responses received to specific questions from the participating prison and jail systems varied tremendously.

Respondents were asked to provide an annual salary range for each position. Exhibits VI-7 and VI-8 reflect the midpoint of the ranges for each position. When data were reported in hourly figures, the salaries were annualized using a factor of 2,080 hours per year.

Exhibit VI-7 provides the average annual salaries of certain prison health staff positions. Three of the DOCs using for-profit contractors (in Idaho, Kansas, and Massachusetts) declined to answer these questions and information was not available for the Montana DOC. For the 24 prison systems with usable data, psychiatrists were the highest paid in virtually every system (ranging from $58,997 to $234,000 with a mean of $133,564), followed by physicians (ranging from $58,997 to $171,600 with a mean of $110,403), and dentists (ranging from $55,000 to $120,276 with a mean of $73,510). On average, physician extenders (ranging from $35,970 to $78,520 with a mean of $54,963) were paid somewhat better than Ph.D. psychologists (ranging from $40,726 to $62,472 with a mean of $52,734) in most DOCs. Health care administrators (ranging from $33,000 to $73,944 with a mean of $57,996) were paid better than pharmacists (ranging from $40,342 to $60,000 with a mean of $51,572) in most locales.

It was not surprising, given their lower salaries, that the least variability was among registered nursing positions. Registered nurses in the same system working with medical (ranging from $31,000 to $55,705 with a mean of $41,800) and psychiatric (ranging from $31,000 to $55,705 with a mean of $42,622) patients usually were paid the same. It is surprising that RNs generally were paid about the same as master's-level psychologists and social workers (ranging from $29,174 to $59,072 with a mean of $41,846). Consistent with their lower educational requirements, licensed practical and vocational nurses were paid the least in all systems (ranging from $21,500 to $37,500 with a mean of $28,733).

These same patterns are apparent in the seven jail systems reporting (see exhibit VI-8), except that general physicians were paid more than psychiatrists on average. Physician extenders made more than Ph.D. psychologists, and health care administrators were better paid than pharmacists. The extent of missing data for the jail systems, though, makes it difficult to draw any reliable conclusions.

Caution should be exercised in drawing conclusions regarding the prison systems' salary data as well. Salaries alone do not tell the whole story. In a review of the positions that prisons and jails said they had the most difficulty recruiting for and retaining (see exhibits VI-9 and VI-10), no consistent correlation is found between low salaries and empty positions. More than half of the prison and jail systems reported they had the most difficulty in recruiting and retaining nursing staff. This was the case in DOCs that paid RNs more on average than other systems (e.g., King County, Washington; Maryland; Michigan; Minnesota; San Bernardino, California). Conversely, recruiting and retaining RNs was not a problem in some DOCs that paid them less on average than other systems (e.g., Dallas County, Texas; the federal Bureau of Prisons; Maricopa County, Arizona; New York; Oregon; Utah; Wisconsin).

EXHIBIT VI–7.
Average Salaries of Prison Health Staff in 1999, by State (*N* = 24)

State	MD/DO*	Physician Extender	Health Care Administrator	Medical RN†	Psychiatric RN†	LPN/ LVN‡	Pharmacist	Dentist	Psychiatrist	Ph.D.§ Psychologist	MA‖ Psychologist/ MSW#
AZ	$94,786	$58,792	$58,668	$38,293	$45,443	$29,791	$51,897	$80,255	$94,786	$51,337	$46,973
BOP	92,755	46,821	56,116	38,699	38,699	31,634	46,843	56,116	92,755	62,115	43,289
DC	106,570	45,350	72,752	**H 55,705**	**H 55,705**	33,530	54,351	87,974	106,402	**	**
FL	97,500	50,000	55,000	40,000	40,000	31,000	**H 60,000**	75,000	123,000	50,000	35,000
MD	125,000	77,000	73,000	52,000	52,000	**H 37,500**	**	**	175,000	**	48,500
MI	112,606	51,950	**	48,060	48,060	33,784	45,362	79,459	111,624	48,473	48,473
MN	**L 58,997**	58,360	68,841	49,528	**	31,748	53,651	73,080	**L 58,997**	53,046	39,891
MO	Contracted	Contracted	Contracted	Contracted	42,000	Contracted	Contracted	Contracted	**H 234,000††**	46,000	37,000
NE	102,500	57,500	55,000	40,300	**	26,500	55,000	57,500	111,000	**	**
NY	100,820	40,342	44,674	39,614	Contracted	26,120	**L 40,342**	82,596	99,000	55,705	49,750
NC	140,000	52,500	60,000	43,500	43,500	28,500	51,000	78,500	145,000	50,250	42,000
OH	**H 171,600††**	**	58,240††	49,920††	49,920††	36,400††	51,740††	114,400††	213,200††	55,224††	43,992††
OK	117,500	75,000	52,000	41,142	41,059	23,847	51,544	74,903	140,000	61,762	**L 29,174**
OR	133,158††	49,098††	62,778††	40,626††	40,626††	30,864††	45,876††	58,326††	133,158††	59,322††	40,626††
PA	169,520††	**H 78,520††**	59,072††	51,844††	51,844††	30,753††	**	67,434††	**H 234,000††**	59,072††	**H 59,072††**
SC	83,917††	44,806††	65,965††	32,754††	32,754††	23,921††	52,429††	71,792††	87,352††	54,516††	48,493††
SD	85,000	60,000	54,000	**L 31,000**	**	**L 21,500**	49,200††	**H 120,276††**	197,600††	47,500	48,500
TN	125,000	54,000	**L 33,000**	**L 31,000**	**L 31,000**	22,500	55,000	**L 55,000**	Contracted	Contracted	34,500
TX	124,026	65,600	53,216	42,784	42,784	29,339	52,494	72,722	124,026	**H 62,472**	36,516
UT	104,946††	47,778††	59,696††	34,518††	34,518††	23,618††	56,222††	64,085††	111,415††	45,250††	36,518††
VT	Contracted	Contracted	Contracted	Contracted	Contracted	Contracted	Contracted	Contracted	166,400††	52,000††	41,600††
VA	86,000	50,000	45,500	38,000	38,000	27,000	50,000	68,000	102,500	50,000	29,500
WA	67,938	**L 35,970**	56,460	39,276	39,276	26,046	49,902	75,936	78,354	49,902	49,902
WI	128,721††	54,839††	**H 73,944††**	41,038††	**	26,229††	58,594††	77,126††	132,413††	**L 40,726††**	31,335††
Average	**$110,403**	**$54,963**	**$57,996**	**$41,800**	**$42,622**	**$28,733**	**$51,572**	**$73,510**	**$133,564**	**$52,734**	**$41,846**

Notes: Salaries not available for Idaho, Kansas, Massachusetts, or Montana. Includes the federal Bureau of Prisons (BOP).
H = High; L = Low.

*Medical doctor/doctor of osteopathy.
†Registered nurse.
‡Licensed practical nurse/licensed vocational nurse.
§Doctorate level.
‖Master's level.
#Master of social work.
**Not provided.
††Annualized salary.

EXHIBIT VI–8.
Average Salaries of Jail Health Staff in 1999, by County (*N* = 7)

County	MD/DO*	Physician Extender	Health Care Administrator	Medical RN†	Psychiatric RN†	LPN/ LVN‡	Pharmacist	Dentist	Psychiatrist	Ph.D.§ Psychologist	MA‖ Psychologist/ MSW#
Bexar County, TX	$119,000	**L $50,737**	$69,929	**L $35,365**	**L $35,365**	**L $20,341**	$60,000	$75,000	$118,990	$54,995	$39,950
Dallas County, TX	**L 82,536**	**	**	40,000	40,000	27,456	**	**	**L 82,536**	**	**
Harris County, TX	Contracted	Contracted	69,000	39,864	40,000	32,868	**L 39,864**	78,696	98,000	**L 52,000**	**L 34,000**
King County, WA	101,847††	60,778††	**L 62,670††**	48,516††	48,516††	33,020††	57,075††	**L 68,838††**	101,858††	**	**
Maricopa County, AZ	138,320††	**H 90,158††**	72,500	41,964††	41,964††	28,454††	61,500	**H 104,000††**	121,680††	**H 79,040††**	36,483††
Miami-Dade County, FL	120,000	66,000	70,000	55,000	**H 55,000**	31,000	**H 100,000**	**	**H 135,000**	**	52,000
San Bernardino County, CA	**H 175,000**	**	**H 75,000**	**H 56,160††**	**	**H 33,280††**	**	70,000	120,000	65,000	**H 55,000**
Average	**$122,784**	**$66,918**	**$69,850**	**$45,267**	**$41,169**	**$29,488**	**$65,341**	**$81,924**	**$111,152**	**$62,759**	**$43,487**

Notes: Salaries not available for Hillsborough County, FL.
H = High; L = Low.
*Medical doctor/doctor of osteopathy.
†Registered nurse.
‡Licensed practical nurse/licensed vocational nurse.
§Doctorate level.
‖Master's level.
#Master of social work.
**Not provided.
††Annualized salary.

EXHIBIT VI–9.
Prison Health Staff Positions That Are Difficult to Recruit and Retain, by State (*N* = 26)

State	MD/DO*	PA/NP†	Psychiatrist	Psychologist	Psych RN‡	RN§	LPN/ LVN‖	Social Worker	Medical Technician	Pharmacist	Pharmacy Technician	Dentist	Dental Hygienist
AZ	●		●			●							
BOP		●											
DC			●										
FL			●			●	●						
KS	●		●	●									
MD		●				●							
MA		●	●				●		●				
MI	●			●		●	●			●		●	
MN						●						●	
MO	●												
MT	●												
NE	●	●				●	●		●		●		●
NY										●			
NC						●						●	●
OH			●	●								●	●
OK	●					●	●					●	
OR			●		●							●	
SC						●	●						
SD						●	●						
TN						●				●			
TX		●				●	●					●	
UT				●				●					
VT												●	
VA						●	●						
WA			●	●	●	●	●	●					
WI		●										●	
Total	**7**	**6**	**8**	**5**	**2**	**14**	**10**	**2**	**2**	**3**	**1**	**9**	**3**

Note: Includes the federal Bureau of Prisons (BOP).
*Medical doctor/doctor of osteopathy.
†Physician assistant/nurse practitioner.
‡Psychiatric registered nurse.
§Registered nurse.
‖Licensed practical nurse/licensed vocational nurse.

EXHIBIT VI–10.
Jail Health Staff Positions That Are Difficult to Recruit and Retain, by County (*N* = 8)

County	RN*	LPN/LVN†	Dentist
Bexar County, TX	●		
Dallas County, TX		●	
Harris County, TX	●	●	
Hillsborough County, FL		●	
King County, WA	●		●
Maricopa County, AZ		●	
Miami-Dade County, FL		●	
San Bernardino County, CA	●		
Total	**4**	**5**	**1**

*Registered nurse.
†Licensed practical nurse/licensed vocational nurse.

Similarly, even though Minnesota pays its physicians and psychiatrists only half as well as other states on average, it did not report any problems in recruiting or retaining staff for these positions, whereas Ohio—where psychiatrists are among the highest paid—still had difficulty recruiting and retaining them. Nine of the prison systems as well as King County, Washington, reported having problems recruiting and retaining dentists. Again, four systems (Michigan, North Carolina, Ohio, and Wisconsin) paid more than the average dental salary of $73,510, but still had problems keeping these positions filled, whereas six systems (the federal Bureau of Prisons, Nebraska, Pennsylvania, Tennessee, Utah, and Virginia) paid dentists considerably less than the national average but did not report any difficulties in hiring or keeping them.

Vacancy and turnover rates for health staff positions in prison and jail systems show the same kind of variability (see exhibits VI-11 and VI-12). Arizona had the highest vacancy rate at 34 percent, whereas the District of Columbia reported being fully staffed. At 22 percent, Oregon's vacancy rate was high also, but many of these positions had been approved in anticipation of future growth and were being kept unfilled deliberately. Perhaps due to their urban locations, jails tended to have lower vacancy rates for health positions than did prison systems (the means were 8 percent for jails and 9 percent for prisons). However, jails averaged higher turnover rates than did prisons (19 percent and 17 percent, respectively), which, again, may be due to their urban location and greater availability of health care jobs.

Some of the variability in health professionals' salaries, vacancy rates, and turnover rates reported by prison and jail systems is undoubtedly due to such factors as differences in the cost of living, location, and availability of jobs for certain types of health professionals. Other factors, such as fringe benefits, overall working conditions, job security, and family situation, contribute to individuals' decisions to take a position at a lower salary than they might make elsewhere and stay with it.

C. Recruitment and Retention Strategies

Attracting and retaining qualified health professionals to work in correctional institutions is much easier now than in the past. Most correctional systems have learned that they must be competitive with the "free world" in terms of the salaries, benefits, and work environments they offer health professionals. In addition, the labor pool of many types of clinicians has expanded. The increasing respectability of correctional medicine coupled with the growing disillusionment of some practitioners with traditional practice settings also has resulted in a greater willingness to consider correctional health care as a career.

It is difficult to state with any certainty what makes a particular job attractive to one person and unattractive to another. Most people, however, weigh these commonalities in their employment decisions: salary structures, benefit packages, working conditions, and the location of the proposed employment.

Unlike jails, which tend to be located in urban areas, prisons are frequently at a disadvantage with respect to location. The decision regarding where a new prison will be built is seldom made with any regard for the available labor pool of health professionals. Traditionally, prisons have been built in rural areas

EXHIBIT VI–11.
Prison Health Staffing Vacancy and Turnover Rates in 1999, by State (*N* = 23)

State	Unit Health Personnel (FTE)	Number of Vacant Positions	Percentage of Vacant Positions	Turnover Rate
AZ	343	117	**H 34%**	22%
BOP	2,393	255	11	10
DC	108	0	**L 0.0**	**L 0**
FL	2,600	208	8	UNK
MD	935	47	5	UNK
MA	590	44	8	27
MI	1,000*	116	12	10
MO	486	2	0.4	**H 38**
MT	52	3	6	30
NE	86*	8	9	11
OH	1,737	150	9	5
OK	328	32	10	UNK
OR	227	49	22	16
PA	857	33	4	9
SC	346	74	21	UNK
SD	83	1	1	36
TN	473	47	10	UNK
TX	4,356	358	8	8
UT	314	36	12	7
VT	66	2	3	UNK
VA	800	40	5	UNK
WA	494	80	16	16
WI	361	52	14	21
Total/Average	**19,034**	**1,754**	**9%**	**17%**

Note: Includes the federal Bureau of Prisons (BOP).
H = High; L = Low; UNK = Unknown; FTE = Full-time equivalent.
*Excludes mental health staff.

EXHIBIT VI–12.
Jail Health Staffing Vacancy and Turnover Rates in 1999, by County (*N* = 8)

County	Unit Health Personnel (FTE)	Number of Vacant Positions	Percentage of Vacant Positions	Turnover Rate
Bexar County, TX	157	15	10%	10%
Dallas County, TX	158	6	4	UNK
Harris County, TX	248	30	12	12
Hillsborough County, FL	120	1	1	11
King County, WA	146	15	10	5
Maricopa County, AZ	180	15	8	25
Miami-Dade County, FL	225	10	4	49
San Bernardino County, CA	120	10	8	UNK
Total/Average	**1,354**	**102**	**8%**	**19%**

UNK = Unknown; FTE = Full-time equivalent.

far removed from metropolitan centers, which, of course, is where most health professionals tend to cluster. If there is an oversupply of particular types of clinicians in the metropolitan area, some may be willing to commute or to move to the more rural environment where the prison is located, providing the prison's employment offer is attractive enough. However, if there is a shortage of health professionals of a certain type in the community, the prison's remote location may make it more difficult to fill certain jobs, even with competitive salaries and benefits.

Unfortunately, remote prison locations are an established fact. The best recruiter in the world cannot change what many view as a permanent disadvantage. Thus, it is important to review those aspects of correctional health employment that are amenable to change. Many people are willing to put up with some inconvenience in job location or compromise their choice of where to live if the job itself is attractive. This is not the case if the salary is low, the benefits are minimal, and the working conditions are poor—which historically is what correctional employment offered health professionals.

The development of an effective recruitment strategy involves first, deciding what to offer; second, reviewing employment practices; and third, identifying ways to reach the potential market.

1. Determining the Employment Package

The salary, benefits, and working conditions of a particular job constitute the employment package. Review each of these elements to determine the attractiveness of the employment package as a whole.

a. Salary Scales

Correctional health salaries must be competitive with those in other health settings in the same locale if the goal is to attract qualified professionals, but what makes a salary competitive for a particular position is not always easy to define. To begin, look at salary scales for the same position in several community markets—both rural and urban. Salary scales at other state or county agencies should be checked also.

The base rate and other salary factors, such as raises, bonuses, promotional opportunities, and overtime

pay, should be reviewed. Some DOCs offer hazardous-duty pay for particular positions or provide a shift differential to compensate for less attractive working hours.

A comparative chart for each position can list the employment settings in the first column (e.g., university hospital, community hospital A, community hospital B, state/county public health agency, state/county mental health agency, DOC) and summarize the various salary factors in the other column headings (e.g., base pay, shift differential, raises). The timeframe for earning raises, the conditions to receive bonuses, and so forth should be specified. It usually is not necessary to have strict comparability in all columns if the overall salary components are somewhat similar. For example, the DOC base pay for a full-time physician may be somewhat less than that paid by a university hospital, but the DOC offers larger raises or gives them sooner. This may be enough to make the DOC competitive.

b. Benefits

The salary offered is just one component of the employment package. Individuals may be willing to take somewhat less in salary if the benefits are attractive. Traditional benefits often include health and life insurance; vacation, holiday, and sick pay; pregnancy leave; disability pay; and a pension plan. Some special benefits beyond these basics deserve consideration.

(1) Special Benefits

Several special benefits are offered by employers in the free world. Some of them are already in place in some DOCs, some are readily adaptable to a correctional setting, and some may be inappropriate. They may be realistic only for certain job categories, whereas others can be provided to all employees. A few of them are discussed here only as a way of introducing the possibilities in improving a DOC's benefit package.

Subsidies for education can be attractive to health professionals. They can take many forms. Some state and county agencies offer tuition reimbursement for courses taken in job-related areas. Others may subsidize training to upgrade the credentials of existing staff. For example, in the 1980s, both the Florida and Texas DOCs paid for unlicensed corpsmen to go to school to earn credentials as qualified health professionals. Educational subsidies benefit the health services division as much as the individual by improving the quality of staff and their level of skills and by reducing burnout and turnover.

Travel dollars and time off for health professionals to attend continuing professional education programs are other variations of educational subsidies. Several states require continuing education as a condition for relicensure for nurses and other health professionals. National certifying bodies, such as the American Academy of Physician Assistants and NCCHC, also require continuing education credits for recertification. Providing opportunities for health professionals to earn continuing education credits can be an important employment incentive that also benefits the DOC.

A related strategy that appeals to clinicians such as physicians, dentists, and psychologists is affiliation with hospitals and academic institutions. A few DOCs have offered faculty appointments for key staff. In some cases, correctional health practitioners serve as clinical faculty for students completing their rotations. In others, the DOC may provide release time for clinicians to teach at an affiliated university. This strategy has not been widely used in corrections, but it has exciting possibilities that again may benefit both employees and employers.

Additional employment inducements include travel reimbursement for job interviews, moving expenses, housing allotments, free meals or other emoluments, and job placement assistance for spouses. Regulations in some areas may not permit DOCs to provide such benefits as moving expenses. Other benefits such as meals may be offered routinely. The point is not to ensure that the DOC provides the same benefits as other employers but, rather, to ensure that what is offered by the DOC is competitive. A deficiency in one benefit area may be compensated for in another.

Other benefits potentially applicable to corrections include family leave and childcare programs. Offering a fixed amount of leave—even unpaid—to both males and females to attend to family matters such as the birth or adoption of a child or caring for an elderly or ill family member could be one of the most important benefits employers offer in the future. Similarly, offering assistance with childcare (e.g., creating daycare centers, subsidizing existing programs) may become a necessity for employers as the numbers of single parents and both parents working increase.

Two other benefits offered by some employers, including DOCs, are providing employee health care and employee assistance programs. Since they both have potential drawbacks, they are discussed in somewhat more detail.

- ***Employee health care.*** In addition to health insurance, some DOCs offer onsite health care as well. These can be minimal services, such as annual tuberculosis screening for all employees, or more costly services, such as providing hepatitis B vaccine for certain categories of employees most at risk. Both of these particular services may be worthwhile because of their public health implications. Other services, however, such as preservice and annual physical exams or onsite ambulatory care to employees, are not recommended. First, onsite health care to employees involves substantial costs. It is unrealistic to assume that the staff, space, equipment, and supplies designed to meet the health needs of a certain number of inmates also can meet the needs of staff. In this arrangement, the inmates are likely to be underserved.

  Equally important is the potential for conflict of interest. As employees of the DOC, health professionals may feel pressured to understate other employees' health problems, especially those associated with occupational safety issues or the employees' ability to work. They also may feel uncomfortable knowing intimate details about the lifestyles and health status of their colleagues. In addition, the employees served may be less than forthcoming about their health problems because they do not want their colleagues or their employer to have access to this information.

  In effect, then, what appears to be a benefit may actually work to the detriment of all involved. This is an avoidable conflict, and except for emergency situations where the "good Samaritan" principle may apply, it is recommended that DOCs not offer ongoing health care to employees. If, in spite of the problems, a DOC decides to offer this benefit, the employee health program should be totally separate from the inmate health program. It should have its own space, its own staff, its own records, its own budget, and its own medical autonomy. The latter is especially necessary if the employee health unit has the responsibility of certifying staff's "fitness for duty" as a part of annual physicals, disability claims, workers' compensation, or other activities.

- ***Employee assistance programs.*** Working in corrections can be highly stressful. Additionally, many correctional employees are at risk for developing illness and disease due to their smoking and drinking habits, improper diets, and lack of exercise. Some DOCs offer wellness programs, such as stress management courses or smoking cessation clinics, that address some or all of these problems. Wellness programs are to be encouraged; they do not require employees to reveal much about themselves other than that they are stressed or overweight or smokers or couch potatoes. Employee assistance programs (EAPs), however, are a different matter.

  EAPs are designed to provide short-term counseling and referral services to employees whose personal problems affect their job performance.[9] They usually go beyond the habit control efforts that are the focus of wellness programs and address problems of a more intimate nature (e.g., marital difficulties, alcoholism, drug abuse, psychological problems). EAPs can help employees when they are in crisis and can help employers by reducing turnover and sick leave, for example. Their

main drawback is the same as that for providing employee health care onsite. The success of an EAP depends on the amount of trust that employees have that their private matters will not be revealed to their colleagues or their employer. Therefore, strict confidentiality must be maintained. If a DOC decides to initiate an EAP, it too should be entirely separate from the inmate health services program, with its own budget and autonomy.

(2) Benefit Review

As with salary scales, it may be helpful to lay out a chart that summarizes the benefits offered by the DOC and compares them with those offered by other state or county agencies and community organizations. The employment settings are placed in the first column and the benefits offered comprise the other column headings. The number of days allowed for specific benefits, along with eligibility requirements and any special conditions, should be stated. The more detailed the information, the easier it is to determine the extent to which the DOC's benefit package is competitive. A deficiency in one area may be compensated for in another. For example, the DOC may offer fewer vacation days but more holidays, or it may offer a less attractive health plan initially than another employer but increase its percentage of premium coverage over time.

c. Working Conditions

The third area of comparison in employment packages involves working conditions, which, in essence, embraces everything other than salaries and benefits. They include the number of hours and days worked and the general ambience of the workplace.

Correctional facilities often require coverage 24 hours a day, 7 days a week; this is usually not a problem because health professionals are accustomed to shift work. Many people, however, do not like to rotate shifts. A position may be more attractive if the hours or days worked can be guaranteed. It is worth noting that not everyone wants to work 9 a.m. to 5 p.m., Monday through Friday. Family obligations or a spouse's work schedule may make other shifts or days off attractive to many applicants. Even if work hours and days cannot be guaranteed to new employees, it may make the positions more attractive if applicants know that they can work into a fixed schedule.

Flextime and position sharing may also appeal to health professionals. State and county agencies are sometimes prevented from utilizing these more creative scheduling options, but where they are not prohibited, they can help in recruiting individuals for hard-to-fill positions. Similarly, if the state or county permits, part-time employment can be a cost-effective option for certain positions that do not need full-time personnel. Alternatively, professional service contracts can be used to cover part-time positions.

Health professionals are more likely to be interested in working in a clinic that is clean, spacious, and well equipped than one that is dingy, cramped, and without modern tools. The health services area should look like a clinic, not a prison or jail. It should mirror community facilities as much as possible, even though perimeter security is required.

One built-in disadvantage of a correctional facility in attracting health professionals is its oppressive atmosphere. Recruiters must be prepared to counteract a new employee's basic fear of inmates generated by countless movies and television shows. The question most frequently asked by health professionals contemplating correctional employment probably is "Is it safe?" Contrary to popular opinion, physical assaults against staff are not common. While no one has calculated exact rates, statistics reported by the Bureau of Justice Statistics can be used to develop rough estimates (Bureau of Justice Statistics, 1997:85, 555). Of the almost 350,000 employees working in state and federal prisons in 1995, less than one-half of 1 percent had been a victim of an assault by an inmate that year resulting in injury. (Unfortunately, breakdowns were not provided by type of staff or by severity of injury.) The proportion of health professionals that have been physically assaulted annually is probably even lower than the overall rate. It is recommended that all DOCs gather information

about physical assaults against staff, broken down by type of institution, by type of staff, and by severity of injury. Such information could be extremely useful for recruiting purposes to help dispel the notion that all prisons and jails are inherently dangerous places to work.

2. Reviewing Employment Practices

Correctional institutions often exclude certain categories of individuals from employment. Sometimes the employment restrictions are legitimate. For instance, a security clearance for all employees, including health professionals, is a necessary precaution, and for some positions, reasonable age or physical ability requirements may be related to the job. In other instances, however, the employment restrictions of DOCs are not legitimate, such as the traditional exclusion of women in jobs "behind the walls." Although DOCs in most areas have recognized the impracticality of automatically excluding half of the human race from employment, others have not. Aside from potential litigation, the reluctance or refusal to hire women to work in prisons and jails can hamper the DOC's ability to fill its jobs with qualified personnel. Such a practice can be devastating when attempting to fill certain health positions (e.g., nursing) in which the vast majority of the labor pool is female.

Aside from ensuring that the DOC is adhering to relevant federal regulations regarding nondiscriminatory hiring practices, the steps involved in the pre-employment application and interview process should be scrutinized. If the pre-employment process is onerous or offensive, potentially valuable employees lose interest. Typical problem areas include outdated or inappropriate questions on the application form,[10] excessive waiting time to be photographed or fingerprinted, questionable practices such as conducting credit checks or invasive character reference checks, and lengthy delays in obtaining security clearances. The latter problem is of particular concern. If it takes 2 to 3 months or longer to obtain an employee's security clearance, the time and effort spent in recruiting and selecting potential health staff can be wasted because the individual may lose interest or take another position.

3. Reaching the Potential Market

After reviewing what the DOC has to offer in its employment package and ensuring that its employment practices and pre-employment processes do not act as disincentives, the final step in recruitment is identifying and reaching the potential labor markets for available positions. Common techniques include advertising in professional journals and national publications, targeted mailings, and inperson solicitations.

Almost all health professions have a national membership association, and many have state and county associations as well. The publications of these groups are a natural place to advertise available health positions. Additionally, NCCHC publishes a quarterly newspaper, *CorrectCare,* and the American Correctional Health Services Association (ACHSA) publishes a bimonthly newsletter, *CorHealth,* both of which are distributed to correctional health professionals. NCCHC and ACHSA also accept display ads and classified advertising.

Targeted mailings can help identify the most promising labor pool. Generally, the wider the distribution of brochures or promotional materials, the lower the rate of return. If a particular locale has several nursing positions open, it may be more effective to send a targeted mailing to nurses already working in that area that compares the DOC employment package with other local markets, rather than trying to attract nurses from a larger area. Information about employment rates of particular health professions can help to determine which groups to target.

Probably the most effective strategy, though, is inperson solicitation. This gives potential applicants an opportunity to ask specific questions about salaries, benefits, and working conditions and gives recruiters a chance to dispel any myths or misconceptions about working in a correctional setting. Many colleges and

universities with health science curriculums hold job fairs for upcoming graduates; this can be a place to start. Another opportunity that should not be overlooked is the possibility of exhibiting at annual meetings of health professional associations or correctional health care conferences such as those sponsored by NCCHC or ACHSA.

D. THE SELECTION PROCESS

Hiring new employees is always something of a gamble. Even individuals with excellent credentials and impeccable references do not always make good employees or do not adapt well to the correctional environment. Still, the odds of hiring people who fit the job are improved if the position requirements are specific. Developing written job descriptions for each type of health care position is a good way to start.

Written job descriptions are required by all four sets of national standards used in corrections (see appendix E, section II.A.1.). They should specify the duties and responsibilities associated with each job title and spell out the minimum qualifications of the person holding that title.

In any given state or county system, there may be three types of written employment descriptions. The first is a civil service classification, such as RN II or psychologist I, that may be used in all government agencies. These classifications are usually very general and determine pay rates. The second type of written employment description is specific to the agency. Several individuals may have the same civil service classification yet have different job titles in the department of corrections. For example, one RN II may have the title charge nurse in a larger facility, another may be the head nurse in a small facility, and another may be the quality assurance coordinator in the central office. Each job title requires a separate job description.

Some job titles also may require post descriptions, the third type of written employment description. Post descriptions define the exact duties of an individual at the unit of assignment on a given shift (e.g., infirmary nurse, night shift or intake nurse, day shift). Thus, a single individual may have a pay classification of RN I, hold the job title of staff nurse, and be assigned to the post of medication nurse, evening shift at a specific correctional facility.

Written job descriptions (and post descriptions where applicable) should be drafted in sufficient detail to determine what qualifications are relevant for the individuals holding that job title (or post). They should be reviewed annually and updated as needed.[11] The format for job descriptions should include, at a minimum, the following elements: the job title, who developed the description, who approved it, the date it was issued, the date(s) it was reviewed, the specific duties and responsibilities of the job, and the minimum qualifications of the person filling it (see the sample format in exhibit VI-13).

The *minimum* requirements should be listed when establishing the qualifications for a specific job. Sometimes, job descriptions are written to reflect the ideal qualifications for a given title, and certain requirements are waived when suitable applicants cannot be found. A better practice is to decide the least qualifications the job requires and give preference to candidates who exhibit additional qualifications.

Credentials can never be waived for health professionals. If the duties and responsibilities of a particular job dictate the employment of a registered nurse, hiring a licensed practical nurse will not suffice—nor will hiring an unlicensed individual or one with an institutional license only (e.g., impaired physicians who had lost their community licensure or foreign medical graduates who had not passed the necessary exams for licensure). The basic requirement for any correctional health job is that individuals be licensed, certified, or registered, as required for comparable positions in community health settings. This is an absolute requirement of all four sets of national standards (see appendix E, section II.A.1.) and was recently reinforced in a joint position statement issued by NCCHC and the Society of Correctional Physicians

EXHIBIT VI–13.
Sample Job Description Format

Job title_____

Developed by _____ Date issued _____

Approved by _____ Date(s) reviewed _____

A. Duties and responsibilities

1.
2.
3. (etc.)

B. Minimum qualifications

1. Education*
2. Credentials†
3. Experience‡
4. Special requirements§

*_Education_ refers to the formal training an individual received in school. Depending on the job title, requirements may be specified in years (e.g., 2 years of college), or degrees (e.g., master's degree, associate's degree) or their equivalent (e.g., high school diploma or equivalent such as GED).

†_Credentials_ refers to the specific licensure, certification, or registration needed to hold a particular job (e.g., RN licensed in the state, certified physician assistant, or registered dietitian).

‡_Experience_ should state the number of years worked in a particular field or job category (e.g., a minimum of 5 years in correctional nursing at least 2 of which must have been in a supervisory capacity, or no experience required).

§_Special requirements_ include elements unique to a particular position, such as possessing a valid driver's license or the ability to travel, operate certain equipment, or speak a foreign language.

(National Commission on Correctional Health Care and the Society of Correctional Physicians, 1999). Requiring proper credentials for health professionals working in corrections has probably done more to upgrade the quality of correctional health services than any other single stipulation.

In the past, it was not unusual for a correctional health unit to be staffed by some combination of inmate workers, unlicensed corpsmen, and practitioners with institutional licenses with perhaps only an occasional properly credentialed staff member. Those days are over. Although some state and county correctional systems still do not use fully credentialed individuals to provide health services, they clearly are the exception.

Almost everyone now agrees that medical and dental personnel working in corrections should be appropriately licensed, certified, or registered in the same way as their community counterparts. There is still some disagreement, however, in two areas: requirements for mental health personnel and the use of inmate workers in the correctional health unit.

Determining the national norm regarding requirements for mental health personnel is part of the problem. State licensure generally is required for traditional health staff such as physicians and nurses who provide mental health services. In some states, however, other mental health personnel, such as psychologists, therapists, and social workers, are not required to be licensed; or the state exempts those individuals working in corrections from licensure requirements; or only certain categories of professionals require licensure (e.g., Ph.D. clinical psychologists, but not master's-level personnel); or individuals without licensure can be hired but be required to obtain one within a specified period of time. Any or

all of the above combinations may apply for different types of mental health professionals in a given state.

The lack of uniformity in state requirements for licensure of mental health professionals makes it difficult to precisely propose a norm for corrections. The basic tenet, however, is the same as that for other health professionals: The community standard prevails; i.e., if a state does not require licensure for psychologists practicing in the community, those working in corrections need not be licensed either. What is not acceptable—at least under NCCHC standards—is for correctional health personnel to be exempt from community practice requirements or to be held to a lesser standard.

Controversy also remains concerning the use of inmate workers. The three sets of standards designed for corrections—published by NCCHC, American Public Health Association (APHA), and American Correctional Association (ACA)—all prohibit inmate workers from providing direct patient care, determining access of other inmates to health services, or handling medical records. ACA standards (1990:113), however, permit "inmates participating in a certified vocational training program [to] perform direct services, such as dental chairside assistance," although those of the NCCHC and APHA do not.

At first glance, it may seem appropriate to provide inmates with vocational training opportunities in the health services, but there are problems with this approach. In many states and for many of the health professions, conviction of a felony automatically disqualifies individuals from obtaining licensure, certification, or registration. Therefore, whatever skills some inmates may learn in a health vocational program cannot be translated into employment opportunities on the outside. More important, however, are the problems created on the inside by having inmates work in the correctional health unit.

Maintaining confidentiality of health information is very difficult in prisons and jails. The presence of inmate workers in the health area makes it almost impossible. Even if the health records are guarded zealously, staff tend to discuss patients among themselves. Furthermore, the inmate worker can claim special influence with the health staff or, alternatively, be subjected to pressure from other inmates to obtain drugs, needles, sharps, supplies, or simply information. Finally, the potential for liability increases when an inmate worker causes harm to another inmate.

When inmate workers are used to clean the health area (which is allowed by ACA, APHA, and NCCHC standards), they must be kept under constant observation. They should arrive, clean, and leave; it is poor practice to assign inmate workers to the health area for a full shift even if their only duties are to clean. Staff members are invariably tempted to use them for other duties (e.g., to run errands, carry records, lift patients), and staff tend to forget their presence when discussing their patients' conditions.

Some prisons and jails offer vocational opportunities to inmates to make health products (e.g., dental prostheses, orthotics) rather than to provide health services. Such activities are permissible under NCCHC standards if two conditions are met: the laboratory or work area must be totally separate from the main clinic area and a coding system must be used to protect the identity of the patients receiving the prostheses (National Commission on Correctional Health Care, 1996:28; 1997:28).

E. Staff Development Programs

Determining the type and extent of training that staff should receive is another personnel consideration. Both custodial and medical staff have training needs, but because the role of the health services unit differs with respect to that training, they are discussed separately.

1. Training for Health Staff

Newly hired health staff require orientation to the correctional environment, and all health employees benefit from ongoing training opportunities. The primary decisions to be made by the systemwide health services director (HSD) regarding education concern the content of the training, the length and

frequency of course offerings, the staff to receive them, and the staff to conduct them.

a. Orientation

Orienting new employees to the prison or jail environment and the health services division helps to familiarize them with rules and regulations and avoid certain pitfalls. Although the clinical aspects of medicine in corrections are similar to those in the community, the setting and the patients usually are not. The orientation program for new health employees should focus on these differences as well as on the similarities between correctional and community practices.

Security is the overriding concern in correctional institutions, and all new employees must be aware of security issues. It is important, however, to remind health staff that they are not custody officers. Their primary role is to serve the health needs of their patients; another group of professionals is responsible for custody functions.

Some DOCs as well as the federal system require new health staff to undergo the same initial training as new correctional staff. In my opinion, most correctional health professionals believe this is not the right approach. Health staff do not need training in weaponry, riot control, and the use of force, which are the province of correctional professionals. Although health staff may need exposure to some of the same issues as correctional staff, they do not need the same intensity of training. Having a single orientation program for all staff not only wastes time in learning material and skills that will not be used, it also fails to address issues specific to health services that new health employees need to know. Furthermore, training health professionals first in correctional matters makes it more difficult for them to maintain their role of neutrality in nonmedical issues and avoid co-optation by security officials on health matters. Thus, separate orientation programs for new correctional and health staff is a better approach than joint orientation, even though both groups need some awareness of the other's concerns and regulations.[12]

Defining the population to be served and describing the inmate social system also should be addressed in orientation for new health staff. Information about who goes to jails and prisons, including their ethnic and class makeup, can be useful as can any epidemiological data or description of special health needs of the inmates in the system. Mention should be made of the games inmates play to manipulate the health staff for their own purposes. Because new staff are particularly vulnerable, it is a good idea to review some of the ways inmates may try to "con" them into providing unneeded services or violating institutional rules. Often, much is made of the manipulative nature of inmates. It is worth remembering, though, that clinicians are conned in all settings, public and private. The motives and methods of inmates may differ, but the concept of manipulation is not unique to the correctional environment.

The orientation program also should contain information about the organizational structure of the department of corrections, the health services division, and the various correctional units. The rules and regulations of the DOC as a whole as well as the health services policies and procedures should be reviewed. The orientation program generally does not cover specific job responsibilities. It is anticipated that additional instruction on particular tasks and duties will be provided on a one-on-one basis at the employee's work station. Other topics that may be addressed in initial orientation for health professionals include an overview of the criminal justice system; an introduction to corrections including its purposes and terminology, and sometimes, inmate slang; general personnel policies; and the emergency plan. Throughout the orientation, it is important to remind health professionals that although the setting is different, the basic precepts, principles, and standards of their own disciplines remain the same.

The length of the orientation program may vary, but 2 or 3 days should be the minimum. When it is offered is a more important consideration. Ideally, new employees should be oriented to the system

before reporting to their work stations. Larger DOCs usually can adhere to this timetable because they may have several new health employees starting at about the same time or they may specifically schedule starting dates to coincide with orientation offerings. Smaller departments may have to balance employees' need for timely orientation with practical considerations regarding class size. Still, orientation should occur within the first month or two of employment to be worthwhile (National Commission on Correctional Health Care, 1996:30; 1997:30).

NCCHC standards require that initial orientation be provided to all full-time health personnel (National Commission on Correctional Health Care, 1996:30; 1997:30). Consideration should be given to including regular part-time employees and consultants in orientation programs as well. Often, they are excluded because the HSD does not want to pay for their time while in training. This can be shortsighted, however, because these individuals also need an awareness of security issues, health services policies and procedures, and the patients they are serving.

Who should conduct the orientation is another issue. The larger DOCs may contain a health education section in the central office. Health educators may teach the orientation themselves and draw on the expertise of department officials or other guest lecturers for various components of the curriculum. In smaller DOCs, the orientation may be provided by a coworker on a one-on-one basis. Who conducts it is less important than having a set curriculum that is reviewed with all new employees on a timely basis.

b. Inservice Training

The term *inservice training* encompasses a variety of training activities ranging from instruction provided onsite to formal continuing education offerings. Its primary purpose is to ensure that health staff are kept up to date on clinical issues and administrative procedures. Its primary benefit is to improve the quality of care, and secondarily, reduce staff burnout. Any job can become boring over time and it is easy for staff to become jaded about their work or the patients they serve. Providing periodic opportunities for employees to escape their routines helps to improve their skills and morale as well as reemphasize the goals of the health care system.

It is not possible to specify the exact content of a model inservice program for correctional health professionals. Not only do requirements differ among states, they differ among the various health disciplines as well. Similarly, no standard number of hours is required across states or disciplines. NCCHC standards mandate a minimum of 12 hours of inservice training annually for all full-time health care providers (National Commission on Correctional Health Care, 1996:25; 1997:25), but individual practitioners may need more or fewer hours to maintain licensure or certification.

Thus, each DOC should develop its own inservice training plan that reflects the requirements of its state licensing boards and the needs of its personnel. It does not matter where the training is offered, only that various opportunities be provided for employees to attend inservice programs and obtain formal continuing education credits. Some DOCs conduct most of the training themselves using their own instructors and guest lecturers. Others allow their employees to attend inservice programs offered by community hospitals or other state or local agencies or to participate in annual conferences of local, state, or national health groups.

Regardless of the approach taken, it is important to document all training received by each health service employee. Individual records should list the courses taken, the dates, and the number of inservice hours earned. This information should be maintained in their personnel files and be accessible to supervisory staff.

2. Training for Custody Staff

Determining the training needs, schedules, and curriculums for custody staff is not the province of the health services division. Nonetheless, most of the sets of national standards (i.e., all but the Joint

Commission on Accreditation of Healthcare Organizations) require correctional officers to have some training in health-related issues (see appendix E, section II.C.5.a., for specific requirements). Health personnel can be helpful in designing or reviewing proposed curricula and serving as instructors for certain courses.

Health-related topics for custody staff may include formal training in first aid and cardiopulmonary resuscitation (CPR) as well as training regarding their role in managing special needs inmates, such as those who may be, for example, mentally ill, HIV positive, mentally retarded, suicidal, chemically dependent, etc. Health staff also may offer educational programs for their correctional colleagues regarding infection control practices, stress management, occupational safety, or environmental health issues. The involvement of health professionals in conducting such courses can help improve the relationships between custody and health staff as well as ensure that the clinical information presented is accurate.

F. CONCLUSIONS

This chapter has focused on the larger staffing issues that confront administrators. Its purpose was to address the health staffing concerns that differ in a correctional environment. A number of other personnel matters common to all settings, such as performance evaluations and disciplinary measures, have not been addressed. There are entire manuals devoted to these and other personnel topics that administrators are encouraged to explore.

Staff are the primary resource of all correctional health systems. Decisions regarding their recruitment, selection, training, and development have enormous impact on the likelihood of successful attainment of the delivery system's goals. Failure to devote sufficient time, effort, and dollars to staffing issues reduces the quality of care and increases the probability of litigation.

NOTES

1. See chapter V, section B for a description of the survey and its methodology.

2. See appendix E, section I.B.

3. See chapter VIII for a more complete discussion of inmates with special health needs.

4. See chapter IX for more information regarding women's health needs.

5. See Anno (1997) and Goldkuhle (1999).

6. See, e.g., Hammett et al. (1995); Inciardi et al. (1994); Lachance-McCullough et al. (1993; 1994); and Minshall et al. (1993).

7. Generally, mental health services are the most neglected in terms of space considerations. Because counseling does not require any special equipment, frequently it is assumed that it can be conducted in any vacant room. Sitting on stools in an empty lab or radiology room may provide the necessary privacy for the therapist and client, but is scarcely a therapeutic environment and certainly not a professional one. The impact of space on services is discussed more fully in chapters VII and XI.

8. American Public Health Association standards (Dubler, 1986:104) require one full-time equivalent physician for every 200-750 inmates without regard to the correctional setting (i.e., jail or prison). National Commission on Correctional Health Care (NCCHC) prison standards (1997:49) require a physician to be onsite seeing patients a minimum of 3.5 hours per week per 100 inmates, and NCCHC jail standards (1996:29) recommend at least one FTE physician in jails with an average daily population of 500 or greater.

9. See Bosarge (1989:269-274).

10. Some DOCs make the mistake of asking all potential employees the same questions. Although it may be appropriate to require entry-level correctional officers to produce a copy of a high school

diploma, a physician may find that same requirement annoying. Similarly, it is not relevant to ask all potential staff what office machines they can use and at what speeds.

11. See National Commission on Correctional Health Care (1996:28; 1997:28).

12. It is recognized that not all correctional health administrators would agree with the author's views. Some believe strongly that health staff should receive the same orientation as correctional staff, both to increase their identification with their correctional colleagues and to provide backup assistance in the event of a riot, escape, or similar event. See Journal of Prison and Jail Health (1992).

REFERENCES

Articles and Books

American Correctional Association
1990 Standards for Adult Correctional Institutions (third edition). Laurel, MD.

Anno, B. Jaye
1997 "Health behavior in prisons and correctional facilities." Chapter 14 in David S. Gochman (Ed.), Handbook of Health Behavior Research III. New York: Plenum Press.

Benton, F. Warren
1981 Planning and Evaluating Prison and Jail Staffing. Volume I. Washington, DC: U.S. Department of Justice, National Institute of Corrections.

Bosarge, Betty B. (Ed.)
1989 First/Second Line Jail Supervisor's Training Manual. Washington, DC: U.S. Department of Justice.

Bureau of Justice Statistics
1997 Sourcebook of Criminal Justice Statistics, 1996. Washington, DC: U.S. Department of Justice.

Dubler, Nancy N. (Ed.)
1986 Standards for Health Services in Correctional Institutions (second edition). Washington, DC: American Public Health Association.

Goldkuhle, Ute
1999 "Health service utilization by women in prison: Health needs indicators and response effects." 6 Journal of Correctional Health Care 1:63-83.

Hammett, Theodore M., Rebecca Widom, Joel Epstein, Michael Gross, Santiago Sifre and Tammy Enos
1995 1994 Update: HIV/AIDS and STDs in Correctional Facilities. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Inciardi, James A., Dorothy Lockwood, Steven S. Martin, Anne E. Pottieger and Frank R. Scarpitti
1994 "HIV infection among Delaware prison releasees." 74 The Prison Journal 3:364-370.

Journal of Prison and Jail Health
1992 "Case 4: Correctional training for health professionals." Volume 11, Number 2:86-97.

Lachance-McCullough, Malcolm L., James M. Tesoriero, Martin D. Sorin and Claudia Lee
1993 "Correlates of HIV seroprevalence among male New York State prison inmates: Results from the New York State AIDS Institute criminal justice initiative." 12 Journal of Prison and Jail Health 2:103-134.

Lachance-McCullough, Malcolm L., James M. Tesoriero, Martin D. Sorin and Andrew Stern
1994 "HIV infection among New York State female inmates: Preliminary results of a voluntary counseling and testing program." 74 The Prison Journal 2:198-219.

Minshall, Michael E., Daniel J. Dickinson and Mary Lou Fleissner
1993 "Prevalence of syphilis, hepatitis B virus, and human immunodeficiency virus (HIV) infection in new arrestees at the Lake County Jail, Crown Point, Indiana." 12 Journal of Prison and Jail Health 2:135-155.

National Commission on Correctional Health Care
1996 Standards for Health Services in Jails. Chicago.

1997 Standards for Health Services in Prisons. Chicago.

National Commission on Correctional Health Care and the Society of Correctional Physicians
1999 "Joint position statement on licensed health care providers in correctional institutions." Chicago (November 7).

Teplin, Linda A., Karen M. Abram and Gary M. McClelland
1997 "Mentally disordered women in jail: Who receives services?" 87 American Journal of Public Health 4:604-609.

Health Care Delivery System Model

Chapter VII

Chapter VII

Health Care Delivery System Model

Chapter VI states that the primary determinant of the types and levels of staff is the services offered at a particular facility. This chapter discusses the basic components of an adequate health care delivery system. The chapter begins with a comparative analysis of national standards because their requirements provide the framework for the delivery system model. Section B reviews some of the more important elements of the medical program, including such basic ambulatory care services as intake, sick call, medication distribution, and chronic care clinics as well as specialty care, inpatient care, and emergency care. Section C focuses on the mental health program. Topics such as intake procedures, crisis intervention, outpatient treatment, and inpatient services are presented. Elements of the dental program are outlined in section D. Eye care is the focus of section E. The chapter concludes with a brief discussion of some of the ancillary services that support the health programs and the need to coordinate health services with custody staff.

A. Comparative Analysis of Standards

Four sets of national standards are used to govern correctional health care in the United States: those of the American Correctional Association (ACA) (1990; 1998 supplement), American Public Health Association (APHA) (Dubler, 1986), Joint Commission on Accreditation of Healthcare Organizations (JCAHO) (2000), and National Commission on Correctional Health Care (NCCHC) (1996; 1997). Other professional associations, such as the American Nurses Association (1985) and the American Psychiatric Association (1989), have developed correctional health standards for their areas of expertise, but the four sets noted previously are more comprehensive in covering the range of health services to be provided.

Although the four sets of national standards have some requirements in common, there are enough differences to prevent discussing them as if they were a single entity. At times, the sets of standards disagree on important issues. In constructing the health delivery system model discussed in this chapter, those of APHA and NCCHC were relied on most heavily. Both of these sets of standards were developed by health professional associations specifically for corrections and are consonant on most issues. They tend to complement one another in the areas addressed and the extent of detail provided.

Appendix E consists of a chart that summarizes the requirements of the four sets of national standards with respect to management concerns and delivery system components. Each set has advantages and disadvantages, and they do not work equally well when applied to correctional health care systems.

The primary advantage of ACA standards is that they were developed by the most prominent correctional professional association, and hence many prison and jail administrators and directors of departments of corrections (DOCs) are likely to be familiar with them. In a sense, though, this is also

their primary disadvantage from the perspective of health professionals. Where there are potential areas of conflict between custody and medical staff—particularly related to ethical concerns such as those involving health care staff in custody procedures—ACA standards tend to stand silent or adopt the security perspective. Additionally, health services is not the focus of ACA standards, which were designed to cover all aspects of the administration and operations of correctional facilities. Of the 363 standards in ACA's 1990 edition for adult correctional institutions, only 54 (15%) are specific to health.

Furthermore, although the health care section of the ACA standards addresses many of the same topics as NCCHC and APHA standards,[1] ACA's are the least comprehensive and suffer from a lack of detail. ACA health care standards seldom include discussion, commentary, or examples that could assist health care professionals in implementation. Finally, ACA designates few of its standards as mandatory for accreditation. Only 38 of the total 363 are mandatory, and only 11 of those are health care standards.

JCAHO is the preeminent accrediting body for community health care. It has a series of separate standards volumes for facilities with various health missions, including hospitals, ambulatory care clinics, mental health facilities, substance abuse programs, and so forth. Of these, the set for ambulatory health care fits most correctional institutions' basic health mission better than the other JCAHO sets.[2] The primary advantage of utilizing JCAHO ambulatory care standards is that they reflect the "community standard of care" because they are used in community facilities. Another strength of JCAHO standards is their emphasis on quality improvement.

Their primary disadvantage is that they are not specific to corrections and, hence, do not address topics such as the role of health care staff in evidence gathering or inmate disciplinary actions, health training of correctional staff, intake procedures, sick call, etc. Also, the ambulatory health care set addresses medical services only and not dental or mental health programs. Finally, JCAHO requirements are stated in very general terms and no commentary is provided to assist managers with implementation. For example, several standards refer to the need to receive reports (e.g., laboratory, radiology) "in a timely manner," but there is no definition of "timely." Similarly, JCAHO standards require "available and accessible" health services, but these terms are not defined.

The standards developed by APHA address a number of the problems identified with ACA and JCAHO standards. APHA standards were developed by a health professional association so they emphasize the perspective of health professionals. These standards are comprehensive (covering medical, dental, and mental health services) and specific to corrections. Additionally, they are sufficiently detailed in their requirements to provide some guidance to individuals regarding implementation. Overall, APHA standards are very good as a set of principles, but have two basic problems in their application to correctional institutions.

First, these standards purport to apply to large state prisons as well as small county jails, which is not always practical. For example, one component of the standard on entrance examinations for women states that "plans must include . . . continuation of contraceptives for women who request it" (Dubler, 1986:7). This is a reasonable requirement for facilities holding women for short terms, but not for most prisons where it is assumed that contraceptive devices will not be needed for most women during their stay. Similarly, APHA standards state that "sick call shall be at least five days weekly" (Dubler, 1986:11), which makes sense for larger institutions but not for smaller ones. Second, the absence of an accreditation effort associated with APHA standards makes it difficult to judge whether compliance has been achieved. This means that the interpretation of APHA standards and the measurement of compliance are left to the individual practitioners using them.

The standards of NCCHC have many of the same advantages as those of APHA. NCCHC standards were developed by representatives of a number of health professional associations, using the prior standards of the American Medical Association as a base. NCCHC has separate sets of standards for prisons, jails, and juvenile facilities, and size differences are taken into account as well. This makes them more practical than APHA's. NCCHC standards also have the added advantage of being more measurable because compliance levels are established through an ongoing accreditation program.

The primary disadvantage of NCCHC standards is that certain important areas such as environmental and occupational health issues are not addressed adequately. Taken together, though, APHA and NCCHC standards make a very good set because the deficiencies in one tend to be offset by the strengths of the other. The requirements of these two sets form the basis for the following discussions about components of the medical, mental health, and dental programs.

B. THE MEDICAL PROGRAM

The components of the medical program addressed in the following subsection include basic ambulatory care services, specialty care, inpatient care, and emergency care. With the exception of ambulatory care services, most prisons and jails do not offer every service in-house, nor is this necessarily recommended. In many DOCs, the patient base for certain special services and programs is not large enough to justify offering every service in every institution. Instead, the decision is made regarding which basic services will be decentralized (i.e., available at every unit in the correctional system) and which will be available only on a systemwide basis. Factors that must be considered in making such a decision (e.g., patient load, cost, geographic location, custody class, and other security issues) are described in chapter XI.

1. Basic Ambulatory Care

a. Intake Procedures

Every prison and jail needs to have established procedures for medical intake. What those procedures consist of may differ depending on the DOC and the mission of individual facilities. In most systems, there is a single designated systemwide reception center through which all inmates coming into the DOC are admitted. In some systems, though, the intake function may be regionalized, and in a few systems, several institutions perform an admitting function. Regardless of whether inmate admission to the DOC is centralized, regionalized, or decentralized, staff at the first facility in the system at which an inmate appears must conduct the initial health screening and assessment.

(1) Receiving Screening

The requirement for receiving screening may well be the single most important standard for correctional facilities to meet.[3] It represents the first opportunity health care staff have to gather basic information about the inmates they will care for as patients. The intent of this standard is to ensure that inmates with serious health needs (e.g., chronic or communicable diseases, mental illness, alcohol withdrawal, suicidal ideology) are identified rapidly and appropriate followup care provided so that continuity of care can be maintained and potential medical emergencies averted.

Receiving screening is crucial because most inmates come to jail directly from the streets and are not accompanied by any information on their current health status or problems. Although most individuals come to prison directly from jails, very few of them are accompanied by any health information. Additionally, some inmates come to prison from the streets (e.g., those who previously made bail, parole violators). In any case, it is imperative that certain basic health data be gathered on each new arrival immediately upon admission to the prison or jail

system. A qualified health professional should observe and interview every inmate within the first couple hours of his or her admission to the correctional system. The purpose of this receiving screening is essentially triage; that is, to determine which inmates need to be referred for care immediately, which need to be set up with medications or scheduled for followup care, and which safely can wait to be seen according to the usual health admission procedures.

According to NCCHC prison standards (1997: 41-42), at a minimum, the screening process for an initial intake unit must include—

- Inquiry into current and past illnesses, health problems, and conditions including:

  Any past history of serious infectious or communicable illness, and any treatment or symptoms . . . suggestive of such illness; mental illness, including suicide risk; dental problems; allergies; medications taken and special health (including dietary) requirements; for women, date of last menstrual period, date of last Pap smear, current gynecological problems, and pregnancy; use of alcohol and other drugs, and any history of associated withdrawal symptoms; and other health problems designated by the responsible physician.

- Observation of the following:

  [B]ehavior, which includes state of consciousness, mental status (including suicidal ideation), appearance, conduct, tremors, and sweating; bodily deformities and ease of movement; persistent cough or lethargy; and condition of skin, including trauma markings, bruises, lesions, jaundice, rashes, infestations, and needle marks or other indications of drug abuse.

- Administration of a screening test for tuberculosis.

- Notation of the disposition of the patient, such as immediate referral to an appropriate health care service, placement in the general inmate population and later referral to an appropriate health care service, or placement in the general inmate population.

- Documentation of the date and time the receiving screening is completed.

- Signature and title of the person completing the screening.

For jails, the requirements for receiving screening are basically the same except that jails are not required to administer a screening test for tuberculosis on admission (National Commission on Correctional Health Care, 1996:41-43). This is because the recommended test for tuberculosis screening (the purified protein derivative [PPD]) must be read within 48 to 72 hours of application, and most jail inmates do not stay that long.

The results of the receiving screening should be recorded on a standardized form and a copy placed in each inmate's health record or maintained in a computerized database. For first-time offenders, the receiving screening form initiates the health record. If inmates are transferred from the intake unit to another facility in the same correctional system, they should be accompanied by their health records, which should be reviewed by a health professional at the receiving unit within 12 hours of the transfer to ensure continuity of care (National Commission on Correctional Health Care, 1997:43-44).

It is important that the DOC's policy statement on receiving screening include specific guidelines for disposition. In other words, the health screener should know what procedures to follow and what forms to complete to ensure that any patient needs identified during the screening process are attended to in a timely fashion.

At some point during this process, each inmate should receive information about the procedures for accessing health services and for filing medical grievances.[4]

(2) Health Assessment

The intent of receiving screening is to gather enough basic information about each new arrival's health needs to ensure continuity of care and to prevent avoidable medical emergencies. According to NCCHC prison standards (1997:44-46), receiving screening should be followed by a more detailed health history and examination within the first week of each inmate's incarceration, although ACA standards (1990) and NCCHC jail standards (1996) allow up to 14 days for the health assessment to be completed. Health assessment data should be recorded on standardized forms and placed in each inmate's health record.

The full health assessment includes a number of steps. Generally it begins by reviewing the receiving screening forms and gathering additional data to complete the inmate's medical, dental, and mental health histories. Information should be solicited regarding past illnesses and hospitalizations as well as current health complaints, medications, and treatments. The patient's family history of certain genetic-linked diseases should be included on the form along with the individual's immunization status and known allergies. If height, weight, and vital signs were not taken as part of the initial screening, they should be obtained and recorded.

Depending on the timeframe between admission and the health assessment, a PPD should be applied or the patient's reaction to the tuberculin skin test applied at screening should be read or recorded. Additional laboratory tests to detect communicable diseases (e.g., syphilis, gonorrhea) and for other diagnostic purposes (e.g., urinalysis, pregnancy test for females) should be conducted. Vision and hearing tests should be done along with mental status exams and dental exams.[5]

A physical exam by a physician or physician extender (e.g., nurse practitioner or physician assistant) completes the health assessment data collection. The exam should consist of a "hands on" assessment of the major organ systems, including a pelvic exam and a Pap smear for females.[6] It is suggested that the form used to record the physical exam results simply list the body parts and systems reviewed and leave space for comments. When the form includes "normal" and "abnormal" columns, examiners often are tempted to draw a line down the "normal" column, which makes it difficult to verify that each body part or system has been reviewed.

The final step is for the examiner to review all data collected, specify the health problems identified, and develop an appropriate treatment plan that provides instructions regarding "diet, exercise, adaptation to the correctional environment, medication, the type and frequency of diagnostic testing, and the frequency of followup for medical evaluation and adjustment of treatment modality" (National Commission on Correctional Health Care, 1997:65). Although much of the health assessment can be completed by health personnel who are not physicians, the hands-on exam, the identification of problems, and the development of treatment plans should be done by a physician or a physician extender. In the latter case, a physician still should review and cosign the extender's significant findings when required by state statute.

It is not necessary to repeat the receiving screening nor the full health assessment at each institution in the DOC to which an inmate is transferred.[7] However, it is imperative that each patient's health record accompany him or her on transfer. Staff at the sending institution should review the record to ensure that it is complete. In some systems, a brief transfer summary is filled out that lists current medications, treatments, pending appointments, and so forth. Medications may be transferred at the same time as the inmate. Health intake at the receiving correctional facility consists of health care staff reviewing the chart of each transferred inmate on the day of transfer and taking the necessary steps to ensure continuation of medications, diet, and other care and treatment regimens.

Some other issues associated with receiving screening and health assessments should be addressed—one is their frequency and the other concerns

refusals. It usually is not necessary to repeat the receiving screening done on the day of admission during an inmate's confinement. If an inmate is discharged from the DOC and returns or goes out on extended furlough, a new screening form should be completed. Otherwise it is not relevant because more detailed and more current health data should be available in the patient's chart. Regarding the health appraisal data, at a minimum even for young, healthy inmates, each patient's chart and a tuberculin skin test (unless contraindicated) should be reviewed annually. The need to repeat other laboratory or diagnostic tests or to initiate new ones or to conduct another hands-on assessment is dependent on the inmate's age, need, and risk factors. It is suggested that each DOC have its clinical director develop protocols that define the frequency and extent of repeat health appraisal data collection for inmates in different age, gender, and risk groups. The guidelines published by a number of medical specialty societies (e.g., American Academy of Family Physicians, American College of Obstetricians and Gynecologists, American College of Physicians) can be extremely useful in developing such protocols.[8]

The issue of inmates' refusal to participate in all or part of the health appraisal process is problematic. For the most part, competent inmates have a right to refuse medical care and treatment, which certainly extends to the health assessment data collection process. They even have a right to refuse communicable disease screening, although when this occurs, medical staff can order that the inmate be quarantined to protect the health of others if there is sufficient clinical justification for doing so. Usually, all that is necessary to get a recalcitrant inmate to agree to the testing is to explain that he or she cannot be placed in general population until the testing is completed and communicable diseases are ruled out. Suppose, though, that an inmate agrees to the communicable disease testing, but refuses all other tests and exams and will not cooperate by providing health history data? That is the inmate's right and all the health care staff can do is explain to the inmate that the sole purpose of the information is to meet his or her health needs.

In effective health care systems, inmates rarely refuse to participate in the health assessment process. They understand that it is done for their benefit and cooperate willingly. If an institution is experiencing a high percentage of refusals, it is likely that some disincentives are built into the process. Health care staff may be allowing inmates to refuse the health assessment by notifying a correctional officer instead of insisting that all inmates scheduled be brought to the health unit so the purpose of the data collection process can be explained. Sometimes, a high refusal rate can be traced to an overzealous lawyer who has fashioned a complex consent form that frightens or intimidates individuals. In most instances, it is not necessary even to provide a separate written consent form for the health assessment because there are no invasive procedures except drawing blood, from which the potential risk of complications or injury is negligible. If a prison or jail is experiencing a high rate of refusals of the health assessment process, it is suggested that health care staff interview a sample of inmates to determine why they refused. The results of such a study may suggest procedural changes that will reduce the refusal rate.

b. Sick Call

(1) Process

The backbone of any correctional health delivery system is its sick call process. Every correctional facility should have a mechanism in place that enables all inmates—including those in segregation—to request health services daily. Some DOCs allow inmates to make verbal requests for care or simply to appear at the health unit. In others, health care staff make daily rounds of each housing area. Some DOCs utilize a written request system and some use a combination of these procedures. A written request system coupled with staff rounds of inmates on lockdown status is probably the best system because it is most likely to ensure that all inmates have an opportunity to voice their health needs daily. It also ensures that there is documentation of inmates' requests and the daily patient load can be regulated better than a walk-in system.

Two major problems with a written request system must be addressed. First, a number of inmates are illiterate, retarded, mentally ill, or non-English speaking. The DOC's health care staff must develop procedures to assist these inmates in completing their request forms or provide an alternative way for them to access health services. Second, health care staff are cautioned against rigid adherence to the written request procedure. The purpose of a written request form, after all, is simply to inform them of the inmate's health needs. If other inmates or correctional staff tell a health care staff member that an inmate appears ill, it can be both foolish and costly to insist that the inmate complete a written request form. A 1990 death in the King County Jail in Seattle demonstrated the potential folly of this approach.[9]

Regardless of which sick call procedure is used, the important points are to ensure that—

- All inmates have an opportunity to make their health needs known on a daily basis.
- Access is directly controlled by health care staff and not by correctional staff (which, in a written request system, includes health care staff only picking up the request slips).
- Health care staff review all slips received daily and determine the appropriate disposition (e.g., "inmate to be seen immediately" or "scheduled for next sick call" or "referred to dental department").
- Inmates are notified of the health unit's response to their requests.

Regarding the last point, DOCs that have a written request system often use a multiple-copy form. One copy is returned to the inmate with the disposition of his or her request noted. This step is important. Health care staff who fail to notify inmates of the response to their requests frequently are inundated with multiple requests for the same problems from the same inmates. If it is possible to do so without breaching security, it also is a good idea to include a timeframe regarding the disposition of copies that are returned to the inmates. This way, they know not only that their requests have been received, but they have some idea of when they can expect to be seen. Generally, inmates are not told the exact date of their appointments outside the institution for security reasons, but can be informed of the timeframe for their in-house appointments.

The process described above is essentially triaging requests.[10] Sick call occurs when an inmate reports for and receives appropriate care. It must be held in a clinical setting where adequate equipment and supplies are available. Sick call should be conducted by nurses, physician assistants, or other qualified health professionals at least 5 days per week in all but the smallest jails. Additionally, although the frequency of physician clinics depends on institutional size and inmate needs, a prison or jail with 500 or more inmates usually will require a physician to hold clinic at least 5 times per week.

In general, inmates' requests for nonemergency care should be processed within 24 hours, and they should be scheduled for sick call within the next 24 hours. Nurses or physician extenders usually see the patient first to gather additional information, take vital signs, and/or provide care within the scope of their licenses. Based on their review, they determine whether the inmate needs to be referred to a physician or another clinician. Although stating precise guidelines is difficult, if an inmate reports to sick call more than twice with the same complaint and has not seen a physician, he or she should be scheduled to do so.[11]

Correctional health practitioners often ask whether they are obligated to see every patient who requests care. This is generally the case, although sometimes common sense dictates otherwise. For example, if a patient was seen recently and submits a request for the same condition, there are times when it is appropriate for the clinician to provide only a written response stating that the medication or therapy will take time and directing the patient to return to clinic only if the condition worsens or does not

improve in a specified number of days. Similarly, there are times when a course of treatment has been tried without success and the physician decides that a consultation by a specialist is needed. If the physician cannot do anything else for the patient in the interim, it is appropriate to notify the inmate that he or she will have to wait. It should be clear that the above examples involve inmates who have been seen previously for the same complaint. It is never appropriate to refuse access to care for an inmate with a new complaint or for one who has not been seen recently.

(2) No-Shows

Another area in which practitioners often seek guidance is in the handling of inmates who do not show up for their sick call or clinic appointments. Clearly inmates have a right both to refuse care and to change their minds. Additionally, a number of medical complaints and illnesses have a self-limiting course and resolve on their own. Although inmates must not be punished for refusing care, their failure to show up for scheduled appointments is of concern.

The problem with no-shows is twofold: they reduce the efficiency of the health unit, and inmates who need health services may not receive them. In the former case, one solution is to devise a way for inmates to cancel their appointments. If the health care staff know which patients will not attend which clinics, other inmates can be scheduled to be seen. To illustrate, the Pontiac Correctional Center in Illinois was experiencing a 40- to 50-percent no-show rate for scheduled health appointments. A task force studied the problem by conducting a 9-month retrospective review and decided to redesign the medical call pass system. The new pass was a three-part form that allows the inmate to refuse the scheduled appointment (see appendix F). If he or she refuses, the inmate's copy is returned to the health unit so that the appointment can be canceled and another patient scheduled. Simply by altering the pass system, no-shows were reduced to about 10 percent.

Another solution regarding no-shows is the one instituted by the Georgia Department of Corrections. In that system, inmates are not permitted to be a no-show for a scheduled health appointment. Like inmates in Illinois, Georgia inmates have a written mechanism for canceling appointments after submitting a health services request. If they choose not to use it, however, they are required to come to the health unit in person to indicate their desire to cancel the appointment. This lets the health care staff know that the inmate voluntarily changed his or her mind. It also forces the inmates to take personal responsibility for canceling appointments just as they would be expected to do in the community. Another advantage to this approach is that it saves the health care staff time because they no longer have to research the reasons why inmates do not appear for their appointments.[12]

The other concern with no-shows is that people who need care are not receiving it. The question is whether health care staff have an obligation to follow up on *all* no-shows to determine why they did not attend their scheduled appointments. The answer is no. If an individual is on critical medications or fails to report for monitoring of a chronic disease, health care staff should seek out the inmate, determine why the appointment was missed, and counsel the inmate to continue the course of treatment prescribed. Similarly, if there is no signed refusal form, segregated inmates who do not show for their appointments should be sought out to ensure that their access to care was not barred. Otherwise, routine requests from general population inmates who do not show up for their appointments simply can be filed in their medical records.[13] Patients need to assume some responsibility for their own care. It is not practical or necessary for health care staff to track down all no-shows.

(3) Utilization patterns

A discussion of sick call would not be complete without some mention of utilization patterns. Most correctional practitioners are convinced that

inmates utilize health services at a rate far exceeding their community counterparts. The utilization studies that have been published on longer term inmates confirm this view for both males[14] and females.[15] On average, prison inmates go to the health services unit at least 1.5 times per month or more than 18 times per year.

Inmate health utilization patterns are so high for a number of reasons, only some of which are correctable. For one thing, inmates tend to be sicker than the average citizen, as noted elsewhere in this book.[16] Their lack of prior care and their history of abusing their bodies through poor nutrition, excessive drug and alcohol use, tobacco use, risky sexual practices, etc., mean that some of their increased utilization is justified.

For another, prisons and jails tend to create a general sense of malaise. Inmates are not happy about being confined. Sometimes their discontent manifests itself in physical complaints. A review of any correctional facility's sick call logs is likely to reveal a substantial number of generalized complaints of subjective pain (e.g., stomachache, headache, backache) or bodily dysfunction (e.g., diarrhea, constipation, nausea) for which no cause can be determined. Unfortunately, the lack of objective findings in assessing subjective complaints usually involves costly workups and specialty consultant referrals until serious illnesses can be ruled out.

For the most part, these inmates are not faking. They simply do not feel well and they do not know why. Sometimes the solution is to refer them to a counselor. Often all they need is someone with whom to talk. Correctional health care staff need to recognize that handling inmates with nonspecific complaints and illnesses is an important part of their job. Instead of becoming angry or impatient with inmates who are "not sick," they should seek to reassure them that their health needs will be met. Additionally, staff should keep in mind that there are times when the same nonspecific subjective complaints are signs of serious illness.

Of course, some inmates deliberately abuse the health system and fake symptoms for secondary gains. An individual on lockdown wants to get out of his cell. Another inmate does not want to work in the field. Someone else wants an opportunity to meet a friend housed elsewhere in the facility. Still another inmate may seek a therapeutic diet in the hope of obtaining more palatable food. If health care staff suspect that specific patients are overutilizing services, they should try to determine why.

Sometimes, the problem lies elsewhere in the prison or jail. A lack of meaningful programs, insufficient exercise, unappetizing food, and so forth can all result in increased utilization of health services. Nathan (1985) wrote an excellent editorial that describes the effects of idleness, boredom, and depression on the health unit. His advice is for correctional health professionals to practice social medicine; that is, to try to eliminate the environmental causes that contribute to overutilization and misutilization of health services.[17]

For other repeat abusers of health services (e.g., those who do not want to work or who come to the health unit to meet friends), the problem often can be resolved through scheduling. In other words, these individuals are not denied access, but are told that they will be seen before or after work or otherwise outside the regular clinic hours.

The one group of abusers for whom there is no ready solution is individuals on segregated or lockdown status. Because they generally are confined to their cells for up to 23 hours per day, they are strongly motivated to get out for even a brief period of time. Counseling probably will not be successful with this group.[18] Some DOCs have tried to alleviate the problem by providing care in the segregation area rather than in the main clinic. This is acceptable to address routine requests of segregated inmates, provided that a fully equipped examination area (complete with sink, exam table, etc.) that assures auditory privacy exists in the segregated area. In its absence, segregated inmates must be brought to the main clinic. Cellside treatment is not an acceptable substitute.

Another reason exists for increased health service utilization in prisons and jails, and it is of our own making. In most DOCs, inmates are required to come to the health unit to receive services and products that are only marginally medically related. An individual who needs dandruff shampoo must come to the health unit to obtain it. Similarly, an inmate whose skin breaks out using the institution-issued soap has to go to the health unit to receive special soap or lotion. Permission not to shave or to receive an extra mattress or a type of shoe that differs from the regularly issued ones—all must be obtained from health care staff. Periodic revisits are required to replace products or to continue permission to deviate from institutional rules such as not shaving. In some systems, inmates still must come to sick call to receive over-the-counter (OTC) preparations to treat headaches, colds, heartburn, or constipation.

Such practices place a tremendous burden on already overloaded health care staff. There is no legitimate reason why certain items such as dandruff shampoo, lotion, and soap as well as other OTC preparations cannot be made available in the facility's commissary, as is done in California and elsewhere. Additionally, DOCs that have tried it (e.g., Florida, Illinois) have had success with placing certain OTC items in the housing area so that they are readily accessible to inmates complaining of headaches, colds, constipation, or heartburn. Prior to implementing a new OTC distribution system, a written policy statement should be drafted that specifies which OTC items will be available and how they should be distributed and recorded, and correctional staff should be oriented to the procedure. Making OTC items readily available not only decreases the daily workload for health care staff, but also enables inmates to receive prompt relief for their minor complaints.

Sometimes it is difficult to convince correctional administrators that inmates safely can be allowed to participate in managing some of their own health care needs. Traditionally, jails and, especially, prisons have fostered total dependence of their charges, and it is hard to break out of that mold. Nevertheless, it should be tried. If inmates are given the responsibility for some aspects of their own health care, this not only can increase their morale and decrease their utilization of health services but also can decrease the institution's potential liability. Inmates are not children and should not be treated as such. A correctional administration that denies inmates any opportunity for self-care has assumed total responsibility for ensuring that all the inmates' health needs are met.

Clearly inmates utilize health services much more often than those of similar age, gender, and ethnicity in the community. Anno (1997) states:

> The extensive utilization of ambulatory health services by inmates is affected by a number of factors unique to the correctional setting as well as by those common to all individuals seeking care. The extent of inmates' health needs, the correctional environment, institutional rules, system-mandated visits, inefficiencies in the health delivery system, unrestricted access to care, manipulation for secondary gains, and psychological factors all play a part in increasing inmates' utilization of health services (p. 297).

She argues, however, that "true comparisons of health care utilization between correctional and community populations should focus only on those factors common to both groups in seeking care, namely, extent of need, illness behavior as a coping mechanism, and manipulation for secondary gain" (p. 300). Such studies have not been done but would be a useful addition to the correctional health care literature.

c. Chronic Illness Monitoring

For the most part, the sick call process is designed to address acute, nonemergency complaints. In addition, each facility needs to have a mechanism in place to monitor individuals with chronic health conditions. By definition, chronic illnesses are either ongoing or recurring. Patients with asthma, heart

disease, diabetes, hypertension, AIDS, etc., as well as those with certain permanent physical disabilities (e.g., paraplegics) need to be monitored closely to maintain their health status or to slow the progression of their diseases.

The first step in developing an effective program is to identify the number of inmates with specific chronic conditions. Although this seems obvious, the health care staff at a number of prison and jail systems still cannot state precisely how many inmates have specific medical conditions. A 1998 survey conducted by NCCHC and the National Institute of Justice (NIJ) of the 50 state prison systems, the District of Columbia, and the federal Bureau of Prisons revealed that of the 41 systems responding, only 19 (46%) were able to identify the number of inmates in their systems with specific chronic diseases.[19]

Each DOC should have clinical protocols for chronic conditions that provide guidance to practitioners in managing their patients' care.[20] An individualized treatment plan must be developed for each of these patients that includes instructions regarding medications, special therapies (e.g., physical therapy, respiratory therapy), exercise, diet, the type and frequency of laboratory and other diagnostic testing, and the frequency of followup for reevaluation of the patient's condition and adjustment of the treatment plan as needed.[21]

Establishing chronic care clinics where such patients are scheduled for routine revisits to the health unit can help to ensure that they receive needed care. For these patients, it is imperative that health care staff take an aggressive approach. Due to the seriousness of their conditions and the potential for negative outcomes, patients with chronic conditions should not be left to seek care on their own. Once identified and included in a regular "return to clinic" system, though, they can be taught to manage certain aspects of their care. Counseling and self-care instruction by clinicians, health educators, or dietitians can be of great assistance to these inmates both within the correctional facility and when they return to the community. For example, diabetics can be taught to administer their own insulin, monitor their own glucose, and select an appropriate diet. Although some of these activities still must be supervised by health care staff for security reasons, inmates are provided with valuable information they can use for the rest of their lives.

Teaching inmates to assume some responsibility for managing their chronic conditions also can improve their compliance with prescribed treatment regimens while incarcerated. At the Oregon State Penitentiary, a monitoring and evaluation study of diabetes and hypertension revealed only sporadic patient compliance. It was determined that inmates' lack of knowledge about their diseases and loss of control over aspects of their own care were contributing to the problem. As a consequence, nursing clinics were established to teach diabetics and hypertensives about their diseases and to promote self-care. Catherine M. Knox, administrator of health services for the Oregon DOC, described the program as follows:

> Diabetic patients were given responsibility for diet selection, and for the collection of data to track blood glucose levels, medication types and dosages. They also scheduled their own blood glucose monitoring. Compliance with prescribed treatment has increased 40% since the program was initiated. A similar increase was noted with hypertension patients in compliance with medication, diet, and blood pressure monitoring.
>
> After the patients receive education from the clinic nurse about diabetes or hypertension, they are given responsibility for recording in a notebook their own data base and noting any deviations from normal values. This process allows the patients to correlate any changes in blood pressure or blood glucose with modifications in diet, exercise and/or medication. These changes and progress are discussed with the health

> care staff managing the chronic disease clinic at regular intervals.
>
> Providing reasonable opportunities for patients to participate in self-care and permitting them to control scheduling of monitoring procedures better prepares them to manage their conditions upon discharge from the correctional institution. When knowledge and control of chronic health care problems are returned to the patient, compliance with prescribed treatment regimes increases. (Personal communication, March 1, 1991)

Sometimes correctional practitioners complain that in spite of their best efforts, inmates with chronic conditions are continually noncompliant with their care instructions. This happens to community providers as well, of course, but the difference is that correctional health personnel cannot terminate their provider-patient relationships if someone refuses to cooperate with the prescribed treatment regimen. Correctional practitioners may be tempted to restrict certain rights and privileges for their recalcitrant patients, such as prohibiting an asthmatic from purchasing cigarettes or a diabetic from purchasing candy or other inappropriate food items. Except in a controlled medical environment such as an infirmary or a hospital, this is not practical if such privileges are extended to other inmates. The only recourse is for the clinician to continue to counsel such patients about the need to follow the prescribed treatment and to document the counseling in the patients' charts. The patients then are responsible for any deterioration in their health conditions attributable to their failure to follow care instructions.

d. Medication Distribution

Medication must be distributed every day, up to four times a day, 365 days a year. Given the number of inmates with health problems, some of whom have multiple conditions, the number of medications passed annually in most prisons and large jails is staggering. In some DOCs, medications are distributed from a central area. In others, all medications are brought to inmates in their housing areas. Still others use a combination approach (e.g., general population inmates come to a central "pill window" and medications are brought to inmates in segregation). It does not matter which system is used as long as the following precepts are observed:

- Medications are dispensed by individuals licensed to do so.
- Each prescription is labeled appropriately in accordance with applicable regulations, and at a minimum, has the following information: date and pharmacy prescription number; patient name; name, strength, and amount of the drug dispensed; directions to the patient for use; prescriber name; and any other pertinent information.
- Medications are passed by health personnel who have been trained (e.g., medication aides) or licensed (e.g., licensed practical nurse (LPN) or registered nurse (RN)) to do so.
- Administration of medications or their refusal is recorded on individual patient logs or computer files.
- For security reasons, patients on abusable medications are monitored to ensure that the medications are taken and not hoarded.

There are ways to cut down on the number and types of medications distributed. Establishing a pharmacy and therapeutics committee can be of great assistance in limiting the types of medications that can be ordered by clinicians as well as monitoring their prescribing practices. Periodic studies by such a committee can help to ensure that medications are used for legitimate medical purposes and not for punishment or inmate control. Additionally, the prescribing practices of individual practitioners can be reviewed. Such a committee also can control the use of certain medications by requiring the clinician to obtain special permission to order them or by prohibiting them altogether for certain symptoms (such as the use of minor tranquilizers for "sleeplessness").

Another technique that has worked well in some DOCs is to move to a system of b.i.d. (i.e., twice a day) distribution. Some medications (e.g., certain antibiotics) still must be distributed three or four times a day as ordered, but many categories of drugs are available in *b.i.d.* preparations. This step alone can represent tremendous savings in staff time.

Removing certain OTC preparations from the medication distribution system and making them available elsewhere has been addressed already, but there are also a number of prescription medications that need not be distributed one at a time. A number of prisons and jails have had good success with "keep on the person" (KOP) medication programs. DOCs interested in initiating a KOP medication program should develop a written policy and procedure and orient health care staff, inmates, and correctional staff to its use prior to implementation. At a minimum, the policy should specify—

- Which medications may be given in multiple doses and which may not (e.g., psychotropic medications, controlled drugs, and any abusable preparations should always be administered in single doses).
- Types of inmates who may be given multiple doses (e.g., those who have been compliant in taking their medications in the past).
- Reasons an individual may be withdrawn from the KOP medication program (e.g., noncompliant, gave or sold medications to someone else).
- Forms of medications allowed to be issued in multiple doses (e.g., tablets only or tablets and ointments but no liquid medications).
- Procedures for renewal of the prescription and for disposing of any unused portion.
- Maximum number of allowable preparations that may be in the possession of a single inmate at one time (e.g., no more than 30 pills of a single type and no more than 3 prescriptions).

The last practice is much more advisable than using a time period (e.g., a week's supply or a month's supply) because with some medications, a month's supply would represent an inordinate amount of pills in someone's possession (Anno, 1990).

2. *Specialty Care*

Every DOC, no matter how small, is likely to have some inmates who require the services of medical specialists. The decision regarding whether specialty care is offered onsite at every facility in the correctional system, only at specific facilities, only in the community, or some onsite and some offsite depends on a number of factors, the most important of which is patient need. The number of patients in the system requiring each type of specialty care will dictate which specialty services should be provided within the DOC and at which institutions, and which should be provided at community facilities.

Assuming the availability of specialists in the community, their willingness to treat inmates, and the existence of appropriate specialty equipment at the prison or jail, it is preferable to conduct specialty clinics onsite. This avoids the added security risk of transporting inmates outside of the institution, and the added costs of custody time and transportation expenses. Obviously, there are times when certain specialty services are not available locally or when it is not cost efficient to duplicate specialty services (including expensive diagnostic equipment) onsite.

Some prison systems and a few jails have successfully used telemedicine as an alternative way to provide specialty care "onsite." In its 1999 survey, NCCHC found that 13 of the 28 responding prison systems were using telemedicine for at least some of their specialty care.[22] These tended to be the larger prison systems. While telemedicine can be cost effective if the volume of services and the travel distances averted are substantial,[23] smaller correctional systems may not be able to generate any cost savings because the costs of the equipment, initial installation of the technology, and operation are so high.[24] However, the cost savings in larger systems can be significant. McDonald and colleagues (1999)

estimate that the federal Bureau of Prisons was able to reduce its average cost per specialty care encounter from $173 to $71. They also note that there are nonmonetary benefits to using telemedicine, including reduced security risks (because patients do not have to be transported outside the facility), shorter waiting times for patients to be seen by specialists, and improved access to specialty care not previously available. NCCHC (1999b) has developed a position statement on telemedicine that can guide correctional systems in designing appropriate policies and procedures to ensure that the scope of such services is defined, that the equipment is kept in good repair, that patient consent has been obtained, that confidentiality is maintained, and that staff providing telemedicine are appropriately licensed and receive both initial and periodic training to stay current in this new technology.

Regardless of whether specialty care is provided onsite, offsite, or both, it is paramount that arrangements for such services be made in advance of need. Each DOC's health services policy manual should define clearly the levels of care available at each facility in the system and specify where additional services are provided. Procedures for making specialty referrals and arranging for transportation when needed should be included.

When specialty services are provided outside the DOC, it is a good idea to use a consultant form that tells the specialist why the referral was made and that has space for the consultant to note his or her findings and recommendations. This form must be transferred and returned with the inmate, then forwarded to the referring physician. Such a form also can be used for specialty consults that occur onsite. Alternatively, the specialist should record his or her findings and recommendations in the regular progress notes section of the patient's chart.

Specialists that work for the DOC—whether as full-time or part-time employees or under personal contracts—need to be oriented to the correctional environment and to the institution's security regulations and health services' policies and procedures. Additionally, each onsite specialist should be required to provide evidence of continued licensure.

3. Inpatient Care

At any given time, a certain number of a DOC's inmates require inpatient services for medical conditions. Different DOCs use different estimates of the number of medical infirmary beds required in the system, but estimates generally range from 0.5 to 1 percent of the population (i.e., 5 to 10 medical infirmary beds per 1,000 inmates). Additionally, every DOC needs to establish arrangements for providing inpatient hospitalization for conditions that cannot be treated adequately in the system. Guidelines for both types of inpatient services are discussed below.

a. In-House Inpatient Services

Part of the difference in DOCs' estimates of the number of medical beds required in-house may be attributable to differences in patient needs, but differences in the definition and utilization of infirmary services undoubtedly also play a part. For example, in some DOCs, inmates with broken legs, females in their third trimester of pregnancy, or elderly inmates may be housed in the infirmary. In others, inmates with these same conditions are housed in general population, and in some DOCs, they reside in special medical housing.

The first step in determining how many in-house inpatient beds are needed in the DOC is to separate patients into categories of care based on the types of inpatient services required. There are essentially three levels of in-house medical beds: sheltered housing, extended care, and skilled nursing care. A fourth type, often called medical observation beds, is designed for short-term use only (e.g., less than 24 hours) and should be used only when health care staff are present in the area.

Sheltered housing is appropriate for inmates who may need a more protective environment but who do not require 24-hour-per-day nursing care. In

most DOCs that use it, sheltered housing is a regular housing area designated for a special purpose. It often is adjacent to the health services unit, but is not a special facility. The types of medical patients for whom sheltered housing may be appropriate include individuals who may have difficulty ambulating (e.g., some elderly, some amputees, paraplegics), those who may be convalescing from a nonserious condition (e.g., broken bones, colds), and those who may require more frequent ambulatory services (e.g., pregnant inmates, chronic disease patients). In other words, these are individuals who might be restricted in some of their activities, but who could be cared for at home or could care for themselves in the free world.

Patients who need *extended care* are those who would be in a nursing home or hospice on the outside. They include individuals who are terminally ill (e.g., AIDS and cancer patients), those suffering from problems associated with aging (e.g., Alzheimer's disease, incontinence), some mobility-impaired individuals, and those who may be in the latter stages of chronic diseases (e.g., certain heart disease patients, those with chronic obstructive pulmonary conditions). These patients generally need daily medications and/or therapy and assistance in performing such basic functions of daily living as washing, dressing, eating, or ambulating.

Some patients require *skilled nursing services* (e.g., those on IV therapy, burn patients, postsurgical patients) but not hospitalization. These individuals also need daily nursing care, but usually at a higher level (i.e., RN versus LPN) and for a shorter duration than the extended care patients.

Patients who need extended care or skilled nursing services must be treated in an infirmary setting, which NCCHC (1996:65; 1997:67) defines as "an area within the confinement facility accommodating two or more inmates for a period of 24 hours or more, expressly set up and operated for the purpose of caring for patients who are not in need of hospitalization or placement in a licensed nursing care facility." Written policies and procedures guide the operation of the infirmary and include the following elements at a minimum:[25]

- A definition of the scope of medical and nursing services to be provided in the infirmary.
- A physician who is on call 24 hours per day and who sees patients as required by the severity of their illnesses.
- Daily supervision of the infirmary by a registered nurse.
- Health personnel on duty 24 hours per day, 7 days per week, who make rounds a minimum of once per shift and more often as required by patients' needs and physicians' orders.
- Patients within sight or hearing of a health care staff member (e.g., call lights, buzzer system).
- Written nursing care procedures.
- Complete inpatient records, including admission and discharge notes.
- Admission to and discharge from the infirmary only on the order of a physician or other authorized health professional.

The last point bears special mention. Correctional administrators, especially in overcrowded institutions, sometimes are tempted to use the infirmary for nonmedical housing. This is not acceptable. It violates the principle of medical autonomy and can be extremely disruptive to the smooth operation of the infirmary. More important, it can result in the denial of infirmary services to patients in need because of a lack of available beds. Unlike sheltered housing beds (which tend to be part of the regular prison or jail housing and more or less permanent placements for inmates), medical inpatient beds are for temporary use and should not be included in the facility's rated bed capacity. In larger DOCs, if there is a separate extended care facility where patients are placed permanently, it would be an exception to the rule. In general, infirmary beds should be used only to house inmates until their

medical conditions improve sufficiently to warrant discharge or deteriorate to the point that hospitalization becomes necessary. These are clinical decisions that cannot be ignored or overruled.

For planning purposes, it is important for health care staff at each correctional facility with medical inpatient beds to keep utilization data (e.g., daily number of patients, their conditions, lengths of stay). Such information is crucial in trying to determine whether the DOC has a sufficient number of in-house beds to meet the demand. If utilization data consistently show that existing medical beds are not filled, a quality improvement study should be conducted. While it is possible that the system has overbuilt its medical beds by overestimating patient need, it also is possible that infirmary beds are underutilized compared with patient need. Some practitioners are reluctant to place their patients in the infirmary because that entails additional work and more extensive charting. A quality improvement audit that focuses on inmates with acute and chronic conditions should help to determine whether inpatient beds are overbuilt or underutilized.

Utilization review studies of infirmary beds are useful for other reasons as well. Paris (1998a) reminds us that, especially in systems that emphasize cost control, inmates who should be treated in an acute care hospital may be maintained inappropriately in an infirmary setting within the institution. This is very shortsighted. Overutilization of infirmary beds for patients who require hospitalization can be even more risky than underutilization because of the seriousness of the patients' needs and the inability of the infirmary staff to care for such patients appropriately. The lack of specialized emergency and other equipment as well as specially trained hospital staff in prison or jail infirmaries places such patients at risk for a poor outcome. It also can be more costly in the long run when inmates' families sue.

b. Hospitalization

The advantages of a DOC operating its own hospital are that it can be built and staffed to ensure maximum security and that it can be operated according to the DOC's own admission and discharge criteria, unencumbered by diagnostic-related groups and length-of-stay restrictions that regulate admission and discharge in community hospitals. Any health administrator who has been notified late on a Friday afternoon of the imminent discharge of an inmate patient can appreciate the latter advantage and correctional administrators can appreciate the former. The disadvantage of a DOC operating its own hospital is primarily one of cost. It is inordinately expensive to staff, equip, and maintain a hospital that meets community standards. Additionally, for prisons, it is difficult to attract qualified health professionals to work in remote locations.[26]

Only a handful of correctional systems are large enough to justify operating their own hospitals, and they still need community facilities sometimes to avoid delays in care or to provide sophisticated services. Providing custody staff around the clock to guard inpatients in a community hospital involves an added expense and a higher security risk. Some DOCs—particularly large jail systems—have successfully worked with local hospitals to designate a secure ward for their inmate patients. This helps to reduce both the security risk and the cost, since inmate patients are in a single area and one officer can guard more than one patient at a time.[27]

Regardless of where the care is provided, every DOC needs to make arrangements for hospital services in advance of need. Any hospital used for inmates' inpatient care must meet the criteria for licensure and other regulations governing hospitals in the state and should be accredited by a state agency or JCAHO.

Also, the DOC should have a written agreement with each hospital utilized. Its health services policy manual should specify which hospitals are to be used for each facility in the correctional system as well as the procedures for arranging transportation and hospital admission. It is imperative that a hospital discharge summary accompany the patient upon his or her return to the prison or jail. This form should state not only what care was provided, but

should include instructions for followup care as well. Many DOCs have found that designating a discharge coordinator to work with hospital personnel helps to ensure that the patient is returned to an appropriate medical environment within the correctional system.

4. Emergency Care

Every correctional facility, no matter how small, must have a plan for responding to medical emergencies. By definition, emergencies are unforeseen occurrences that require immediate action. While staff cannot know when a medical emergency will occur, they must know how to respond appropriately when the occasion arises.

First and foremost, each facility must have a written plan for medical emergencies that—

- Designates one or more hospital emergency departments or trauma centers to which patients will be transferred.
- Provides the name and number of a physician who is on call 24 hours per day.
- Specifies the arrangements, including security procedures, for emergency evacuation of the inmate from the prison or jail.
- Identifies the mode(s) of transportation that will be used.

Additionally, it is imperative that certain in-house capabilities exist to respond to medical emergencies. Because they are likely to be the first responders, all correctional staff who work with inmates must be currently trained in cardiopulmonary resuscitation (CPR). All but the smallest prisons and jails should have medical staff on duty 24 hours per day, 365 days per year. Health care staff also should be CPR trained, and where appropriate, designated physicians and other practitioners should have training in advanced life support measures. Furthermore, it is excellent policy for the DOC to require quarterly drills of simulated medical emergencies at each institution. These drills should be critiqued and each shift should participate in them at least once a year. Moreover, each institution should have a mock disaster drill annually that is designed with the cooperation of community resources.[28]

Assuming the availability of appropriately trained health care staff, the correctional facility's emergency room should contain the following basic equipment at a minimum:

- A crash cart that contains the necessary emergency supplies and equipment to treat and stabilize patients prior to transfer (which should be kept fully stocked and should be inventoried after each use).
- A portable emergency medication box (which is kept stocked, locked, and inventoried after each use).
- Emergency stretchers.
- Portable oxygen containers.
- IV stands and supplies.
- A defibrillator/monitor.[29]

The availability of outside emergency medical services (EMS) personnel to respond in a timely fashion is rarely a problem for jails because they usually are located in urban areas. One of the biggest problems facing prison staff in responding to medical emergencies, though, is often the lack of readily available transportation. Few prisons are located in an area where community EMS units are able to provide emergency medical technicians (EMTs) and/or ambulances within a reasonable response time (e.g., 15 minutes). Consequently many prisons will need to employ their own EMTs and operate their own ambulances. Where this decision is made, the statewide health services director must ensure that community standards are met regarding EMT training and equipping and maintaining the DOC's ambulances.

5. Discharge Planning

One area in which few prison or jail systems do an adequate job is in assisting inmates to plan for their health care needs upon release. The 1998 NCCHC/NIJ survey mentioned earlier found that of the 41 prison systems responding, only 16 (39%) said they had policies and procedures for discharge planning for inmates with chronic diseases, although 29 (70%) prison systems said inmates with chronic medical conditions were given a supply of medication when they were released to the community.[30]

Adequate discharge planning is even more challenging for jail health care staff because they seldom know when many of their patients are being released. A substantial number of jail inmates leave the facility for court and are bonded out, placed on probation, acquitted of the charges, or given a suspended sentence and do not return to the jail. It probably is not practical to try to do discharge planning for these individuals, but sentenced misdemeanants who are being released to the community and convicted felons who are being sent to the state prison system are a different matter.

Regardless of the correctional setting, discharge planning should include, at a minimum, notification to the local or state health department of inmates with communicable diseases so their treatment is uninterrupted, counseling inmates with chronic and communicable diseases regarding the importance of continuing their care, and providing inmates with a sufficient supply of medications to tide them over until they can make arrangements to see an appropriate provider in the community.

A few prison and jail systems have developed excellent programs to assist inmates in transitioning back to the community. For example, the Hampden County Correctional Center in Ludlow, Massachusetts, contracts with four community health centers to provide health services to inmates while they are in jail. These same health centers follow the inmates in the community (Conklin et al., 1998). The Rhode Island Department of Corrections—in conjunction with the Rhode Island Department of Health, Miriam Hospital, and Brown University—has developed two programs to link incarcerated HIV-infected women with community resources upon their release. The Prison Release Program makes medical appointments for these women, finds financial assistance and substance abuse treatment when needed, and assists with housing referrals. Project Bridge assigns a medical care provider and a case management team who assist the released offender in obtaining medical care and in maintaining social stability (Mitty et al., 1998). The Oregon Department of Corrections has initiated a Transition Project to assist inmates in reintegrating themselves into society.[31] Although the success of this project has not yet been evaluated, it holds promise for providing continuity of services for ex-offenders and perhaps reducing recidivism as well.

C. THE MENTAL HEALTH PROGRAM

Published studies estimating the prevalence of mental illness in state prisons have reported anywhere from 1 to 78 percent of inmates afflicted, although much of the variability is due to differences in defining mental illness.[32] More controlled studies tend to report a prevalence of serious psychiatric illness in prisons at 5 to 8 percent of the inmate population and an additional 15 to 20 percent of inmates who need psychiatric services at some point during their incarceration.[33] These latter rates generally do not include personality disorders and substance abusers for whom some counseling services should be available.

Prevalence studies of severe mental illness in jails tend to show somewhat higher rates than those for prisons. Teplin (1990) found a 10-percent prevalence of severe mental illness among male admissions to the Cook County Jail, and Guy and colleagues (1985) identified 16 percent of the Philadelphia jail pretrial admissions with severe mental illness.

A more recent study that relied on inmate self-reporting, however, found comparable rates of severe mental illness among state prison inmates

and local jail inmates (Ditton, 1999). Prevalence rates were at 16 percent for both of these groups. In contrast, self-reported mental illness was less than half that rate for federal prisoners (7%).

Additionally, a smaller percentage of inmates are classified as mentally retarded and require certain support services from the mental health program. A survey of state and federal correctional systems by McCarthy (1985) showed that about 2.5 percent of the total inmate population was classified as mentally retarded, but other studies suggest that 10 percent may be a more accurate figure.[34] Clearly, there is a need for a strong mental health component in DOCs' health services divisions.

Much has been written about the deinstitutionalization of the mentally ill and its resultant impact on corrections.[35] Additionally, numerous articles and books address the management of specific mentally disordered offenders (e.g., suicidal inmates, sex offenders, self-mutilators), some of which are reviewed in chapter VIII of this book. This section seeks only to describe certain of the system components that should be in place to operate an effective mental health program.

Chapter V states that the preference is for a unified health system—that is, one in which medical, dental, and mental health services are organized under a single health authority at both the unit and the central office levels. In DOCs where this is not the case, strong measures must be taken to ensure effective coordination between the medical and mental health programs to enhance continuity of care.

1. Intake

Mental health questions must be included as part of both the receiving screening and the followup health history described above under the medical program. These procedures help to identify patients with gross mental abnormalities who are in need of immediate care and treatment. Additionally, each DOC needs a separate mental health screening and evaluation process for all new admissions that is designed to identify inmates' level of functioning and to uncover less obvious mental conditions. NCCHC standards for jails (1996:50-51) and for prisons (1997:46-47) state that the postadmission mental health assessment should include, at a minimum—

- A structured interview by mental health staff in which inquiries into the following items are made: history of psychiatric hospitalization and outpatient treatment; current psychotropic medication; suicidal ideation and history of suicidal behavior; drug usage; alcohol usage; history of sex offenses; history of expressively violent behavior; history of victimization; special education placement; history of cerebral trauma or seizures; and emotional response to incarceration.
- Testing of intelligence to screen for mental retardation. It is recommended that inmates identified as possibly retarded on group tests of intelligence or brief intelligence screening instruments be further evaluated by a comprehensive, individually administered instrument such as the Wechsler Adult Intelligence Scale-Revised (WAIS-R).

Such mental health assessments need not be conducted by psychiatrists or clinical psychologists, but these professionals should be intimately involved in developing the screening instruments, training mental health workers in the application of those instruments, and drafting guidelines for referral of patients in need of subsequent services.[36] Additionally, psychiatrists and clinical psychologists are needed to provide indepth workups and evaluations and to develop appropriate treatment plans. Other mental health professionals, including master's-level psychologists, counselors, social workers, and psychometrists, should be employed to carry out other aspects of the mental health program.

The results of the postadmission mental health assessment (which should be performed within 2 weeks of admission in both prisons and jails) help to determine appropriate housing and program assignments for mentally disordered offenders. Each individual identified as disordered needs a treatment

plan that specifies the frequency and extent of followup care as well as the level of services (e.g., inpatient, outpatient, sheltered housing) to be provided.[37]

2. Crisis Intervention

Crisis intervention is defined as short-term care for acute mental distress. It is, in a sense, emergency care in that it addresses unforeseen occurrences that require an immediate response. It differs from traditional emergency care in that crisis intervention services are designed to meet a wider range of needs.[38] Some inmates may have a true psychiatric emergency (e.g., acute psychotic break, major depression, suicide attempt), but others may experience a less serious, although traumatic, emotional state such as an adjustment reaction to incarceration, the aftermath of homosexual rape, or grief following the loss of a loved one. These latter individuals need short-term supportive counseling, while the former need to be referred to appropriate staff and facilities for care.

Each prison or jail in the DOC system must have arrangements for handling both types of crises. Procedures for addressing psychiatric emergencies should include the components noted in the discussion in the prior section on medical emergencies. For less serious conditions, care must be taken in assessing whether the crisis was precipitated by a special situation or was the result of an underlying mental illness that will require future services. If the former, it is suggested that such individuals not be entered on the regular mental health caseload. More than one inmate has had the experience of seeking mental health services in a time of special need, only to find that the label "mentally ill" followed him or her throughout confinement. Once labeled, these inmates often experience problems in qualifying for furloughs, special programs, and parole.

Crisis intervention care need not rely solely on the services of mental health clinicians. Some DOCs have had good success with utilizing crisis intervention teams composed of both mental health professionals and other trained staff members. Anthony T. Schaab, Ph.D., who serves as the chief of mental health services for the Illinois DOC, provided the following description of crisis intervention teams in Illinois prisons:

> Each institution is required to maintain a crisis intervention team with a member on site 24 hours per day. The team is led by the institution's psychologist or clinical social worker and typically includes nurses, correctional counselors, security command staff, and correctional officers. All members receive 16 hours of initial training through the DOC's training academy. The training is provided by mental health professionals and includes recognition of symptoms of mental illness and basic crisis intervention skills. Each institution's crisis team leader provides 2 hours of training quarterly to all members. The onsite crisis team member is called on in any situation in which self-harm has occurred or has been threatened or mental illness is suspected.
>
> Since the initiation of the team concept in Illinois, two trends have emerged that we believe are largely attributable to the growing sophistication of the teams. In the first 6 years of their existence, while the inmate population increased 33 percent, the number of suicides decreased from six to eight per year to three per year. Simultaneously, the number of inmates placed on a formal suicide watch status decreased by some 25 percent. At this time, the age-adjusted suicide rate for the DOC is at or below the rate in the free community. Anecdotal information from the institutions indicates that a large percentage of crisis calls are resolved by team members without the need to resort to formal suicide watches. (Personal communication, January 15, 1991)

3. Outpatient Treatment

Unless the management of the mentally ill is confined to special institutions, every correctional facility should be capable of providing not only crisis intervention services but also basic ongoing mental health services commensurate with outpatient care in the community. Such services include individual counseling, group counseling, psychiatric and psychological consultations, medication monitoring, and periodic reevaluation of the effectiveness of the treatment modality employed and adjustment of the treatment regimen as needed.[39]

For the most part, supportive counseling is likely to be the service most used because individuals with more serious psychiatric disorders often do not function well when placed in the general population. On the other hand, a substantial proportion of the inmate population can benefit from the ready availability of mental health counselors. As noted in the section on sick call, a great many inmates simply need someone with whom to talk. They do not meet the classic definition of psychiatric illness or psychological impairment, but they are unhappy with their lives and depressed by their surroundings. Supportive counseling programs can do much to alleviate inmates' anxiety, assist in their adjustment to incarceration, and help them plan for the future. Such programs also reduce utilization of the medical program and contribute to the well-being of the institution.

In correctional facilities, a strong argument can be made for lowering the threshold for mental health care at every level.[40] If inmates know they can talk to someone when they need to, they are less likely to suffer from psychosomatic symptoms or to resort to more dramatic ways of gaining attention (e.g., suicide gestures, self-mutilation). When compared with the cost of other types of medical and mental health care, supportive counseling programs are not expensive. All that is required usually is appropriately trained staff (e.g., bachelor's- and master's-level psychologists supervised by a clinical psychologist) and a quiet, private area in which to talk.

4. Specialty Care

Most large jail and prison systems provide psychiatric care onsite. In recent years, though, telemedicine has emerged as an alternative way to provide psychiatric care. In one study, Zarate et al. (1997) measured the effectiveness of videoconferencing in assessing patients diagnosed with schizophrenia. They found that videoconferencing at high bandwidth was equally effective in assessing schizophrenics as in-person interviews. Low-bandwidth videoconferencing was less reliable, though, owing to its lesser power in picking up nonverbal cues. Patients in both the low-bandwidth and high-bandwidth groups were very accepting of video interviews in lieu of inperson contact. Australia also reports good results with the use of telemedicine to provide psychiatric services to a number of its remote locations[41] as does the federal Bureau of Prisons.[42]

For psychiatric services, the same caveats regarding the use of telemedicine apply as for other medical specialties; namely, prison or jail systems contemplating its use would do well to conduct a cost-benefit study to determine its potential applicability in their areas. For correctional systems where it is likely to be cost effective, the NCCHC position statement on telemedicine can be helpful in developing appropriate policies and procedures to govern its use.[43] Regardless of whether psychiatric services are provided in person at the facilities, through videoconferencing, or by providers in the community, the primary concern is that appropriate arrangements for psychiatric care have been made in advance of need and that appropriate policies and procedures exist to ensure that patients' rights to adequate psychiatric services have been safeguarded.

5. Inpatient Services[44]

Unlike the medical inpatient program, inpatient psychiatric services tend to be provided by the DOC itself rather than by state or community hospitals. Often this is by default rather than by design due to a lack of available acute psychiatric beds in the community or to the refusal of community facilities to

treat offenders. This can be to the DOC's advantage, though. Part of the difficulty in utilizing "free world" psychiatric beds is that most hospitals use "achieved maximum hospital benefit" as their primary criterion for patient discharge. If the same discharge criterion is used in prisons or jails, it results in people who are still seriously mentally ill being housed in the cellblocks. Not only does this present management problems for correctional administrators, but it also increases the cost of care by precipitating a cycle of hospitalization, discharge, destabilization, and rehospitalization of psychiatric patients.

In prisons and jails, a more rational criterion for discharge from acute care is "current level of functioning." Patients can be maintained in DOC-operated psychiatric facilities as long as it is the best placement for them, without regard to community restrictions defining admission, length-of-stay, and discharge criteria.

The primary disadvantage of DOC-operated psychiatric facilities is that they are expensive to build, equip, staff, and maintain according to community guidelines. They must meet all of the elements described in the section on infirmary care and some of the requirements for hospitals as well. Many experts estimate the number of acute psychiatric beds that will be needed for a DOC at about 1 percent of the DOC's average daily population. This figure has proven fairly accurate in prison systems in Illinois, Oklahoma, and Texas. For jails, projecting the number of acute psychiatric beds that will be needed should be based not just on average daily population figures but on total annual intake and average length of stay as well.

In addition to acute psychiatric beds, a certain portion of the prison or jail population needs what can be termed "intermediate care." For the most part, these individuals represent the chronically mentally ill. They are stabilized and not in need of acute hospitalization. However, they are not ready to be discharged to the general population. Individuals in the community who require intermediate care are found in group homes, day hospitals, and Fairweather lodges.

In correctional facilities, intermediate care beds can be located in existing units separated from the general population (Metzner, 1998; Sanders et al., 1998). The need is not for a special facility, but for special programs. A higher mental health staff-to-inmate ratio is required in prisons and jails offering intermediate care, over and above the ratio needed to provide crisis intervention and basic outpatient services. Intermediate care patients require a protective environment, the availability of supportive counseling, and monitoring to ensure that they are taking their medications, eating appropriately, etc.—in essence, case management.[45] The thrust of intermediate care should be to acclimate individuals so they can function in a regular cellblock, although few of the chronically mentally ill do well in general population. For many of them, the absence of a sheltered environment precipitates another acute episode and initiates the "revolving door" treatment cycle.[46]

6. Special Issues: Therapeutic Seclusion, Therapeutic Restraint, and Forced Psychotropic Medication

In every prison and jail, there are times when mental health emergencies, as a result of disorganized or dangerous behavior on the part of the mentally ill or mentally retarded individual, justify the use of therapeutic seclusion, therapeutic restraint, or forced psychotropic medication. It is imperative that every DOC have written policies and procedures in place that delineate the circumstances under which therapeutic seclusion, therapeutic restraint, or forced psychotropic medication may be used to control an inmate's behavior. State laws and regulations have been developed to govern these situations and they must be strictly adhered to when using these extreme treatment modalities.

In every DOC, the director of mental health services should be aware of all state laws and regulations governing therapeutic seclusion, therapeutic restraint, and forced psychotropic medications. Additionally, he

or she should research the clinical issues surrounding their use and be cognizant of the recommendations of national professional associations, including APHA, NCCHC, the American Psychiatric Association, and the American Psychological Association. The American Psychiatric Association has published various task force reports that address these issues,[47] and NCCHC recently published a separate volume of standards and guidelines for correctional mental health care (National Commission on Correctional Health Care, 1999a).

Based on the results of researching both the legal and clinical issues, written policies and procedures are needed for all three treatment modalities that include the following elements at a minimum:

- Prohibiting the use of these modalities for punishment.
- Requiring their authorization only by a physician or another clinician where specified by law.
- Defining the clinical criteria for use (e.g., patient is dangerous to self or others).
- Limiting the time and frequency of use of these extreme measures.
- Specifying staff responsibilities for monitoring patients, reevaluating their progress, and fully documenting such encounters in the patients' medical records.
- Training relevant staff to ensure that they are familiar with all aspects of such policies and procedures.

Additionally, the DOC's systemwide mental health director should require that staff at each facility maintain statistics on the frequency of use of each of these procedures. This will facilitate conducting quality assurance audits on the systemwide utilization of therapeutic seclusion, therapeutic restraints, and forced psychotropic medications. Such studies can help to determine whether the DOC's procedures are adequate to protect patients' rights and whether staff are using them appropriately.

7. Discharge Planning

With the exception of acutely mentally ill individuals who are to be confined involuntarily at the end of their incarceration, most prisons and jails do not do an adequate job of discharge planning. In the 1998 NCCHC/NIJ survey, Hornung and colleagues (2000) found that only 7 (17%) of the 41 responding prison systems said they had policies and procedures for discharge planning for inmates with mental disorders, although 23 (56%) systems said they provided inmates with mental disorders with a supply of medication upon their release to the community. Steadman and Veysey (1997) found a similar absence of discharge planning services for mentally ill jail inmates.

Discharge planning for the mentally ill in prisons is complicated by the fact that correctional mental health staff often do not have good contacts with local mental health providers. In jails, the primary problem in providing adequate linkages with community mental health services is that inmates are released from the court, and jail mental health staff often do not know when their patients are discharged. Regardless of the difficulties encountered by correctional mental health staff, it is crucial that every attempt be made to provide adequate discharge planning for the mentally ill. If these patients, in particular, are not provided with a supply of medications and with sufficient social services in the community, they are likely to reoffend. As Veysey and Bichler-Robertson (2000) note, "lack of medication and basic necessities of life (i.e., housing, clothing, food, and health care) virtually guarantee the return of the individual to jail." Recent research studies suggest that when mentally ill offenders are provided with case management services and assistance in obtaining resources such as housing and financial aid, they are less likely to reoffend.[48]

A few correctional systems have developed programs for transitioning mentally disordered offenders into the community that could serve as models elsewhere. Jails in Fairfax County, Virginia, Hampshire County, Massachusetts, Pinellas County,

Florida, and Shelby County, Tennessee, have had good success with court liaison programs.[49] The Hampden County Correctional Center in Ludlow, Massachusetts, uses a public health model to link correctional care with community resources. The four community health centers that follow inmates in jail and in the community contracted with the mental health centers in their catchment areas to provide aftercare for mentally ill offenders upon release.[50] In Maryland, the state Department of Health and Mental Hygiene has developed a program to coordinate community services for mentally ill offenders.[51] Finally, the Transition Project initiated by the Oregon Department of Corrections holds promise for reducing recidivism not only of mentally disordered offenders but also of others who require housing, employment, and treatment upon release.[52]

D. The Dental Program

Early studies of prisoners' health care needs consistently found a high proportion of inmates requiring dental services—sometimes 90 percent or greater.[53] More recent studies have confirmed that inmates arrive at jails and prisons with extensive dental care requirements. In their study of dental treatment needs of recently incarcerated inmates in Texas, Barnes et al. (1988) reported that only about 1.5 percent of the 637 inmates examined needed no care. In their study of 183 women inmates at Rikers Island, Badner and Margolin (1994) found that in spite of their relatively young age (average age 27.6 years), these women had a mean decayed, missing, and filled teeth (DMFT) index of 9.9.

Ormes and his colleagues (1997) examined a representative sample of 251 male inmates in the Michigan Department of Corrections. They reported a mean DMFT index of 11.5 for offenders ages 18 to 34, 19.3 for those ages 35 to 44, and 24.7 for inmates ages 45 and older. These offenders had a greater number of decayed teeth than reference groups in the community. Similar results were found by Clare (1998) in his examination of a sample of new admissions to the North Carolina Department of Correction. He found higher rates of decayed teeth and periodontal disease among male and female offenders of all age groups and ethnicity when compared with the results of the National Health and Nutrition Examination Survey of individuals in the community. Additionally, more than one-fourth of this sample had one or more treatment needs classified as urgent.

Although the literature is not extensive, a few publications address the development of a correctional dental program[54] or specific issues such as legal considerations,[55] screening options,[56] staffing alternatives,[57] and treatment need prioritization.[58] Additionally, the American Dental Association offers numerous publications, forms, and audiovisual materials that can assist correctional dentists in their care and treatment programs, continuing education offerings for staff, infection control measures, and dental education efforts for inmates.[59] In this section, some of the basic care components of a correctional dental program are presented.

1. Intake

The minimum goals of the dental program should include relief of pain, elimination of infection and disease, and restoration of function.[60] To achieve these goals in a timely fashion, patients' dental needs must be identified upon admission to the DOC. Dental questions should be included in the receiving screening and health history forms discussed earlier under the medical program. Additionally, every inmate should receive a dental screening and an examination by a licensed dentist. NCCHC prison standards (1997:47-48) state that dental screening must occur within the first 7 days of an inmate's incarceration; an examination must occur within the first month, consistent with APHA recommendations (Dubler, 1986:49). In many prison systems, though, the dental screening and examination are both conducted at the reception center as part of the intake process for new admissions. For jails,

because of their higher turnover and shorter length of stay, NCCHC says the dental screening should occur within the first 14 days of an inmate's admission (National Commission on Correctional Health Care, 1996:44).

Dental screening can be performed by dentists or by other health personnel as directed by dentists. Its purpose is to identify gross abnormalities that require immediate care that cannot wait for regularly scheduled sick call. This is usually a good time to provide oral hygiene instruction and dental health education, since many of inmates' dental needs are attributable to a lack of self-care.

The dental examination is more extensive than the screening and requires the professional expertise of licensed dentists. It includes reviewing the patient's medical and dental histories and current complaints, examining the oral cavity to chart teeth and review the status of tissues and bone structure, and obtaining full-mouth x-rays. Based on the results of the dental exam, treatment plans should be developed for each patient in accordance with a written priority system.[61]

2. Basic Dental Care

All except the very smallest prisons and jails need the capability of providing basic dental services onsite, including extractions, surface restorations, prostheses, prophylaxis, and other preventive measures. The practice of modern dentistry necessitates not only trained staff (dentists, hygienists, dental assistants) but also dedicated dental space and specialized equipment,[62] instruments, and supplies. Due to the extent of inmates' dental needs, most correctional systems will find it is more cost effective to duplicate basic services in-house at each jail or prison rather than to transport inmates to community facilities or to other prisons or jails in their system.

The intake dental examinations identify patients' needs on admission to the DOC, but cannot foretell deterioration of dental conditions over time or address dental emergencies. Inclusion of dental care in whatever system the DOC has adopted for inmates to request nonemergency services (e.g., written sick call system, walk-in services) is imperative. If a written sick call system is used, health care staff triaging those requests must refer all dental complaints to the dental staff for response. The latter are responsible for reviewing the requests and setting up appointments for inmates to be seen according to the system established for prioritizing dental needs.

T.H. Heid, DDS, who served as the director of dental services for the Texas prison system, suggests that basic dental care can be categorized as follows:

- ***Emergency/urgent care.*** Individuals requiring treatment for the relief of acute oral and maxillofacial conditions characterized by trauma, infection, pain, swelling, or bleeding that are likely to remain acute or worsen without intervention.
- ***Interceptive care.*** Individuals requiring early treatment for the control of extensive, subacute dental or oral pathosis and/or requiring basic education in oral self-care.
- ***Corrective care.*** Individuals requiring treatment for chronic dental and oral pathosis and for the restoration of essential function. (This level of care should include restoration of carious teeth, extractions, long-term management of periodontal disease, and endodontic and prosthodontic procedures needed to retain or restore essential masticatory function.)
- ***Elective care.*** Individuals who have none of the treatment needs specified above.

The above, of course, is only a basis for a system of prioritizing dental needs and for identifying those specific treatment procedures employed by the institution to meet program goals. It should not be overlooked that providing basic education in oral self-care should have a high priority. In fact, documented inmate compliance with self-care instructions should be a prerequisite, not a barrier, to receiving any corrective dental care. (Personal communication, January 23, 1991)

Dr. Heid's last point deserves additional discussion. Most dentists would agree that regular flossing is the best way to avoid serious periodontal disease, but many DOCs prohibit the use of dental floss for security reasons. Dental floss is quite strong and has been used by inmates to saw through bars or as a weapon. There are ways to accommodate both the dental need and the security concern, however. One solution is to issue the floss daily and supervise inmates to ensure that it is used and disposed of properly. A less labor-intensive solution is used in the Texas system, where inmates are issued plastic picks that have about an inch of floss attached to a small bow. The amount of floss is too small to cause any security concerns, yet is sufficient to allow inmates to practice good oral hygiene.

3. Specialty Care

In addition to the dental care provided onsite at each prison or jail, arrangements must be made to obtain specialty services such as periodontics, endodontics, and oral surgery when needed. Some DOCs may be large enough to support these specialties in some of their institutions, but most will find it more advantageous to utilize community resources. Because some dental care can be considered elective, each DOC should have carefully thought-out protocols that specify the types of dental specialty services that will be provided. As with all specialty care, contractual terms and procedural arrangements for appointments, transportation, security, and so forth should be made in advance of need.

4. Emergency and Urgent Care

True dental emergencies are rare. With the exception of facial fractures, uncontrolled bleeding, and infections not responsive to antibiotic therapy, there are few instances when immediate referral for dental care is indicated. Other conditions such as toothaches, abscesses, and postextraction complications may be painful, but they usually do not constitute emergencies. They are better classified as urgent conditions. Even a fractured tooth more often requires urgent rather than emergency care, although one involving the dental pulp or an avulsed tooth may require prompt attention by a dentist to better ensure that it can be retained.

A true dental emergency (e.g., fractured jaw)—especially if it occurs "after hours"—requires that the patient be transported to a hospital emergency department for care. Dental emergencies should be included in the protocols governing emergency services as discussed under the medical program. On the other hand, urgent dental conditions that occur after regular dental hours can be handled by a nurse or a physician extender, with a backup dentist or physician on call to prescribe medication as needed. The DOC's dental director should develop protocols to guide nondental health staff in managing urgent conditions until the patient can be seen at the next scheduled dental clinic.[63]

E. EYE CARE[64]

Another important component of a correctional delivery system is eye care—especially in longer term facilities. Important components of eye care include intake procedures, basic outpatient care, referral to specialists, and emergency care. Each of these topics is addressed briefly below.

1. Intake Procedures

Dr. Edward Berger recommends that routine screening for eye problems take place "as soon as is practical" after the inmate's admission to the system. In prisons, this generally means within the first week. Because of their higher turnover rates and shorter lengths of stay, jails should conduct such screening within the first 2 weeks of an inmate's admission. The screening should consist of a brief history regarding any prior eye disease, treatment, or trauma; a review of any current complaints; a test for visual acuity; and measurement of intraocular pressure.

Visual acuity is measured using a Snellen's chart or like instrument from a prescribed distance (e.g., 20 feet). The person conducting the visual acuity test need not be a licensed health professional, but must be trained to perform the test accurately. Measurement of intraocular pressure, however, must be done by a licensed health professional who has been trained in this technique. Although he or she need not be an optometrist or ophthalmologist, this test is most often performed by physicians.

2. Basic Eye Care

Patients generally are referred to an optometrist for one of two reasons: distance blur or near strain. The former is picked up on the visual acuity test. Dr. Berger recommends that individuals with a visual acuity of 20/30 to 20/50 or less be referred to an optometrist to be fitted for glasses. Presbyopia is a progressive condition that causes near strain, which generally affects people over the age of 40. It cannot be measured on an eye chart, but generally is picked up from patients' symptoms and complaints. Glasses can help to reduce the effects of near strain.

Dr. Berger recommends that routine eye exams be provided every 2 years, with accommodation for advanced age and disease. Patients with HIV, diabetes, dry eye, foreign bodies, or other eye diseases or who are over 50 years of age should be checked at least annually. Appendix F includes sample eye record forms.

Each prison or jail system should develop a policy statement that specifies the frequency with which glasses will be provided or replaced. Dr. Berger indicated that in the New York state prison system, glasses are provided once every 2 years without charge to all inmates whose visual acuity is 20/50 or less. If glasses need to be repaired or replaced sooner, the inmate is charged for the cost.[65] Contact lenses generally are not provided to inmates unless medically indicated. A few individuals cannot wear glasses due to an extreme degree of far- or near-sightedness or to cone-shaped corneas (keratoconus). In such circumstances, contact lenses are indicated.

3. Specialty Care and Emergency Care

In correctional facilities, the majority of eye care is provided by optometrists. Dr. Berger indicated that in all 50 states, optometrists can treat patients using therapeutic agents, providing they have received additional training and are therapeutically certified. The states differ, however, regarding what diseases or conditions optometrists can treat and which medicines they can prescribe. Still, each correctional system needs to make prior arrangements for referrals to ophthalmologists when needed. Dr. Berger suggests that a priority system be developed that specifies the urgency of the referral. The New York state system classifies referrals as follows:

- Emergency: within 24 hours.
- Urgent: within 5 days.
- Soon: within 2 weeks.
- Routine: within 30 days.
- Assigned: the provider writes in the timeframe.

See appendix F for a sample copy of the New York state referral form.

Correctional systems also should have a mechanism in place for inmates who may need emergency services for eye care. Generally, procedures for emergencies involving the eyes should be covered under the protocols governing emergency services for the medical program, as noted above.

F. OTHER SERVICES

A number of ancillary health services (e.g., pharmacy, laboratory, radiology, dietetics) and special therapies (e.g., respiratory therapy, physical therapy, occupational therapy) support one or more of the four basic health programs noted above. Additionally, custody staff have an important role to play in ensuring that each facility's health unit operates smoothly. General guidelines governing ancillary services and custody staff's role in the health program are discussed below.

1. Ancillary Services

Only those correctional institutions with a special health mission (e.g., inpatient units) are likely to have a full range of ancillary services onsite. In most DOCs, it is more cost effective to regionalize or centralize ancillary services and special therapies, and in the smallest DOCs, virtually everything beyond basic care is purchased from community providers. Due to differences in the utilization and organization of ancillary services and therapies among various DOCs, it is difficult to state precisely what elements should be in place at each facility. However, some general guidelines should be followed:

- Each DOC's health services policy manual should specify for each prison or jail what ancillary services and special therapies are available onsite, and each onsite service should have its own procedural manual.
- All onsite staff (whether full-time, part-time, or contractual) providing special services must be appropriately licensed, certified, or registered.
- State and federal regulations governing special services must be followed (e.g., safety inspections for radiological equipment, Drug Enforcement Administration guidelines for pharmacy operations, disposing of infectious waste for laboratories).
- For any service or therapy not provided onsite, the DOC's health policy manual must indicate for each prison or jail where such services and therapies are available, and must include procedural instructions for staff in arranging scheduling, transportation, etc.

More specific guidance in operating and managing ancillary services and special therapies is available from various health professional associations representing those services (e.g., American Dietetic Association, American Pharmaceutical Association) and from national health standard-setting bodies such as APHA, JCAHO, and NCCHC.

2. Custody Support

Every institution's health services unit requires support from custody staff in order to operate efficiently. The usual roles for custody staff are to provide security within the health unit itself, to escort patients to and from the health unit, and to transport patients to scheduled appointments with community health providers. In some prisons and jails, security regulations also require that health care staff be escorted anywhere in the facility except within the health unit itself. The need for such a policy should be scrutinized carefully, since it has extensive staffing implications for the custody program. Failure to allocate sufficient correctional officers (COs) to carry out such a policy can be very costly in terms of both wasting clinical time and increasing the DOC's potential liability. Lack of a sufficient number of COs to provide security is not a defense for failing to deliver medications on a timely basis or delaying the care or treatment of patients.

Aside from the basic roles of providing security, escorting patients in-house (and health care staff where required), and transporting patients to outside health facilities, correctional staff should not be involved in the routine operations of the health unit. They should not pick up medical request slips, take health histories and vital signs, schedule health appointments, file health records, serve as orderlies, or provide any patient care or treatment. Even though a number of these activities do not require a qualified health professional to perform them, the potential for role conflict is too great to assign such tasks to COs. Further, correctional staff assigned to the health unit to provide security must be instructed that any information they obtain about patients' health conditions must be kept confidential.

The general rule regarding custody staff's role in health programs has one potential exception. Inpatient mental health units in some DOCs include correctional staff on their treatment teams. For example, the Texas Department of Criminal Justice

uses COs as psychiatric aides in its inpatient mental health facilities and as rehabilitation aides in its special programs for the retarded. There is some logic to utilizing correctional staff as paraprofessionals in special mental health units. COs assigned to these units typically spend more time observing and interacting with the residents than do clinical staff. Their observations are invaluable in determining patients' progress. Moreover, as Coleman (1988:684) notes: "Several studies have found that paraprofessionals or lay individuals often perform as well, relative to clinical outcome measures, as professionals and that they sometimes perform more effectively."

The potential for role conflict for COs serving as paraprofessionals in mental health programs still exists but can be minimized. Where such use is contemplated, the following steps should be taken:

- COs to be assigned to mental health programs should be selected carefully to ensure that they have the interest and inclination to work with the mentally ill or retarded.
- They should be assigned to fixed posts to enhance their ability to become familiar with the patients and their routines.
- They should receive additional training from the mental health staff.
- They should be supervised by clinical staff and not by custody staff, since they are part of the mental health team.

G. CONCLUSIONS

This chapter addressed the basic components of an adequate health care delivery system. Essential elements of the medical, mental health, dental, and eye care programs were reviewed, and some of the ancillary services that support the health programs were mentioned briefly. The decision regarding which health services will be provided onsite and which will be obtained in the community is a complicated one that requires balancing a number of factors, including utilization data, location of community resources, and cost, among others.[66] Regardless of where services are offered, two basic precepts must be followed: first, arrangements must be made in advance of need, and second, in-house services must follow the laws, standards, and regulations that govern these professions in the community.

NOTES

1. During the 1970s, the American Correctional Association (ACA) health care standards were more consonant with those of the health professions. At one point, in fact, they were the same, since ACA adopted the health care standards developed by the American Medical Association for use in its prison and jail standards editions. Since that time, though, ACA has revised its various sets of standards on its own.

2. Obviously, if the department of corrections operates a hospital or a freestanding mental health facility, one of the other sets should be used.

3. See Anno (1988).

4. See "Information on Health Services," National Commission on Correctional Health Care (1996:44; 1997:41).

5. Intake procedures for mental health care, dental care, and eye care are discussed in more detail later in this chapter in the respective sections for these services.

6. For more specific information on the areas to be included in the physical exam, see Dubler (1986:1-7) and National Commission on Correctional Health Care (1996:45-47; 1997:44-46).

7. See "Transfer Screening," National Commission on Correctional Health Care (1997:43-44).

8. See also Dubler (1986:14).

9. A 21-year-old man, sentenced to serve 15 days in jail, died 6 days after admission. According to the newspaper account, both his requests for medical attention and those of other inmates on his behalf were ignored. He was told repeatedly by the officers to "fill out a kite" (a written request slip). At least two nurses making medication rounds spoke briefly to the individual and told him the same thing. By the time anyone took his complaints seriously, he was in acute distress. His appendix had ruptured. He died a few hours after being transported to a hospital. For more information on this occurrence, see the Seattle Times, June 7, 1990, page 1.

10. See also Paris (1998b) for differences between triage and sick call.

11. See National Commission on Correctional Health Care (1996:47-48; 1997:49-50).

12. Personal correspondence, Madeleine LaMarre, MSN, FNP, State Clinical Supervisor, Georgia Department of Corrections, October 1999.

13. Quality improvement studies can be conducted periodically to check on no-shows by randomly selected general population inmates. This will help to ensure that patients who need care are not "falling through the cracks."

14. See, e.g., Paris (1994); Sheps et al. (1987); and Twaddle (1976).

15. See, e.g., Goldkuhle (1999) and Ingram-Fogel (1991).

16. See, e.g, chapter II, section A; chapter VIII; and chapter X, section C.

17. See also the editorial by Cohen and Wishart (1983) on social medicine.

18. Paris (1989) followed 16 such confined abusers in a Florida prison for 3 months to track their utilization rates. He concluded that there was no ultimate solution to decrease the utilization of this group.

19. See Hornung et al. (2000).

20. See Spencer (1999). See also appendix K in this book for Dr. Spencer's sample protocol on hypertension. See Puisis and Robertson (1998) for guidance on the clinical management of diabetes, asthma, hypertension, and epilepsy.

21. See Dubler (1986:13); and National Commission on Correctional Health Care (1996:63- 64; 1997: 65-66) regarding special needs treatment plans.

22. See chapter VIII, exhibits VIII-1 and VIII-2.

23. See McDonald et al. (1999).

24. Gailiun (1997) estimates that just the equipment for a room system can run $80,000 to $100,000.

25. For more specific direction and explanation of the components of infirmary care, see National Commission on Correctional Health Care (1996: 64-65; 1997:66-67). See also Paris (1998a).

26. See Brecher and Della Penna (1975:29-32) for a more detailed discussion of the factors to be weighed in utilizing department of corrections facilities versus community hospitals.

27. For more information on secure units in hospitals, see Heyman (1998).

28. For more information on emergency planning, see chapter X, section B.4.b.

29. Additional suggestions for equipping an emergency room are listed in appendix J.

30. For additional information on the results of the National Commission on Correctional Health Care/ National Institute of Justice survey, see Hornung et al. (2000).

31. For additional information on the Oregon Department of Corrections Transition Project, contact Scott Taylor, Assistant Director, or Tonya Ruscoe, Project Manager, at 503-945-0920.

32. See Swetz et al. (1989) and the references cited therein.

33. See, e.g., Jemelka et al. (1989) and the references cited therein; Lamb and Weinberger (1998); McCarthy (1985); Metzner (1997a); Steadman et al. (1987); Swetz et al. (1989); and Weinstein (1989).

34. See chapter VIII, section C.5. on the mentally retarded offender and the references cited therein.

35. See, e.g., Teplin (1983); Torrey et al. (1992); and several of the articles contained in volume 5, issue 1 of the Journal of Prison and Jail Health (1985).

36. This recommendation is consistent with that of the American Psychiatric Association. See American Psychiatric Association (1989:28). See also Stein and Alaimo (1998).

37. See also Metzner (1997b).

38. See Steadman and Veysey (1997).

39. See Anno (2001) and Weisman (1998).

40. I am indebted to Walter Y. Quijano, Ph.D., a clinical psychologist who practices in Conroe, Texas, for the many discussions we have had on this topic.

41. See Kavanagh and Yellowlees (1995).

42. See McDonald et al. (1999).

43. See National Commission on Correctional Health Care (1999b).

44. Again, Dr. Quijano was extremely helpful in clarifying the issues for this discussion.

45. Jemelka et al. (1989) argue for the case management approach in dealing with the mentally disordered offender, although they point out that in prisons, case management is less a matter of coordinating the patient's survival and more one of coordinating treatment services. See also U.S. Department of Health and Human Services (1992) and Steadman and Veysey (1997).

46. The utilization of psychiatric observation beds and the provision of sheltered housing for the retarded are discussed in chapter VIII.

47. See, e.g., American Psychiatric Association (1985; 1989).

48. See Trupin et al. (1999) and Ventura et al. (1998).

49. See Steadman and Veysey (1997).

50. See Conklin et al. (1998).

51. See Conly (1999).

52. See note 31 above for contact information.

53. See, e.g., Conte (1973); Office of Health and Medical Affairs (1975); and Anno (1977; 1978).

54. Although the appendixes are somewhat dated, the manual prepared by Easley and Lichtenstein (1979) still contains much useful information on establishing a correctional dental program. See also Myers (1999).

55. See, e.g., Rold (1988).

56. See, e.g., Mehlisch (1986-87a).

57. See, e.g., Block (1983) and Mehlisch (1986-87b).

58. See, e.g., Barnes et al. (1988).

59. For a copy of the current American Dental Association catalog, contact the American Dental Association, 211 East Chicago Avenue, Chicago, IL 60611; 312-440-2500.

60. See American Dental Association (1981).

61. Classification systems for prioritizing care based on need are available (see, e.g., Barnes et al., 1988; Myers, 1999). In addition, dental directors in several departments of corrections (e.g., Illinois, Michigan, and Texas) have developed sample protocols that may be of interest.

62. See appendix J for a sample dental equipment list.

63. R. Patrick Murphy, DDS, of the Texas Department of Criminal Justice has written an article that can assist medical personnel who provide afterhours coverage to determine what constitutes a dental emergency. See Murphy (1990).

64. Information for this section was based on a telephone interview with Edward Berger, OD, February 3, 2000. For additional information, contact Dr. Berger at Correctional Eye Care Network Services, Inc., 333 Hoosick Street, Troy, NY 12180; phone: 518-270-LENS (5367); fax: 518-272-2032; e-mail: *DrEBerg@aol.com*.

65. Note, however, that inmates in the New York state system are paid for working and that the cost of new eyeglasses is relatively low ($15 to $25 per pair, according to Dr. Berger).

66. See chapter XI for a detailed discussion of the decisionmaking process regarding onsite versus offsite services.

REFERENCES

Articles and Books

American Correctional Association

1990 Standards for Adult Correctional Institutions (third edition). Laurel, MD.

1998 Standards Supplement. Lanham, MD.

American Dental Association

1981 Dental Care in Correctional Facilities. Chicago.

American Nurses Association

1985 Standards of Nursing Practice in Correctional Facilities. Kansas City, MO.

American Psychiatric Association

1985 Task Force Report 22: Seclusion and Restraint—The Psychiatric Uses. Washington, DC.

1989 Task Force Report 29: Psychiatric Services in Jails and Prisons. Washington, DC.

Anno, B. Jaye

1977 Analysis of Inmate/Patient Profile Data. Washington, DC: Blackstone Associates, Inc.

1978 Analysis of Inmate/Patient Profile Data, Year Two. Silver Spring, MD: B. Jaye Anno Associates.

1988 "Receiving screening: The number one health care standard." 40 The National Sheriff 6:46-48.

1990 "Questions and answers on NCCHC standards." 4 CorrectCare 2:3. Chicago: National Commission on Correctional Health Care.

1997 "Health behavior in prisons and correctional facilities." Chapter 14 in David S. Gochman (Ed.), Handbook of Health Behavior Research III. New York: Plenum Press.

2001 "Standards of care and treatment for adult and juvenile offenders with special needs." Chapter 3 in Jose B. Ashford, Bruce D. Sales and William Reid (Eds.), Treating Adult and Juvenile Offenders with Special Needs. Washington, DC: American Psychological Association.

Badner, Victor, and Robert Margolin

1994 "Oral health status among women inmates at Rikers Island Correctional Facility." 1 Journal of Correctional Health Care 55-72.

Barnes, George P., Theodore H. Heid, Warren A. Parker, James S. Cole, R. Paul Fultz and Richard G. Tollefsbol

1988 "Dental care requirements of male inmates recently incarcerated in Texas Department of Corrections prisons." 7 Journal of Prison and Jail Health 1:37-52.

Block, Marvin J.

1983 "An extramural dental care program in a prison setting." 3 Journal of Prison and Jail Health 1:34-39.

Brecher, Edward M., and Richard D. Della Penna

1975 Health Care in Correctional Institutions. Washington, DC: U.S. Department of Justice, Law Enforcement Assistance Administration.

Clare, James H.
1998 "Survey, comparison, and analysis of caries, periodontal pocket depth, and urgent treatment needs in a sample of adult felon admissions, 1996." 5 Journal of Correctional Health Care 1:89-102.

Cohen, Robert L., and Margaret D. Wishart
1983 "Editorial." 3 Journal of Prison and Jail Health 1:3-5.

Coleman, Claudia R.
1988 "Clinical effectiveness of correctional staff in prison health units." 18 Psychiatric Annals 12:684-687, 691.

Conklin, Thomas J., Thomas Lincoln and Timothy P. Flanigan
1998 "A public health model to connect correctional health care with communities." 88 American Journal of Public Health 8:1249-1250.

Conly, Catherine
1999 Coordinating Community Services for Mentally Ill Offenders: Maryland's Community Criminal Justice Treatment Program. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Conte, Thomas G.
1973 "Survey of dental treatment in New Jersey prisons." 44 New Jersey Dental Association Journal 10-12.

Ditton, Paula M.
1999 "Mental health and treatment of inmates and probationers." Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Dubler, Nancy N. (Ed.)
1986 Standards for Health Services in Correctional Institutions (second edition). Washington, DC: American Public Health Association.

Easley, Michael W., and Richard L. Lichtenstein
1979 Dental Health Programs for Correctional Institutions. Lansing, MI: Correctional Health Care Program, Michigan Department of Corrections. Distributed by National Commission on Correctional Health Care, Chicago.

Gailiun, Michelle
1997 "Telemedicine takes off." 59 Corrections Today 4:68-70.

Goldkuhle, Ute
1999 "Health service utilization by women in prison: Health needs indicators and response effects." 6 Journal of Correctional Health Care 1:63-83.

Guy, Edward, Jerome Platt, Israel Zwerling and Samuel Bullock
1985 "Mental health status of prisoners in an urban jail." 12 Criminal Justice and Behavior 1:29-53.

Heyman, Budd
1998 "The hospital secure unit." Chapter 9 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Hornung, Carlton A., B. Jaye Anno, Robert B. Greifinger and Soniya Gadre
2000 Health Care for Soon-To-Be-Released Inmates: A Survey of State Prison Systems. Volume II of the National Commission on Correctional Health Care/National Institute of Justice's Report to Congress. Washington, DC.

Ingram-Fogel, Catherine
1991 "Health problems and needs of incarcerated women." 10 Journal of Prison and Jail Health 1:43-57.

Jemelka, Ron, Eric Trupin and John A. Chiles
1989 "The mentally ill in prisons: A review." 40 Hospital and Community Psychiatry 5:481-491.

Joint Commission on Accreditation of Healthcare Organizations
2000 2000-2001 Standards for Ambulatory Care. Oakbrook Terrace, IL.

Kavanagh, Steven J., and Peter M. Yellowlees
1995 "Telemedicine—Clinical applications in mental health." 24 Australian Family Physician 7:1242-1246.

Lamb, Richard H., and Linda E. Weinberger
1998 "Persons with severe mental illness in jails and prisons: A review." 49 Psychiatric Services 4:483-492.

McCarthy, Brian
1985 "Mentally ill and mentally retarded offenders in corrections." Sourcebook on the Mentally Disordered Prisoner. Washington, DC: U.S. Department of Justice, National Institute of Corrections.

McDonald, Douglas C., Andrea Hassol, Kenneth Carlson, Jeffrey McCullough, Elizabeth Fournier and Jennifer Yap
1999 Telemedicine Can Reduce Correctional Health Care Costs: An Evaluation of a Prison Telemedicine Network. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Mehlisch, David F.
1986-87a "Oral health screening—A means to improve dental care in correctional institutions." 6 Journal of Prison and Jail Health 1:62-77.

1986-87b "Using teaching institutions for dental care in correctional facilities." 6 Journal of Prison and Jail Health 2:140-154.

Metzner, Jeffrey L.
1997a "An introduction to correctional psychiatry: Part I." 25 Journal of the American Academy of Psychiatry and the Law 3:375-381.

1997b "An introduction to correctional psychiatry: Part II." 25 Journal of the American Academy of Psychiatry and the Law 4:571-579.

1998 "An introduction to correctional psychiatry: Part III." 26 Journal of the American Academy of Psychiatry and the Law 1:107-115.

Mitty, Jennifer A., Leah Holmes, Anne Spaulding, Timothy Flanigan and JoAnne Page
1998 "Transitioning HIV-infected women after release from incarceration: Two models for bridging the gap." 5 Journal of Correctional Health Care 2:239-254.

Murphy, R. Patrick
1990 "Diagnosing oral, dental, and maxillofacial emergencies." 9 Journal of Prison and Jail Health 1:75-94.

Myers, Pamela J.
1999 "Gauging the effectiveness of a preventive dental program in a large state prison system." 6 Journal of Correctional Health Care 2:207-222.

Nathan, Vincent
1985 "Guest editorial." 5 Journal of Prison and Jail Health 1:3-12.

National Commission on Correctional Health Care
1996 Standards for Health Services in Jails. Chicago.

1997 Standards for Health Services in Prisons. Chicago.

1999a Correctional Mental Health Care: Standards and Guidelines for Delivering Services. Chicago.

1999b "Use of telemedicine technology in correctional facilities." 6 Journal of Correctional Health Care 1:129-135.

Office of Health and Medical Affairs
1975 Key to Health for a Padlocked Society. Lansing: Michigan Department of Corrections.

Ormes, Walter S., Dean Carlyon, W. Foster Thompson and Melanie Brim

1997 "The measurement of dental disease in a correctional setting and its importance to functional service delivery." 4 Journal of Correctional Health Care 2:105-119.

Paris, Joseph E.

1989 "Daily self-declared emergencies." Paper presented at the 13th National Conference on Correctional Health Care in Chicago (November).

1994 "Inmate over-utilization of health care: Is there a way out?" 1 Journal of Correctional Health Care 1:73-90.

1998a "Infirmary care." Chapter 8 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

1998b "Sick call as medical triage." Chapter 7 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Puisis, Michael, and John M. Robertson

1998 "Chronic disease management." Chapter 6 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Rold, William J.

1988 "Legal developments in the constitutional right to dental care." 7 Journal of Prison and Jail Health 1:8-14.

Sanders, Roxanne, Anderson Freeman and Laurie Goldman

1998 "Managing the patient with an acute psychiatric condition." Chapter 20 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Sheps, Samuel B., Martin T. Schechter and Real G. Prefontaine

1987 "Prison health services: A utilization study." 12 Journal of Community Health 1:4-22. Human Sciences Press.

Spencer, Steven S.

1999 "Standardizing chronic illness care behind bars." 6 Journal of Correctional Health Care 1:41-61.

Steadman, Henry J., Stanley Fabisiak, Joel Dvoskin and Edward J. Holohean, Jr.

1987 "A survey of mental disability among state prison inmates." 38 Hospital and Community Psychiatry 10:1086-1090.

Steadman, Henry J., and Bonita M. Veysey

1997 Providing Services for Jail Inmates With Mental Disorders. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Stein, Leslie, and Carl Alaimo

1998 "Psychiatric intake screening." Chapter 18 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Swetz, Anthony, Marcel E. Salive, Thomas Stough and T. Fordham Brewer

1989 "The prevalence of mental illness in a state correctional institution for men." 8 Journal of Prison and Jail Health 1:3-16.

Teplin, Linda A.

1983 "The criminalization of the mentally ill: Speculation in search of data." 94 Psychological Bulletin 54-67.

1990 "The prevalence of severe mental disorder among male urban jail detainees: Comparison with the Epidemiologic Catchment Area Program." 80 American Journal of Public Health 6:663-669.

Torrey, E. Fuller, Joan Steiber, Jonathan Ezekiel, Sidney M. Wolfe, Joshua Sharfstein, John H. Noble and Laurie M. Flynn

1992 Criminalizing the Seriously Mentally Ill: The Abuse of Jails as Mental Hospitals. Washington, DC: Public Citizen's Health Research Group.

Trupin, Eric, Peter N. Wood and Victoria L. Harris
1999 "Mentally ill offenders and community transitions: Resource acquisition and recidivism." 6 Journal of Correctional Health Care 1:27-40.

Twaddle, Andrew C.
1976 "Utilization of medical services by a captive population: An analysis of sick call in a state prison." 17 Journal of Health and Social Behavior 236-248.

U.S. Department of Health and Human Services
1992 Progress and Issues in Case Management. Washington, DC: Alcohol, Drug Abuse, and Mental Health Administration.

Ventura, Lois A., Charlene A. Cassel, Joseph Jacoby and Bu Huang
1998 "Case management and recidivism of mentally ill persons released from jail." 49 Psychiatric Services 10:1330-1337.

Veysey, Bonita M., and Gisela Bichler-Robertson
2000 Providing Mental Health Services in Corrections. Volume II of the National Commission on Correctional Health Care/National Institute of Justice's Report to Congress. Washington, DC.

Weinstein, Henry C.
1989 "Psychiatric services in jails and prisons: Who cares?" 146 American Journal of Psychiatry 9:1094-1095.

Weisman, Andrea
1998 "Mental health outpatient services in correctional settings." Chapter 19 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Zarate, Carlos A., Jr., Lisa Weinstock, Peter Cukor, Cassandra Morabito, Linda Leahy, Craig Burns and Lee Baer
1997 "Applicability of telemedicine for assessing patients with schizophrenia: Acceptance and reliability." 58 Journal of Clinical Psychology 1:22-25.

Programming for Special Health Needs

Chapter VIII

Chapter VIII

Programming for Special Health Needs

A. The Scope of the Problem

Chapter VII outlined the primary components of a model health care delivery system and discussed the basic levels of care and services that should be available to all inmates. Additionally, each department of corrections (DOC) must make arrangements to address the health needs of special populations, which is the focus of this chapter. In the medical program, patients with special health needs include the terminally ill, geriatric offenders, and the physically handicapped as well as patients with chronic illnesses and communicable diseases. The mental health program must address the needs of suicidal inmates, self-mutilators, substance abusers, and sex offenders in addition to inmates who are mentally ill and violent and those who may be retarded. Health programming for each type of special offender can have significant implications for staffing, housing, space, and equipment—all of which affect cost.

Meeting the needs of these special populations may well represent the coming crisis for correctional health care in the 21st century for two reasons: first, the number of inmates with special needs is escalating rapidly, and second, most DOCs are not doing a good job of identifying and serving their existing special populations.

On the first point, it is clear that today's inmates are older, sicker, and staying longer than their counterparts of two decades ago. In addition, there are many more inmates with which to contend. The "law and order" stance of many politicians during the 1980s resulted in mandatory sentencing and reduced utilization of alternatives to incarceration (both of which meant that more inmates went to jail and prison) and also resulted in more use of fixed sentences (which meant that many inmates were staying longer). The launching of the "war on drugs" during this same period also contributed to the burgeoning jail and prison populations. The Federal Bureau of Prisons and the Florida Department of Corrections, among others, attribute much of their growth during the 1980s to the war on drugs.[1] Furthermore, the prison population is aging—due not only to mandatory and fixed sentencing practices but also to the fact that more older people are committing crimes.[2]

The National Council on Crime and Delinquency (NCCD) published a startling report in December 1989.[3] It showed that the U.S. prison incarceration rate nearly doubled in the 10-year period between 1980 and 1989, reaching an unprecedented rate of 250 prisoners per 100,000 population. Even more startling was NCCD's prediction that:

> Under existing policies, the states will increase their prison populations by over 68 percent by 1994, an annual average growth rate of about 13 percent per year. This rate of growth is twice that projected by NCCD in its 1988 forecast. (Austin and McVey, 1989:1)

Austin and McVey (1989:2) went on to state that "it appears that the phenomenal growth of prison populations during the 1980s will be followed by even

greater increases over the next five years, which will threaten to completely overwhelm the nation's prison systems." What made these predictions so sobering was the fact that most DOCs were already overcrowded and ill prepared to deal with increasing numbers of offenders.

As it happened, Austin and McVey's dire predictions proved true. By midyear 1998, an estimated 1.8 million people were incarcerated on any given day in America. The incarceration rate had soared to 671 prisoners per 100,000 U.S. residents (452 per 100,000 in prisons and 219 per 100,000 in jails).[4] By 2000, more than 2 million people were behind bars in the United States (National Commission on Correctional Health Care/National Institute of Justice, 2000).

The potential crisis for correctional health care is even more dramatic. Not only must basic health services be increased to meet the needs of a growing population, but expensive specialty services must be increased to serve those with serious health needs. Unfortunately, in many DOCs, health services personnel not only have failed to plan for the influx of future offenders with special needs but also have been unable to identify those in their current population in any systematic way.[5]

Although some states once again are exploring the possibility of alternatives to incarceration to help stem the tide of jail and prison admissions and several states are expanding their use of good time to shorten prison stays, the implementation of such measures depends on decisions made by individuals external to correctional health care (e.g., legislators, correctional administrators). Systemwide health services directors would do well to ensure that they have a process in place to accurately identify patients with special health needs. That way, good data will be available to use in planning to meet the needs of future offenders.

The first step in identifying offenders with special health needs is simply to list the categories for which information will be sought. For example, under the medical program, the list might include individuals with chronic diseases, communicable diseases, physical handicaps, and terminal illnesses as well as older offenders and females. Category headings also should be established for the mental health program. Under each of these major headings, the specific illnesses or conditions that have implications for special health services should be listed.

When defining the conditions listed under each category, it is important to be as specific as possible to avoid overcounting. For example, the *AIDS patients* category (for those with acquired immune deficiency syndrome) might be broken down into those who are HIV positive but asymptomatic, those who are being followed in chronic disease clinics, and those who are terminally ill because implications for the special needs of each subset differ dramatically. Similarly, under the *physical handicap* heading, breakdowns might include the blind, the deaf, and the mobility impaired. The latter category might be broken down further into those who are confined to a wheelchair and those who can ambulate with the assistance of another device (e.g., prosthesis, walker).

Operational definitions should be provided for the subsets within each category. To the extent possible, the categories should be mutually exclusive. Offenders with more than one special need generally should be counted only in the category of their primary problem.

Once the basic categories and their subsets have been listed and defined, it is helpful to review them in terms of their implications for specialized care. Ronald M. Shansky, MD, former medical director of the Illinois Department of Corrections, has developed a matrix that can assist in this task (see appendix G). The column headings reflect the special needs categories and subsets and the row headings list implications for housing, programming (e.g., work, school), staffing (medical and other), specialty services, special space and equipment needs, and fiscal impact.

After completing this exercise, if any categories are listed that have no implications for special services, they should be deleted from the list. For example, amputees who ambulate well with a prosthetic device and no longer need physical therapy or the services of a physiatrist should not be counted as

special needs offenders. Similarly, inmates who are HIV positive but asymptomatic generally do not require anything beyond basic health care. Although it may be important for statistical or epidemiological purposes to know how many offenders in the DOC have these conditions, including them in the special health needs count serves only to inflate it. Because the fiscal impact of special services can be extensive, it is important to be as accurate as possible in identifying these groups.

Once the special needs categories have been defined and refined, a data collection instrument can be developed to count the number of individuals in each category at a specific point in time. The data must be collected simultaneously in all institutions to avoid duplicate counting. It is useful to conduct a training session for those individuals who will be collecting data to ensure that they understand their task. At a minimum, written instructions with clear definitions of terms should accompany the survey instrument.

Data from such a survey and the matrix review can assist health planners in determining whether it is more cost-effective to centralize or regionalize each specialty service and whether they should be provided in-house or purchased in the community. After the survey has been completed, a tracking system should be established for special needs offenders currently in the system. In addition, each intake unit should have a mechanism in place to identify the special health needs of new admissions.

If correctional health administrators are to weather the coming crisis, it is imperative that data be collected systematically on the incidence and prevalence of specific diseases and conditions related to serious health needs. There is a paucity of such information in the literature. AIDS, tuberculosis (TB), and certain sexually transmitted diseases are the only diseases of prison and jail inmates that are reported regularly on a national basis.[6] Occasionally, a study is published that presents data on a specific disease or condition in a particular jail or prison system at a given point in time, but few correctional systems are routinely collecting morbidity and mortality data. Even where such data are collected, correctional health staff often are not publishing their results.

In terms of understanding the health problems of the population it deals with, correctional medicine is significantly behind other health care fields. Undoubtedly, it will take a national organization to serve as the impetus for creating a national repository of correctional health data, and much work will have to be done to standardize the definition of terms and the data collection methodology and reporting systems. That is in the future, though. In the interim, each DOC should establish its own data collection system for use in its own planning.

The sections below address some of the more prevalent health needs of offenders that require special planning. Implications for housing,[7] special programs, staffing, specialty care, and space and equipment are reviewed.[8]

B. SPECIAL MEDICAL NEEDS

1. Chronic and Communicable Diseases and Conditions

Although the terms *chronic disease* and *communicable disease* are not interchangeable, certain conditions, such as AIDS and TB, may be classified properly as both. Only a few of these diseases are discussed in this section, because of either their prevalence, their seriousness, or both. For disease entities not presented, general guidelines on managing chronic illnesses may be found in chapter VII, section B.1.c., and on communicable diseases in chapter X, section C.

a. Cardiovascular Conditions

Heart disease and stroke are among the top five causes of death in the United States. Although national mortality data for U.S. jail and prison systems are not available, it is likely that these two conditions represent a substantial portion of the deaths in correctional facilities attributable to natural causes,

especially among older offenders.[9] A high percentage of inmates exhibit a number of the factors that place them at risk for these conditions, including smoking, having poor dietary habits, and suffering from a lack of exercise. In addition, significant numbers of inmates are hypertensive.[10]

The management of hypertension in correctional facilities is not difficult and does not usually imply the need for any special housing, programs, equipment, or staff. Most of these patients can be managed adequately through regular chronic clinics where their medications can be checked, their blood pressure can be monitored, and they can be counseled regarding exercise, weight control, and avoidance of smoking and high-sodium foods. Failure to provide regular followup for hypertensives, though, can have serious consequences. Hypertension is known as "the silent killer" and can lead to heart attacks, stroke, and renal failure.

In their acute stages, cardiovascular conditions often involve lengthy hospital stays and the services of expensive consultants such as cardiologists or neurologists. For people with chronic conditions, a number of special services are required. Depending on the seriousness of their conditions, some of these patients may need to be assigned to an extended care facility and others will require protective housing or special consideration in their bunk or tier assignments. Work assignments, if any, are likely to involve restrictions.[11]

Cardiovascular patients should be placed in facilities that offer immediate access to appropriately equipped and staffed emergency services and the availability of 24-hour nursing care. They should be seen periodically in specialty clinics by the appropriate specialist (e.g., cardiologist, physiatrist) and monitored regularly by the unit physician. Some of these patients also will require additional special services such as physical therapy, speech therapy, or other rehabilitative measures.

b. End-Stage Renal Disease

End-stage renal disease (ESRD) may result from hypertension, intravenous drug abuse, and AIDS, among other conditions, but one of the most common causes is complications from diabetes. Diabetes is a chronic condition that can have serious consequences if improperly managed. It can cause blindness, heart attacks, and stroke in addition to renal disease and can precipitate such medical emergencies as hypoglycemia (insulin shock) or ketoacidosis (diabetic coma). For these reasons, patients whose diabetes is not well controlled should be assigned to units that offer immediate access to appropriately equipped and staffed emergency services and where 24-hour nursing care is available.

Type II diabetes mellitus (the most common form) is found in about 5 percent of the adult population in the United States.[12] Rates are highest for Blacks and females and increase with age regardless of gender or ethnicity. Although good data are not available on the prevalence of diabetes among prisoners, Hornung et al. (2000b) projected the rates to be 2.7 per 100 for state prisons and 2.4 per 100 for local jails; that is about half the rate of the general population. The lower prevalence in correctional facilities is attributable to the relatively young age of inmates.

For most of these patients, no special health programming is required beyond regular monitoring at chronic care clinics.[13] They can be housed in general population and do not require any dedicated space or special equipment (besides a glucometer) for their care. For patients with ESRD, though, the story is altogether different.

Regardless of what condition precipitated the need for dialysis, patients with ESRD require extensive services. Estimates of the cost of dialyzing a single patient three times a week in a community facility range from $40,000 to $60,000 annually. Additionally, the DOC needs a dedicated vehicle to transport the patients and custody staff to escort them on what is often an all-day process. In most DOCs, if three or more patients in the system require hemodialysis, it will be more cost-effective in the long run to provide

this service in-house, even though the initial investment in a dialysis unit is an expensive proposition. Dedicated space, specially trained staff to operate the dialysis unit, arrangements for waste disposal, the availability of dietary counseling, and the services of a consultant nephrologist are also needed.

Patients with ESRD usually do not require any permanent special housing but should be placed in a facility with an infirmary so access is assured when needed. Some creativity is required in work and program assignments for these patients because they spend several hours a week in dialysis.

c. Respiratory Conditions

Prisoners are prone to both infectious (e.g., TB) and noninfectious (e.g., emphysema and asthma) respiratory conditions. TB, a disease once thought to be well controlled in the United States, was on the rise during the 1980s and early 1990s.[14] This was attributable, in part, to the epidemic spread of HIV infection.[15] Researchers have demonstrated that HIV-seropositive subjects with a positive purified protein derivative (PPD) are much more likely to develop active TB than individuals with a positive PPD who are seronegative for HIV.[16] Because prisons and jails contain a population that is at high risk for having contracted the HIV infection,[17] DOCs can anticipate an increase in the incidence of coinfection with TB. A study in the New York state prison system showed that the incidence of TB among inmates increased from 15.4 cases per 100,000 in 1976 to 105.5 per 100,000 in 1986 and that the majority of inmates in 1985 and 1986 with TB also had AIDS or were HIV positive (Braun et al., 1989). A more recent survey of prisons found that the rate of positive PPD skin tests at intake averaged 8.9 percent for males and 6.7 percent for females (Wilcock et al., 1996).

Because TB is an airborne disease, its transmission is accelerated in overcrowded conditions. It is imperative that correctional health professionals take aggressive measures to prevent tuberculosis and to control its spread.[18] Patients with active TB must be isolated in a room with negative airflow and staff must be instructed to take respiratory precautions. Once the active stage is past, TB patients do not require any special housing and can be monitored through regular chronic clinics.

The actual prevalence of noninfectious respiratory conditions (e.g., chronic obstructive pulmonary disease [COPD], asthma) among prisoners is unknown. In the general community, COPD is one of the five leading causes of death. Primary risk factors associated with COPD include smoking, air pollution, allergies, and family history. Its usual onset is after age 50. As the correctional population ages, the number of patients with COPD is likely to increase.

Hornung et al. (2000b) projected the prevalence rate of asthma in correctional settings to be 8.5 per 100 compared with a national average of 9.4 per 100. Although disease-specific mortality data generally are not available, experienced correctional physicians[19] believe that deaths from asthma may well be the single most preventable natural cause of death among prisoners.

Depending on the severity of their conditions, some patients with noninfectious respiratory conditions may require protective housing or consideration for ground-floor, low-bunk assignments. Additionally, they should be placed in nonsmoking cells or dorms. Those with more advanced conditions may require placement in an extended care facility with 24-hour nursing care and the availability of oxygen and a consulting pulmonologist. Wherever COPD and asthma patients are housed, there should be immediate access to properly equipped and staffed emergency services.

Patients with respiratory conditions who are able to work should be placed in jobs where they are not exposed to environmental pollutants. Those with more advanced conditions will not be able to work at all. The clinic should have respiratory therapy services available and patients should be monitored regularly regarding their pulmonary function. Special equipment, including peak flow meters, nebulizers, portable oxygen tanks, and emergency drugs, should be readily available.

d. Seizure Disorders

Very little is known about the prevalence of seizure disorders among prisoners. In its bibliography on prison health care, the National Library of Medicine (1990) listed only two publications on epilepsy among prisoners, and one was 10 years old. A more recent article on the management of epilepsy in corrections cites the same articles regarding its prevalence.[20] What little evidence is available suggests that the prevalence of epilepsy is higher among prisoners than in the general population.[21] King and Whitman (1981:18) hypothesize that this is the case because "poor people have higher prevalence rates of epilepsy, and . . . they are also the great majority of prisoners." The causes of seizure disorders include head trauma, drug and alcohol withdrawal, and prenatal and perinatal morbidity—all of which occur more frequently among the poor.

The most expensive aspect of caring for patients with seizure disorders is often in the diagnostic phase, which requires a comprehensive history, a thorough physical examination, and special services such as an electroencephalogram (EEG), a computerized tomographic scan, and a neurological workup.[22] Once the diagnosis is made, most seizure disorder patients can be controlled adequately on medication and monitored in chronic clinics, with periodic consultation by a neurologist as needed.[23] Due to the possibility of status epilepticus, seizure disorder patients should be placed only in facilities that have immediate access to properly equipped and staffed emergency services. Most prisons and jails housing inmates with seizure disorders will find having an EEG machine in-house to be cost effective.

Virtually all seizure disorder patients can be placed in the general population but should be housed on the ground floor and in a low bunk. At least one study suggests that seizure disorder patients not be housed in a single cell.[24] Given their potential for seizures, work limitations for these patients often are required. A number could benefit from vocational programs designed with their disability in mind (e.g., computer operators). Owing to the stigma associated with epilepsy and the mistaken notions regarding appropriate first aid, an aggressive health education program for both inmates and staff can be important to the care of these patients.[25] Additionally, supportive counseling can help them adjust to the social problems that often accompany this condition.

e. AIDS

In contrast to the diseases and conditions discussed above, a great deal has been written about AIDS among prisoners. The National Library of Medicine's 1990 bibliography on prison health care listed 229 references on HIV and AIDS published between 1986 and 1990. Hundreds more articles on HIV/AIDS have been published in the decade since.[26] The annual incidence of AIDS in prisons and jails is substantially higher than in the population at large, due primarily to an overrepresentation of individuals with histories of high-risk behaviors, especially intravenous drug use.[27]

The cost of caring for AIDS patients is substantial.[28] They require expensive medications and the care of AIDS specialists. Although they are less likely to be hospitalized than in the past because of advances in treatment, the fact that they are living longer increases the lifetime cost of their care. In their terminal stage, many AIDS patients need continual care in a hospice or nursing home environment.

Except when clinically indicated, AIDS patients do not need to be housed separately from the general population. In its 1994 policy statement, the National Commission on Correctional Health Care (1995) stated:

> The Commission opposes segregated housing for HIV positive inmates who have no symptoms of the disease. Since HIV is not airborne and is not spread by casual contact, HIV positive inmates should be maintained in the general population in whatever housing is appropriate for their age, custody class, etc. However, people with AIDS may require medical isolation for their well-being as determined by the treating physician.[29]

Extensive counseling services are required for inmates prior to being tested for HIV, after learning they are HIV positive, and at all stages during the progression of their disease. Work and program restrictions are not required for asymptomatic HIV-positive inmates. That status alone should not prevent them from holding jobs (including kitchen assignments), going to school, or participating in regular activities of correctional life (e.g., recreation, religious services, library). For AIDS patients, work and program limitations should be determined by the treating clinician.

2. Physically Handicapped

The physically handicapped include the mobility impaired (e.g., amputees, the wheelchair bound, those who ambulate with assistive devices such as canes, crutches, walkers) and individuals who are visually impaired, hearing impaired, and/or speech impaired. The number of people in prisons and jails with these disabilities is not known. Veneziano et al. (1987) conducted a survey of state and federal correctional systems to identify the number of handicapped in each. They concluded:

> In summary, it appears that there are inmates in our prison systems with special handicaps and thus with special security and treatment needs. Exact numbers are not known; the reliability of the available data is in question due to: (1) differences in definitions of handicaps, and (2) differences in and/or lack of screening and evaluation of handicaps. The present research suggests that handicapped inmates are not singled out for differential treatment, and that little is known about the scope of their difficulties during or after the time they spend in prison. . . . There appears to be a need to systemize evaluation and treatment of inmates with specific handicaps, given the difficulties they are likely to encounter in prison and afterwards. (p. 71)

Three years later, the results of a national special needs survey conducted under the auspices of the Illinois Department of Corrections showed that not much had changed.[30] Few states were systematically identifying, evaluating, and tracking patients with special needs. The data on mobility-impaired inmates was somewhat better because these individuals are highly visible. The 28 correctional systems responding on this item reported a range of 0.04 to 1.2 percent of their total populations had problems ambulating.[31] The percentage of inmates with other physical disabilities was not reported.

Programming for the physically handicapped in prisons and jails represents a major challenge. The special needs of this group of offenders cut across all aspects of correctional life. The responsibility for programming for this population often rests with the health services division of the DOC, although this is neither a necessary nor even a logical placement. The health needs of the physically handicapped are usually the easiest to address. Regardless of which department of the DOC is assigned the primary responsibility for programming for the physically disabled, it is imperative that a cross-disciplinary planning group be established. This group should include representatives from the following areas: custody, classification, construction, medical, dental, mental health, vocational services, educational services, religious services, social services, and recreation.

Additionally, once the planning is completed and a program for the physically disabled is operational, it is suggested that a case management approach be adopted for their continuing care. Each physically disabled offender should be assigned to a specific case manager who coordinates all services and follows the patient throughout his or her incarceration. Case management is the best approach to ensure that services are neither fragmented nor duplicated.

The special needs of specific types of physically disabled offenders are discussed in the following paragraphs. In addition, it is suggested that DOCs ask their legal counsel to review the provisions of federal statutes, such as the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990.[32]

a. The Mobility Impaired[33]

Individuals who have difficulty ambulating should be placed in a barrier-free facility, which is easier said than done. Except for perhaps the newest prisons and jails, few existing institutions are truly barrier free. Even in correctional facilities where physical alterations have been made, there tend to be areas such as disciplinary housing that are overlooked. The costs of converting existing institutions to barrier-free facilities can be extensive, especially because many older institutions do not lend themselves readily to the necessary architectural modifications. To illustrate, a partial list of barriers might include—

- The presence of stairs that may prohibit access to institutional programs.
- Insufficient cell space to accommodate wheelchairs, walkers, and other assistive devices.
- Lips on doorways that prevent access.
- Toilets in housing and program areas with high seats and without handrails.
- Showers not equipped for use by the mobility impaired.
- Drinking fountains out of reach for the wheelchair bound.
- Food lines and dining tables inaccessible to the mobility impaired.

Although some states (e.g., Illinois) are attempting to remove barriers in several institutions to allow more flexibility in housing the mobility impaired of different custody classes, other DOCs (e.g., Texas) have opted to house all of their male mobility impaired with special needs in specific barrier-free institutions.

Within a barrier-free facility, a certain number of the mobility impaired also require special housing. Some need a protective environment because of the possibility of victimization. Inmates confined to wheelchairs require larger cells or dormitory space to accommodate their equipment. A few of the mobility impaired need constant care in an infirmary or nursing home environment. Patients with certain spinal cord injuries must be housed in air-conditioned areas.

Work restrictions are likely for this group of offenders because of their physical disabilities, but a number of amputees and wheelchair users are able to work. They should have access to jobs where their disabilities are not a handicap. Others can benefit from vocational training or academic programs. Recreational opportunities should be available as well.

The special medical needs of the mobility impaired often include regular monitoring by a physiatrist and the availability of physical therapy and other rehabilitation services. If the latter are provided in-house, dedicated space and special equipment are required. Each DOC should have at least one van that is specially equipped to transport inmates with mobility impairments. Increased mental health services are needed as well to help such patients adjust to the limitations and social stigma associated with their disabilities.

b. Other Disabilities

Some inmates may be visually impaired, hearing impaired, or speech impaired and thus require special services. Most can be housed in regular population assignments, but those with severe disabilities (e.g., blind, deaf, mute) may need protective housing because of the possibility of victimization. By themselves, these conditions do not require any special medical housing.

Work restrictions are necessary for inmates with severe visual, hearing, or speech impairments, but most are capable of working in some capacity. Many can benefit from special educational and vocational programs designed to accommodate their particular disabilities.

This group of offenders has few special medical needs created by their conditions. The services of specialists (e.g., ophthalmologists, audiologists, otolaryngologists) are important in initial diagnosis and for those who can benefit from continued

monitoring and intervention. Inmates with permanent disabilities, though, require more in the way of social services and supportive counseling than medical care for these conditions. Individuals who are blind, deaf, or severely speech impaired may suffer from depression and have difficulty coping with the limitations and ostracism that accompany their disabilities.

Some inmates with speech and hearing difficulties can benefit from speech therapy. Others require the services of an interpreter to participate in regular prison or jail life. Health professionals should be aware of the special problems created in accurate diagnosis and treatment of patients when an interpreter must be relied on to convey complaints and symptoms of illness.[34]

Each specialty (e.g., ophthalmology, otolaryngology) and ancillary service (e.g., audiometry, speech therapy) necessary to test, diagnose, and treat patients with visual, hearing, and speech impairments has its own equipment needs. Cost-benefit analyses should be conducted to determine whether it is better to provide these services in-house or purchase them in the community.

3. Geriatric Offenders

According to the U.S. Bureau of the Census, the elderly are the fastest growing segment of the U.S. population. In 1900, 1 in 25 Americans was over the age of 65 (4% of the population). By 1990, this figure had increased to one in eight (12.5% of the population). Projections for the year 2050 indicate that individuals over the age of 65 may be as many as one in five Americans.[35]

Advances in medical science have contributed to more people living longer. This fact, coupled with mandatory sentences, longer prison terms, and more restrictive release policies, has meant an increase in the number of inmates growing old behind bars. NCCD's study states that "increasing numbers of offenders above the age of 40 are being sentenced to prison. This age group, while still a minority of all prison admissions, is the fastest growing group of inmates in many states" (Austin and McVey, 1989:5).

Obtaining exact data on the number of elderly inmates in correctional facilities is difficult, largely because definitions of *elderly* differ dramatically from jurisdiction to jurisdiction and across disciplines. Criminologists may define anyone over 30 as "old,"[36] while gerontologists are more likely to use age 65 or over as their benchmark. The federal Bureau of Prisons and some states use age 45 to define older offenders whereas other states use age 55 or 60.[37] A number of researchers on elderly offenders have settled on "age 55 or older" as their operational definition of elderly[38] and one even states that:

> It is somewhat ridiculous . . . to talk of 50 as an entrance to old age. Available research shows that age 55 is the starting point of physical and mental deterioration, that most chronic illnesses begin at this age, and that many of the aged's social needs become accentuated at this age. (Walsh, 1989:218)

On the other hand, some experienced correctional researchers[39] as well as correctional health practitioners[40] argue for age 50 or older as the definition of elderly among the incarcerated. They note that inmates' biological ages frequently are considerably higher than their chronological ages because of substance abuse, smoking, poor nutrition, and a lack of prior care, among other factors. A 1990 survey conducted by the Illinois DOC used *50 and older* as its definition of elderly. In the 18 states responding to this item, the percentage of inmates age 50 and older ranged from 1.4 to 7.7 percent.[41] On a national basis, the number of offenders age 55 and older in state and federal correctional institutions in 1999 was more than 3.9 percent of the total population (42,926 out of 1,095,094) (American Correctional Association, 1999). Projections for the year 2000 placed the number of inmates age 50 and older at 125,000, with 35,000 of them over the age of 65 (Neeley et al., 1997).

Regardless of how *elderly* is defined, it is clear that older offenders have increased health care needs. For one thing, they are more likely to suffer from chronic illnesses than younger inmates. One study of 41 men

ages 50 to 80 who were housed in a Michigan prison found that 83 percent had at least one chronic health problem and nearly half had three or more chronic health problems (Moore, 1989:185-186). In his study of 1,051 elderly inmates over 50 years of age in federal prisons, Falter (1999) found increased health care utilization among this group of offenders due to the presence of hypertension (19.2%), arteriosclerotic heart disease (5.4%), diabetes (3.4%), chronic obstructive pulmonary disease (2.5%), length of sentence, and age. Older offenders also face a host of bodily changes that accompany the normal aging process that can lead to health problems including vision and hearing loss, tremors, sleep disturbances, gastrointestinal disorders, incontinence, and mental confusion.[42]

Although many older inmates do not require special housing, those who are disabled or infirm should be placed in a protective environment because of the possibility of victimization. Those with chronic illnesses are likely to have increased utilization of infirmary and hospital services, and a certain number may need extended nursing care and assistance with daily living skills. Work and program restrictions are inevitable for this group of offenders.[43]

A decade ago, few DOCs had developed alternative programs for the elderly. One state that has (Michigan) reported good success with its age-segregated program improved on all measures of inmate welfare except utilization of health services.[44] Another state (North Carolina) has a special program at the McCain Prison Hospital to provide care and support for elderly inmates in a nursing home environment, and the Maryland DOC has an elderly offenders project designed to coordinate placements and services for this population. Today, age-segregated programs are no longer the exception, at least in prisons. Half of the prison systems responding to a National Commission on Correctional Health Care (NCCHC) survey stated they provided nursing home or shelter care for the elderly (see exhibit VIII-1). Only one jail system reported the availability of these services for the elderly, however (see exhibit VIII-2).

Prisons and jails housing elderly offenders should have immediate access to properly equipped and staffed emergency services and the availability of round-the-clock nursing care. The increased need for health services among the elderly means a concomitant increase in regular health staff and the availability of specialists to address their chronic and age-related illnesses and conditions.

If current trends continue, the increased costs of housing and caring for elderly offenders will represent a substantial portion of most DOCs' budgets. Criminologist Sol Chaneles predicted that "[i]n 20 years, most prisons are going to be geriatric prisons. By the year 2000, prisons will be renamed 'Centers for the Treatment of Old Folks.'"[45] Although this dire prediction did not come true in 2000, it is still a possibility for the future. One alternative (in addition to changes in sentencing guidelines) is to initiate early release programs for the elderly. A promising effort in this direction is the POPS (Project of Older Prisoners) program operated by the Tulane University Law School in Louisiana.[46] Ornduff (1996) argues that early release programs like POPS are a better alternative for the elderly than medical parole, because these latter programs usually are available only if an inmate is terminally ill. He states that:

> Only early release programs can potentially encompass all elderly inmates who tax the prison system, while at the same time minimize the public from any harm resulting in early release of convicted criminals. If no measures are taken, many of our prisons could become "maximum security nursing homes." (1996:200)

4. The Terminally Ill

A number of the conditions and illnesses discussed above are progressive and eventually lead to a terminal stage, which can be defined as a life expectancy of 1 year or less. It is very difficult to obtain accurate statistics on the number of terminally ill in prisons and jails because, by definition, this is a fluid category. Not only does the usual methodological

EXHIBIT VIII–1.
Special Services Provided in Prisons in 1999, by State (*N* = 28)

Service	AZ	BOP	DC	FL	ID	KS	MA	MD	MI	MO	MN	MT	NE	NY	NC	OH	OK	OR	PA	SC	SD	TN	TX	UT	VA	VT	WA	WI	Total
Holistic health care																●				●									2
Telemedicine	●	●		●				●	●					●	●	●			●				●	●	●			●	13
Hospice care		●	●	●		●		●	●	●	●	●	●	●	●	●	●	●	●	●			●	●		●	●		21
Compassionate release/ medical furlough	●	●	●	●	●			●	●	●	●			●		●	●	●		●	●	●	●	●		●	●	●	21
Nursing home/ shelter for the elderly		●		●		●			●	●				●	●	●	●		●		●		●		●			●*	14
Clinical protocols for chronic diseases	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●		●*	26
Parenting classes for offenders	●	●		●	●	●	●	●			●	●	●	●	●	●	●	●	●	●	●		●		●	●	●	●	23
Unique health education programs	●	●	●	●			●	●	●	●	●	●	●	●		●		●		●	●		●		●	●		●	20
Program for babies to live with moms		●									●		●	●			●				●						●		7
Therapeutic community for substance abusers		●		●	●	●	●		●	●	●		●	●		●		●	●	●		●	●	●	●	●	●	●	21
Program for aggressive mentally ill	●	●		●	●	●	●	●	●				●			●	●	●	●	●	●	●	●	●	●	●	●	●	22
Programs for offenders with co-occurring disorders	●	●		●	●	●	●	●*		●		●	●	●*		●		●	●	●	●		●	●	●	●		●	21
Inpatient/crisis beds for mentally ill offenders	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	28
Program for offenders who are victims of abuse	●	●		●	●		●	●			●		●		●	●			●	●			●	●	●		●	●	17
Different levels of care for mentally ill offenders	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	27
Program for juveniles in adult facilities	●			●												●			●				●	●			●	●	8
Computerized medical record system	●*			●		●				●		●		●					●	●				●		●		●*	11

Notes: Includes the federal Bureau of Prisons (BOP). Not all states responded to the National Commission on Correctional Health Care survey on which this exhibit is based.

*In development.

EXHIBIT VIII–2.
Special Services Provided in Jails in 1999, by County (*N* = 8)

Service	Bexar County, TX	Dallas County, TX	Harris County, TX	Hillsborough County, FL	King County, WA	Maricopa County, AZ	Miami-Dade County, FL	San Bernardino County, CA	Total
Holistic health care									0
Telemedicine	●								1
Hospice care			●	●					2
Compassionate release/ medical furlough				●		●			2
Nursing home/shelter for the elderly				●					1
Clinical protocols for chronic diseases	●	●		●		●	●	●	6
Parenting classes for offenders	●			●		●		●	4
Unique health education programs			●			●	●	●	4
Program for babies to live with moms									0
Therapeutic community for substance abusers	●								1
Program for aggressive mentally ill	●		●			●		●	4
Programs for offenders with co-occurring disorders	●		●			●			3
Inpatient/crisis beds for mentally ill offenders	●	●	●	●		●	●		6
Program for offenders who are victims of abuse			●			●			2
Different levels of care for mentally ill offenders	●	●	●	●	●	●		●	7
Program for juveniles in adult facilities					●	●			2
Computerized medical record system									0

problem exist—that is, new inmates enter and others leave this category (through death or release from incarceration) at any time during a given year—but also the category is not exclusive; inmates who are terminally ill are likely to be counted in the category of their primary illness (e.g., AIDS, cancer, COPD, ESRD) as well. Definitional problems also exist. The Illinois survey found that 0.5 percent of inmates in the DOCs reporting were terminally ill, but the author of the report noted that this figure was suspect because some states included individuals who were only HIV positive or who had debilitating but not necessarily terminal conditions (e.g., quadriplegia) (Hall, 1990:112).

Regardless of the exact number, every DOC must provide for the needs of terminal patients. These individuals have more frequent utilization of infirmary and hospital services, and as they progressively weaken, often require 24-hour nursing care. For many who are in the terminal phase of their illnesses, little medical intervention can be provided.[47] The primary health goal is to keep them comfortable and pain free and to help them adjust to the concept of death. Supportive counseling from the clergy, mental health professionals, or those trained to deal with the problems of death and dying (e.g., thanatologists) is essential. Terminally ill patients often experience anger, anxiety, and depression, and there is an increased risk of suicide.[48]

Dying with dignity is difficult under any circumstances, but it is particularly hard to achieve in prisons where individuals may be both physically and emotionally isolated from family and friends. Two approaches hold promise for meeting the needs of terminally ill prisoners: developing special programs in-house and increasing the utilization of compassionate release. Both options should be pursued. In regard to the former, the Connecticut DOC has established a program for the terminally ill at its Somers unit. These patients are housed in a separate section of the infirmary. A thanatologist works with the terminally ill and their families. Supportive counseling, group discussions, special activities, and assistance in planning for death (e.g., writing wills) are offered.[49] The Orient Correctional Facility in Ohio also has a special program for terminally ill patients that is based on a hospice philosophy.[50]

Hospice care is becoming more common in correctional facilities—especially in prisons. An NCCHC survey in 1999 revealed that 21 of the 28 prison systems and 2 of the 8 jail systems responding provided hospice care for the terminally ill (see exhibits VIII-1 and VIII-2, respectively). The principles of hospice care are the same in a correctional setting as in the community; namely, "pain control, patient autonomy, multidisciplinary team, patient and family as unit of care, volunteers" (Price, 1999). There are some barriers to operating a hospice in correctional facilities, though, that need to be addressed. These include institutional policies and procedures that often limit prescribing narcotics for prisoners, specify limits on family visiting, prohibit visits from other inmates when a patient is in the infirmary, and prohibit inmates from serving as volunteers in any "caregiving" activity.

In addition, there are other barriers that must be overcome. Correctional officials concerned with liability may be leery about permitting inmates to die in their facilities. Inmates—a number of whom already distrust the administration and even the health delivery system—may be concerned that they are being coerced to accept "comfort care" in lieu of more costly treatment. Legal issues such as writing advance directives and living wills, designating health care proxy agents, and signing do-not-resuscitate orders are particularly challenging in an atmosphere of inmate suspicion and officials' concern with potential liability.

Despite such barriers, however, the proliferation of correctional hospice programs in the past decade is proof that such problems can be addressed successfully. A number of excellent articles can assist prison and jail staff in understanding the issues surrounding hospice and palliative care[51] and in addressing the ethical and legal concerns regarding end-of-life care behind bars.[52] Other articles describe components of successful hospice programs in correctional facilities.[53]

Compassionate release programs are another approach that can be used with terminally ill patients. In a 1988 survey, the Texas Department of Criminal Justice (TDCJ) noted that 15 of the 40 responding state DOCs had provisions for transferring terminally ill prisoners to noncorrectional care settings.[54] The Illinois DOC's 1990 survey reported that 21[55] of the 30 responding state DOCs had compassionate release programs.[56] Unfortunately, neither survey reported the frequency with which compassionate release was used. A report of the Correctional Association of New York (1990) suggests that the availability of early release mechanisms does not mean that this option is used routinely. Of the five states with the largest number of HIV-infected inmates,[57] only New Jersey and Texas reported that their governors had granted executive clemency to any prisoners with AIDS.[58]

A national survey conducted on behalf of the American Bar Association (ABA) in 1993 reported that only three jurisdictions had no mechanism whatsoever for compassionate release (Russell, 1994). Unfortunately, the author of the ABA report concluded that the eligibility criteria in most systems were so restrictive and the process for obtaining such releases was so onerous and protracted that most individuals died in prison. She recommended that compassionate release legislation include these elements:

- Cases must be processed expeditiously.
- All terminally ill inmates should be eligible for compassionate release regardless of their crime.
- Applications for compassionate release should be permitted by any interested person acting on a prisoner's behalf.
- Once an application is submitted, the medical evaluation and certification should occur within 7 days.
- The opinion of the prisoner's attending physician should be accepted without the need for a second physician's opinion.
- The statute should clearly specify the standards the physician should apply in evaluating the prisoner's condition and for drawing conclusions about his incapacity.
- The physician should not be required to make a finding about the prisoner's capacity to commit criminal acts or to determine whether he poses a threat to society.
- The statute should include a requirement that appropriate placement be confirmed for the prisoner prior to release and that arrangements for payment for medical treatment be complete (Russell, 1994:832-834).

Given the explosive population growth in our nation's prisons and jails over the past few years, and the unlikelihood of recidivism among the terminally ill, the possibility of early release for these individuals should be explored aggressively. DOCs are cautioned, though, against the "dumping syndrome" that displaced so many of the nation's mentally ill when the decision was made to deinstitutionalize them. Responsible release policies mandate that provisions be made for continuing care of the terminally ill in community settings. As Russell notes, "Ultimately, society is served if our compassionate impulses can reach beyond the issues of crime and punishment to serve all people as human beings" (1994:836).

C. Special Mental Health Needs

1. Self-Mutilators and the Aggressive Mentally Ill

At first glance, these two categories of inmates with special mental health needs appear to be unrelated, but they share some important commonalities. First, both types of offenders present extreme management problems for correctional officials. Whether inmates' aggression is turned inward or

outward, such acting-out behavior is difficult to address and control in a regular prison or jail unit. Second, there are times when both types of behavior are associated with underlying mental illness and times when they are not.[59] In evaluating such behavior, traditionally trained psychiatrists and psychologists may well determine that self-mutilators or aggressive mentally ill inmates do not meet the criteria for admission to an inpatient psychiatric program.

There is probably nothing more frustrating to individual correctional administrators than to be told by a clinician that an inmate who has repeatedly slashed his throat is not mentally ill or that an inmate with a psychiatric history is not "mad" at the moment, just "bad." All too often, self-mutilating inmates and the aggressive mentally ill are shuttled back and forth between regular correctional units and inpatient psychiatric facilities. Unit staff refer them for treatment because they do not know how to manage them, and staff at the psychiatric facility refuse them because they do not meet standard criteria for inpatient care. Often, the default option for such inmates is placement in restraints or administrative segregation, neither of which serves either the inmate or the institution well. These are temporary solutions at best that do nothing to address the underlying problem.

Someone must take the lead in developing programs to manage self-mutilators and the aggressive mentally ill in correctional facilities. Logically, this responsibility should rest with mental health professionals. In the previous chapter, it was argued that in corrections, the threshold for mental health services should be lower than that used in the community.[60] The failure of traditional correctional mental health programs to address the needs of self-mutilators and the aggressive mentally ill add strength to those arguments. Lowering the barriers to care may mean that inmates do not have to resort to extreme behaviors to gain attention.

As part of the preparation for this book, Walter Y. Quijano, Ph.D., a clinical psychologist, visited six DOCs during 1990 to review their mental health programs.[61] Two states had specific programs to address the management of self-mutilators and aggressive mentally ill inmates. Of the South Carolina DOC's mental health program, Dr. Quijano concluded that:

> The traditional conflict with security is minimal because distinctions between clinical and management tasks are not exaggerated and mental health services are considered management tools for correctional failures. Security acknowledges and is grateful for the positive impact of mental health services in administrative segregation and self-mutilation. (Quijano, 1990:6)

In the New York DOC, mental health services are provided by the state mental health system, but within the prison setting (except for tertiary care). Of this mental health system, Dr. Quijano stated that:

> Innovative approaches such as vigorous transitional care, the mandatory presence of clinicians in administrative segregation areas, and easy access to transitional care by self-mutilating inmates have shown results in lesser inpatient care admissions and crises among self-mutilators and ad-seg inmates. (Quijano, 1990:14)

Subsequent correspondence with Dr. Quijano yielded additional advice on the management of self-mutilation and explosive disorders in prisons. Because his comments can assist DOCs in establishing programs to manage these offenders, they are reproduced verbatim (see "Special Populations: Self-Mutilation and Explosive Disorders").

An innovative program that holds promise for the management of the aggressive mentally ill offender was undertaken by the TDCJ in June 1990. It is an inpatient program for aggressive inmates that does not require that such inmates even be on the current psychiatric caseload. Most of the referrals are anticipated to come from administrative segregation units. The purpose of the treatment program is: "to decrease hostile aggression while increasing the patient's ability to meet his needs using prosocial behavior. The therapeutic techniques employed

SPECIAL POPULATIONS: SELF-MUTILATION AND EXPLOSIVE DISORDERS

Walter Y. Quijano, Ph.D.

December 3, 1990

Although adequate behavioral and pharmacologic technologies exist for behavioral and psychiatric disorders, their management in the correctional setting is made more difficult by a prevailing apprehension among custody and clinical staff of being manipulated into delivering psychiatric services which, even for conventional thinking and affective disorders, sometimes are seen as pampering inmates. The suspicion of malingering and its accompanying withholding of services are particularly acute in the management of self-mutilation and explosive disorders. Yet, self-mutilators and individuals with explosive disorders, though a small number, are common in prisons and when ignored or not managed appropriately, result in deterioration of psychological well-being and in the end, usurp a disproportionate amount of resources. Thus, in the long run, the effective management of these disorders, necessarily a conjoint effort between custody and clinical staff, not only benefits inmates with these disorders but also contributes to the order of the prison and the cost-effectiveness of the psychiatric services department.

a. Self-Mutilation

Self-mutilation is the deliberate infliction of injury on one's body without the expressed intent to commit suicide. It is not a monolithic phenomenon and its etiology is varied though not well understood. In general, self-mutilation in the prison may be classified primarily as one of the following: (1) a psychiatric symptom; (2) a manipulative gesture for safety reasons; (3) a manipulative gesture for convenience; (4) a self-reinforcing behavior; or (5) a behavior with no apparent motivation. Each class calls for its own management technique. The following protocols are suggestive of what can be done.

Protocol #1: Self-mutilation as a psychiatric symptom. Inmates whose self-mutilation is judged by an attending clinician to be a symptom of a major psychiatric disorder should be clinically managed (preferably in a psychiatric inpatient facility) where a thorough psychodiagnostic work-up with self-mutilation as the presenting problem can be conducted. An important component of the evaluation process is complete neurological and neuropsychological examinations. The management of self-mutilation becomes secondary to the aggressive management of the psychiatric disorder (e.g., major affective disorder, major thought disorder, anxiety disorder with panic, depersonalization disorder, and borderline personality disorder) of which self-mutilation is considered a symptom. Incidents of self-mutilation among psychiatric patients with subtle symptoms tend to increase with the difficulty of access to care. The New York and South Carolina prison systems have successfully reduced incidents of self-mutilation by reducing barriers to psychiatric services. Unit assignment at discharge from the inpatient facility should take into consideration environmental factors that may precipitate decompensation. One idea is to assign the discharges to units with a mental health staff specially trained in the management of self-mutilation in order to maximize generalization of coping skills gained in the inpatient facility.

Protocol #2: Self-mutilation as a manipulative gesture for safety reasons. Inmates who are found to self-mutilate in order to manipulate themselves out of a dangerous setting (e.g., cell, wing, prison unit assignment) due to a perceived threat against their lives and/or limbs should be immediately provided safe housing in their current prison unit assignment. Having secured the temporary safety of the inmates, the attending clinician should promptly conduct a thorough psychodiagnostic evaluation to rule out psychiatric disorders correlated with the self-mutilation. If correlated psychiatric disorders are found, the inmates would be treated following Protocol #1 noted above. In each case, the attending clinician should promptly consult the warden who is requested to investigate the reality of the perceived threat. If the threat is verified by custody investigation and no correlated psychiatric disorders are found, the custody line of responsibility assumes the task of securing the safety of the inmate. This may involve change in housing assignment at the cell, wing, or unit level. If the threat is verified and a correlated psychiatric disorder is found, the custody line of responsibility assumes the task of securing the safety of the inmate while psychiatric treatment is simultaneously provided promptly at the current prison unit of assignment and subsequently in a psychiatric inpatient facility. Unit assignment at the time of discharge from the inpatient facility should, of course, take the threat issue into consideration.

Continued on next page

SPECIAL POPULATIONS: SELF-MUTILATION AND EXPLOSIVE DISORDERS
(Continued)

Protocol #3: Self-mutilation as a manipulative gesture for convenience. Inmates who engage in self-mutilation in order to acquire secondary gains of convenience should be placed immediately in protective custody until such time as the attending clinician, the warden, and the offending inmates agree that the inmates can re-assume responsibility for and control over their behaviors in general and self-destructive gestures in particular. The principal technique in this type is the combination of punishments processed and administered by the custody line of responsibility and behavioral contracting involving the attending clinician acting as team leader, the warden, and the offending inmates. As part of the punishment component, there should be a systemwide uniform minimum time (e.g., two weeks) to be spent in restrictive housing which accumulates with the number of repeated self-mutilation incidents. For example, the first incident would lead to a minimum of two weeks in restrictive housing. The second incident would result in four weeks of restrictive housing, and so on. It must be remembered that the efficacy of this approach may not be felt until some accumulation of restrictive housing time is accomplished. The team must insure that minimal or no secondary gains are actually acquired. The behavioral contracting method should include assertiveness training and education on ways and means of legitimately acquiring conveniences in the prison.

Protocol #4: Self-mutilation as a self-reinforcing behavior. Inmates who engage in self-mutilation for its intrinsic positive after effects should be treated using Protocol #1 with the emphasis on long term observation and psycho-diagnostics. Training in naturally self-reinforcing activities including relaxation training, rigorous exercise, biofeedback, and management of leisure activities should be conducted. Opiate receptor antagonists should be considered.

Protocol #5: Self-mutilation with no expressed motivation. Inmates who engage in self-mutilation for no apparent reason should be treated following Protocol #1 with emphasis on psycho-diagnostic evaluations.

These protocols are not the final word in the management of self-mutilation and individual prison units may develop locally adapted protocols. The important consideration is that self-mutilation is addressed, not just ignored, and its complexity recognized.[a]

b. Explosive Disorders

Two classes of disorders are addressed in this section: intermittent explosive disorder as defined by the DSM-III-R and persistent intense anger. Verbal and physical assaults secondary to these disorders are characterized by impulsivity, lack of premeditation, inability of the individual to modulate his behavior, disproportionate response to the perceived provocation, and remorse after the acting out. They should be distinguished from deliberate and purposeful attacks. These disorders and their accompanying behavioral expressions should not be automatically, simplistically, and solely considered as symptoms of antisocial personality disorder which are managed by punishment and physical restrictions alone. While housed to ensure the safety of others, behavioral, psychotherapeutic, and pharmacologic therapies (e.g., contingency management, anger management, and carbamazedine) must be provided. Successful management should help integrate inmates into the general population and reserve expensive administrative housing units as the intervention of last resort. A university-based medical school-sponsored study in the Texas prison system has found encouraging preliminary results in the use of attention and phenytoin in the management of impulse dyscontrol inmates.[b]

---

[a] As Dr. Quijano notes, other protocols for managing self-mutilating inmates are available. The Georgia Department of Corrections uses the same protocol for all of its self-mutilators regardless of the inmates' motivation. For a copy of this protocol, contact the Georgia Department of Corrections, Mental Health/Mental Retardation Services, Floyd Veterans Memorial Building, Room 756-East Tower, 2 Martin Luther King Drive SE., Atlanta, GA 30334.

[b] Dr. Quijano has prepared a bibliography on self-mutilation and explosive disorders to accompany his comments. It is included in a special section of the references listed at the end of this chapter.

[are] derived from behavior therapy and cognitive behavioral therapy."[62] Behavioral techniques used include extinction responding and the level system of earning privileges. Cognitive behavioral techniques include individual counseling, psychoeducational classes, and guided group therapy.[63]

The Texas program is no longer unique. In its 1999 survey of prison and jail systems, 22 of 28 prison systems and 4 of 8 jail systems reported that they had special programs to manage the aggressive mentally ill offender (see exhibits VIII-1 and VIII-2, respectively). In addition, Megargee (1995) provides guidance for clinicians in identifying and managing aggressive and violent mentally ill patients that can be useful in correctional facilities as well. Other authors address the pharmacological treatment of violent individuals (Gerner, 1994) or provide nonpsychopharmacological options for their care (Tardiff, 1994). Although not specific to the mentally ill, May's book (2000) contains a number of interesting articles on the link between violence and correctional facilities.

2. *Suicidal Inmates*

Suicide in confinement settings has not been studied widely. A few studies have examined characteristics of suicides in specific jails and lockups[64] and two national surveys compiled profiles of suicide victims in holding and detention centers.[65] These latter two surveys—conducted 7 years apart—had remarkably similar findings. The typical suicide victim in jails was a 30-year-old single, white male charged with a nonviolent offense. The method of choice was hanging. More than half of jail suicides occurred within the first 24 hours of incarceration. Two of three victims were in isolation. The suicide rate in local detention facilities was projected to be nine times greater than that for the general community.[66]

Similar national profiles have not been constructed on suicides among state prisoners in the United States. Two publications that discuss suicide in state DOCs (Anno's [1985] review of suicides in the Texas prison system and Salive et al.'s [1989] study of suicide deaths in Maryland prisons) both indicated that the risk of suicide was higher among prisoners than among the population at large. Other similarities of results occurred as well. In both studies—

- All victims were male.
- Their average age was 29.
- Whites were disproportionately at risk.[67]
- Offenders charged with crimes against the person (especially death-related offenses) were disproportionately at risk.
- No pattern was established regarding the duration of confinement at the time of suicide.[68]
- Hanging was the preferred method of suicide.[69]

Anno also found an increased risk of suicide associated with a history of mental illness and some evidence of an increased risk associated with a history of prior suicide attempts.[70] These findings are consistent with those reported in the general suicide literature.

Hayes published the results of the first national survey on the frequency of suicide in prisons (1995). He found a national rate of 20.6 suicides per 100,000 inmates during the 10-year period from 1984 to 1993. Although this rate is more than 50 percent higher than the suicide rate for the community at large, it is substantially lower than the suicide rate for jail inmates.

Suicide is the number one cause of death in jails, but not in prisons. The Bureau of Justice Statistics reported that for 1995, less than 5 percent of the 3,358 deaths of state and federal prisoners were suicides (Bureau of Justice Statistics, 1996:554), yet the suicide death rate in prison is still higher than that in the community. Because suicides (and homicides) in confinement are likely to be among the most preventable deaths, it is imperative for correctional systems to do all they can to reduce these rates. Suicide prevention techniques include screening procedures, architectural considerations, monitoring/observation patterns, and interaction techniques.[71]

Obtaining a history of prior suicide attempts as well as current suicidal ideation should be part of the initial mental status exam for all inmates. Equally important are crisis intervention teams[72] who are trained to assess suicide risk at any point during an inmate's incarceration. Available research suggests that among state prisoners, there is no one period of highest risk associated with duration of confinement,[73] in contrast to jail inmates who are most at risk during the first 24 hours of incarceration. Further, mental health staff are cautioned against the use of profiles (especially those based on demographic characteristics) to attempt to predict suicide risk.[74] Current situational stressors are likely to be more salient indicators.

Inmates identified as potentially suicidal may require special housing on a temporary basis, such as placement in a psychiatric observation cell. It is imperative that such cells be constructed following recommended guidelines for suicide proofing (e.g., no electrical outlets, no protrusions of any kind, security screening on the inside of any bars).[75] Such inmates should be monitored at a frequency commensurate with their level of risk and referred to a mental health professional for determination of a continuing care plan.

Although male inmates in maximum-security settings may have an increased risk of suicide,[76] no custody class is exempt from the possibility. Every prison and jail needs a comprehensive suicide prevention plan that addresses these elements:[77]

- Identification of potential suicides.
- Training of correctional and health staff to recognize potential suicides.
- Assessment of suicide risk by mental health professionals.
- Procedures for placing the potentially suicidal in special housing as needed.
- Monitoring procedures that designate level of staff, frequency of checks, and documentation requirements.[78]
- Procedures for referral for continuing care as needed.
- Procedures for releasing the individual from suicide watch.[79]
- Procedures for notifying appropriate correctional and health staff of the inmate's suicide status.
- Intervention techniques if a suicide is in progress.
- Notification of appropriate authorities in the event of a completed suicide.
- Appropriate reporting and documentation procedures.
- A full medical and administrative review after any completed suicide (including a psychological autopsy)[80] to determine whether any changes are needed in the suicide plan.
- Procedures for critical incident debriefing of all affected staff and inmates.

Most of these elements of an adequate suicide prevention plan have been components of national correctional health standards or reported in the literature on suicides in prisons and jails for some time, yet many systems are not doing enough to implement effective suicide prevention policies and practices. Hayes (1996) found in his survey of prison systems that 15 percent of DOCs did not have a comprehensive suicide prevention plan, and 6 percent of DOCs had no plan at all. He found that only 15 percent of DOCs had "policies or directives containing all or all but one of the six critical components to a suicide prevention plan (staff training, intake screening/assessment, housing, levels of supervision, intervention, and administrative review)" (p. 34).

In spite of everyone's best efforts, it is not possible to prevent all suicides in jails and prisons. There always will be inmates who offer no clues regarding their suicidal intent. Nonetheless, implementing the procedures outlined above will reduce the opportunity for suicide and should reduce the facility's potential liability as well.[81]

3. Sex Offenders

It is difficult to say anything meaningful about the management of sex offenders in prisons[82] and still be brief. In contrast to some of the other categories of special needs offenders discussed above, reams have been written about this group of inmates.[83] Even so, no absolute guidelines have been accepted for the identification, management, and treatment of sex offenders within a correctional setting.

A problem involved in deciding on treatment programs for sex offenders in prisons is their sheer number. A national study reported in May 1987 that more than 55,000 sex offenders were held in state prisons,[84] a number that, at that time, represented more than 10 percent of the prison population.[85] Some states reported that as many as one-third of their prisoners were sex offenders.[86] In 1995, the Bureau of Justice Statistics estimated that 234,000 sex offenders were under the control of correctional agencies, of which about 40 percent (93,600) were in prison and 60 percent (140,400) were under conditional supervision in the community (Greenfeld, 1997). The 93,600 estimate represented just under 10 percent of the total prison population for 1995.[87]

Vaughn and Sapp (1989) suggest that whatever the reported number of sex offenders is, it is likely to be seriously understated because first, a substantial number of sex offenses go unreported altogether, and second, there is strong motivation for those charged with sex offenses to seek a plea bargain and plead guilty to a nonsexual offense. Within the prison's social hierarchy, sex offenders have the lowest status (Vaughn and Sapp, 1989:79-82). The stigma associated with sexual deviance also helps explain why "hidden" sex offenders are not likely to seek treatment voluntarily.

Another problem associated with this group of prisoners is their sentence length. Greater societal attention to the problem of sexual victimization in the community during the 1970s and 1980s led to a series of changes in state sentencing guidelines for individuals convicted of sex crimes.[88] Not only are DOCs confronted with large numbers of sex offenders, but they are keeping them for relatively long periods of time. This, too, affects the decision regarding which sex offenders to treat and for how long.

A third confounding factor in the management of sex offenders is disagreement among professionals regarding whether they are "sick" or poorly socialized.[89] Determining the etiology of deviant sexual behavior has obvious implications for its treatment and affects the decision regarding whether a medical model, a psychosocial model, or a behavioral model will be employed. Several articles contained in the National Institute of Corrections (NIC) manual on treatment of the incarcerated male sex offender suggest that different treatment modalities need to be used for different types of sex offenders.[90]

Finally, there are those who question the efficacy of implementing sex offender treatment programs while individuals are incarcerated. Evaluations of community-based treatment programs have shown mixed results. Evidence of successful outcomes in correctional programs is even harder to come by.[91] Little scientific information demonstrates that existing treatment programs have a positive impact on either behavior change or recidivism.[92] Additionally, the latter is a negative outcome measure fraught with its own methodological problems, not the least of which is the necessity of successfully tracking offenders once they are released from prison.

With all of these problems, it is no wonder that "sex offender treatment systems on a statewide basis are relatively rare" (Smith, 1988:31). Although virtually all states offer some treatment to some sex offenders,[93] a systematic approach to managing the needs of this special population is still needed. Those interested in learning more about the complexities involved in treating this diverse group of offenders are referred to the 1988 NIC manual by Schwartz and Cellini. It provides a comprehensive overview of the problem along with "state of the art" treatment modalities and discussion of model programs in correctional facilities.

4. Substance Abusers

Many of the problems identified in conjunction with treating sex offenders in prison are true of substance abusers as well. Professionals disagree on the etiology of the behavior and the selection of treatment modalities, and the efficacy of such programs within correctional facilities has not been demonstrated. Furthermore, outcome evaluations using recidivism as a measure are subject to the same methodological difficulties noted above.

Compounding these problems is the fact that it is hard to find many prisoners who are *not* substance abusers. The National Institute of Justice's (NIJ's) 1995 *Drug Use Forecasting Annual Report* (1996) stated that the percentage of males testing positive for one or more drugs at the time of arrest in 21 cities ranged from 51 to 83 percent—a figure virtually unchanged from the 1989 *Drug Use Forecasting Annual Report.*[94] For female arrestees, the range was from 41 to 84 percent.[95] Among state prisoners, Chaiken (1989b:1) determined that "62 percent of prisoners reported using illicit drugs regularly before incarceration and 35 percent used major drugs" (defined as heroin, methadone, cocaine, LSD [lysergic acid diethylamide], or PCP [phencyclidine]). This translates into literally hundreds of thousands of prisoners and still may be underestimated because this survey relied on self-reported behavior. Further, the prevalence of alcohol abuse was not reported.

A major survey undertaken by the National Center on Addiction and Substance Abuse (CASA) in 1997 found that about 80 percent of the then 1.7 million offenders behind bars "violated drug or alcohol laws, were under the influence of drugs or alcohol at the time of their crimes, stole property to buy drugs, had a history of drug or alcohol abuse or addiction, or share[d] some combination of those characteristics" (Criminal Justice Newsletter, 1997:4).

Given the magnitude of need, it is not surprising that most substance abusers do not receive treatment for this problem while incarcerated. Chaiken (1989b) noted that in 1987, only about 11 percent of inmates were enrolled in drug treatment programs, although most DOCs provide some services to some substance abusers. A decade later, the CASA study found that:

> The gap between current treatment programs and the need for them is "enormous and widening." State officials estimated that 70 to 85 percent of inmates need some level of substance abuse treatment, but in 1996, only 13 percent of state inmates were in any treatment program. (Criminal Justice Newsletter, 1997:4)

Some large counties have had good success with diverting substance-abusing offenders from jail with treatment-oriented drug courts.[96] A number of prison systems have residential-type treatment programs for more severe substance abusers. For example, Delaware has The Key program,[97] Oregon has the Cornerstone program (Field, 1989), and New York has Stay'n Out.[98] In fact, 21 of 28 prison systems and one large jail reported having residential therapeutic communities for substance abusers (see exhibits VIII-1 and VIII-2, respectively). Other prison and jail systems offer educational information or self-help groups (e.g., Alcoholics Anonymous, Narcotics Anonymous) to interested offenders; however, few prisons and jails have a systematic treatment program designed to reach all substance abusers in their care and custody.

One exception is a program initiated by the Illinois Department of Corrections (IDOC). IDOC has a comprehensive plan for substance abuse services that includes—

- Initial assessments of substance abuse problems at all reception centers.
- Substance abuse education at all facilities by trained substance abuse educators.
- Self-help programs at all adult facilities.

- Residential treatment units at four male, one female, and one juvenile institution.
- Intensive outpatient treatment programs at three facilities.
- Special programs for inmates who are both mentally ill and substance abusers at one female treatment center and one male psychiatric center.[99]

Clearly the problem of substance use and abuse among prisoners needs to be addressed. Most correctional administrators acknowledge the link between substance abuse and crime, but not all are convinced that helping to find a solution is their responsibility. The decline of the "rehabilitative ideal" as a purpose of correctional facilities found favor during the 1970s and 1980s. This stance has been largely supported by the courts, which have consistently rejected prisoners' claims of a right to rehabilitation or to treatment for substance abuse while incarcerated.[100] An inmate in need of medical attention for a problem associated with substance abuse (e.g., overdose, withdrawal) must be provided with appropriate treatment (Carlson and Kennedy, 1998). This occurs frequently in jails where inmates are admitted directly from the streets but is a rare occurrence in prisons. By the time most offenders arrive at the prison system's reception center, they no longer need medical attention for substance abuse. Detoxification has occurred at the county jail or another community facility.

Although rehabilitation of substance abusers in prisons and jails may not be mandatory, correctional administrators would do well to consider expanding their efforts. A comprehensive program for substance abuse services in jails and prisons could have important long-term benefits for the criminal justice system as a whole and holds promise for reducing the rate of substance abusers returning to incarceration.[101] Recently reported studies confirm that comprehensive in-prison drug treatment programs coupled with treatment on release can reduce the likelihood of rearrest and lower the probability of resumed substance abuse.[102]

5. The Mentally Retarded Offender

Among the general population, estimates of the number of retarded citizens range from 1 to 3 percent.[103] Among prisoners, McCarthy's survey of state and federal corrections departments revealed an average of 2.5 percent of all offenders were classified as retarded, but the range was from zero to more than 38 percent in specific DOCs (McCarthy, 1985:18). Using published incidence studies of mental retardation among juvenile offenders, the National Center for State Courts arrived at a weighted prevalence of 12.6 percent.[104] For adult offenders, Santamour (1989) suggests that the prevalence of mental retardation is between 4 and 9 percent.

Part of the variation in prevalence rates may be attributable to differences in defining mental retardation. Coffey et al. (1989) suggest that there are well-accepted definitions for the terms *mental retardation, developmentally disabled, learning disabled,* and *learning disadvantaged* and that these terms should not be used interchangeably. The focus here is solely on the retarded because, as a group, they are most closely associated with special health needs.[105]

Like the physically handicapped, the needs of the retarded offender cut across several program lines. Planning for this group should include representatives from custody staff, social services, special education, vocational programs, correctional industries, and recreational services in addition to mental health staff. Traditional responsibilities of the latter include administration of intelligence and psychological tests to diagnose retardation[106] and the development of individual habilitation plans for offenders who meet the definition of retardation.[107] Case management is a useful approach for this group of offenders.

Mental health counselors also can help retarded offenders to accept the limitations of their conditions and to develop constructive ways of dealing with their anger and frustration. Many of the retarded have difficulty adapting to the jail or prison environment and may become management problems.

They are more likely than nonretarded offenders to be charged with disciplinary offenses, sometimes because they do not understand the rules and sometimes because of their inappropriate behavior.[108] Santamour suggests that retarded offenders can benefit from both individual supportive counseling and group problem-solving activities (Santamour, 1989). Several model programs for the retarded offender are noted in the literature, including those offered by DOCs in California,[109] Georgia,[110] Nebraska,[111] South Carolina,[112] and Texas.[113]

At a minimum, every DOC must take steps to ensure the physical safety of the retarded and their "freedom from undue restraint."[114] Retarded offenders are highly susceptible to victimization by other inmates that can range from taking their commissary items to engaging in sexual misconduct. As a consequence, some type of protective housing is needed. Professionals differ as to whether segregated institutions, segregated housing, or mainstreaming the retarded as much as possible is the best approach to managing them within correctional facilities.[115] Regardless of the approach taken, housing decisions for retarded offenders must take into account their special need for personal safety.

Perhaps because retardation cannot be "cured," a number of prisons and jails do not provide any special programming for this group of offenders. Hall (1992) estimates that fewer than 10 percent of retarded offenders receive any specialized services even in systems where they have been officially identified. This is shortsighted. As Petersilia (1997) notes, there is renewed interest in the retarded due to the (then) requirements of the Americans with Disabilities Act (ADA). Under previous interpretations of the ADA, all correctional agencies were to initiate screening for retardation and develop programs to assist those identified as retarded. In addition, each correctional program, activity, and service was to be evaluated to ensure that it was accessible to and usable by those individuals with disabilities who are eligible to participate (Petersilia, 1997).

A recent court decision regarding the ADA leaves doubt about its applicability to prisons.[116] Nonetheless, failure to adequately address the needs of this special population of offenders is likely to be a major source of class action litigation in the future. California—which houses the largest prison population in the United States—has already had such a suit filed (*Clark v. California,* 1997).

D. CONCLUSIONS

The preceding discussion helps illustrate the wide variety of offenders with special health requirements and underscores the necessity of careful planning to address those needs. Much of the material focuses on in-house programming. More global approaches to special needs offenders would emphasize alternatives to incarceration, changes in sentencing guidelines, and more judicious use of compassionate release programs. Although prison and jail personnel are encouraged to work with state legislators and other appropriate individuals to effect such changes, the special needs offender, like the poor, will always be with us. In fact, if current trends are not reversed, the cost of caring for offenders with special needs is likely to overwhelm many DOCs' budgets in the future.

Examining the various special health needs of offenders revealed a common theme: Almost without exception, national incidence and prevalence data were lacking. More important, at least in terms of its potential impact on specific DOCs, good data often are not available at the state or local level either. In the absence of specific information on the extent and level of current needs, it is impossible to plan for what many believe to be the coming crisis for corrections; namely, many more inmates who are older, sicker, and staying longer will need to be housed and cared for in institutions whose resources already are stretched to the limit. The need for accurate data in planning correctional health facilities is examined further in chapter XI, and data management and documentation are the focus of chapter XII as well.

NOTES

1. See Austin and McVey (1989:4-5). See also Weiner and Anno (1992).

2. See, e.g., McCarthy and Langworthy (Eds.) (1989).

3. See Austin and McVey (1989).

4. See Gilliard (1999).

5. The Illinois Department of Corrections conducted a survey of the 50 state departments of corrections (DOCs) to identify their special needs populations (1990). Only about three-fifths of the DOCs responded and many were not able to provide actual data for several of the categories listed. In 1998, Hornung et al. (2000a) again surveyed the state and federal prison systems regarding the prevalence of certain chronic diseases and mental disorders. Of the 41 systems responding, only 19 (46%) said they had data on the number of inmates in their system with chronic diseases, and only 8 (19.5%) states were able to provide information on the number of inmates in their system with specific mental disorders.

6. Regular reports on the prevalence of acquired immune deficiency syndrome in prisons and jails have been published by the National Institute of Justice since 1986. The last report was released in 1995 giving 1994 data (see Hammett et al., 1995). A report summarizing 1996-1997 data is currently in press.

7. All housing recommendations are based on medical need without regard to the patients' custody classifications.

8. The National Institute of Corrections' National Academy of Corrections has a training package, "A Systems Approach to Managing Chronically Ill Inmates (in the Criminal Justice System)," that may help in planning for special needs offenders. The package is available for loan by writing the NIC Information Center, 1860 Industrial Circle, Longmont, CO 80501; calling (800) 877-1461; or e-mailing *asknicic@nicic.org*.

9. In prisons, the number of nonnatural causes of death (such as accidents, homicides, and suicides) often exceeds that of deaths from specific natural causes (with the exception of acquired immune deficiency syndrome in some systems). (See Bureau of Justice Statistics 1997:554.) Published studies of prisoner mortality rates are rare. An article by King and Whitman (1981) identified only three such studies and the two for prisons were both for very limited time periods (i.e., 1 or 2 years). In Maryland, a study of deaths in the prison system over a 9-year period (1979–1987) showed that the leading cause of death was circulatory system disease, followed by suicide and then "homicides and legal intervention." The latter term, presumably, is a euphemism for executions and other deaths caused by the state (e.g., killing an escapee). (See Salive et al. (1990).) In his article, Raba found only four published studies on mortality rates in prisons and only four in jails (1998).

10. Again, good data are not available for state prisoners, although there have been a handful of studies of hypertension among specific jail populations (see, e.g., Raba and Obis, 1983, and Smirnoff and Keith, 1983). Hornung et al. (2000b) projected that among state prison inmates, 16.1% of whites, 18.6% of Blacks, and 11.1% of Hispanics were hypertensive.

11. The Texas Department of Criminal Justice's Health Summary for Classification form lists some of the items to be considered in housing and program assignments for offenders with special health needs. See appendix A.

12. See Hornung et al. (2000b).

13. The American Diabetes Association has established guidelines for health providers in managing diabetes. A position statement entitled "Management of Diabetes in Correctional Institutions" is available to practitioners at no charge. The association also has a health education pamphlet for prisoners called "The Prison Inmate with Diabetes: What You Need to Know." Both of these publications can be obtained by writing the American Diabetes Association,

1701 North Beauregard Street, Alexandria, VA 22311; calling (800) 342-2383; or visiting the association's Web site at *http://www.diabetes.org*.

14. See Rieder et al. (1989); Wilcock et al. (1996).

15. Ibid.

16. See Selwyn et al. (1989).

17. See Hammett et al. (1995).

18. See chapter X, section C.

19. Ronald M. Shansky, MD, and Armond H. Start, MD, for example, believe that deaths from asthma may be the single most preventable natural cause of death among prisoners.

20. See Puisis and Robertson (1998).

21. See the following publications and the references cited therein: King and Desai (1979), King and Whitman (1981), Healton (1981), and Coleman et al. (1984).

22. See King and Desai (1979) and Healton (1981).

23. King and Desai (1979) and Puisis and Robertson (1998) provide some basic guidelines that may be useful in the diagnosis and management of patients with epilepsy.

24. See Coleman et al. (1984).

25. In their survey of the Illinois prison system, Coleman et al. found that many correctional officers still believed it was appropriate to "assist" people having seizures by placing something in their mouth or by restraining them or by moving them. The Epilepsy Foundation of America (EFA) offers a number of publications that provide up-to-date information on the etiology and management of seizure disorders. For information, write to EFA's National Epilepsy Library and Resource Center, 4351 Garden City Drive, Landover, MD 20785; call (301) 459-3700; or visit EFA's Web site at *http://www.efa.org*.

26. See, e.g., Volume 5, Issue 2 of the Journal of Correctional Health Care, which contains more than 100 references to recent articles on human immunodeficiency virus/acquired immune deficiency syndrome.

27. See chapter X, sections C.1. and D.4.b. and the references cited therein.

28. Medications alone currently average $10,000 to $15,000 annually per patient, and another $500 to $1,000 annually per patient for lab work (Personal communication with Ronald Shansky, MD, May 31, 2000). Add to this the cost of more staff in-house, the charges of acquired immune deficiency syndrome (AIDS) specialists, and the cost of sometimes lengthy hospital stays, and it is easy to see why caring for AIDS patients is overwhelming some Department of Corrections budgets.

29. The Commission's 1994 policy statement on the administrative management of inmates who are HIV-positive or who have AIDS is reproduced in its entirety in appendix I. See also National Commission on Correctional Health Care, 1995. To keep pace with clinical developments, the National Commission on Correctional Health Care (NCCHC) board periodically reviews this policy statement to ensure that the information is current. Interested individuals should contact NCCHC for updates to its policy statement.

30. See Hall (1990).

31. Ibid., p. 11.

32. For additional information on the legal issues regarding managing disabled inmates, see Rold, chapter III of this book, section J.1.

33. See also Bagby and Clark (1993) and Paris (1998).

34. Difficulty communicating complicates the diagnostic process. Additionally, interpreters sometimes embellish or distort the information from the patient. Accurate diagnosis of mental problems is particularly difficult because gestures and body movements may be misinterpreted and many diagnoses rely on the pattern of verbal expressions. For more information, see Parwatikar et al. (1990).

35. See Robert Wood Johnson Foundation (1998).

36. See Burnett (1989).

37. See Walsh (1989:217).

38. See Sapp (1989:20) and the references cited therein. See also Walsh (1989).

39. See Morton (1992).

40. See comments of Ken Peterson, RN, as noted in the Correctional Law Reporter (1990:58); personal communication with Ronald M. Shansky, MD, 1990; Faiver (1998); and Falter (1999).

41. See Hall (1990:9).

42. For a fuller discussion of age-related changes, see Booth (1989), especially pp. 199-206.

43. For additional information on the management of the elderly offender, see Faiver (1998), Morton (1992), and Rosefield (1993).

44. See Moore (1989).

45. Baer (1989:5) cited the term "Centers for the Treatment of Old Folks."

46. Initiated by Professor Jonathan Turley, the Project of Older Prisoners seeks early release of elderly offenders based on their infirm condition and low risk of recidivism. See National Commission on Correctional Health Care, 4 CorrectCare 4:1 (1990).

47. A good case can be made for allowing terminally ill inmates to have access to experimental drugs and therapies. See the discussions on clinical trials in chapters III and IV.

48. See Gross (1990:12).

49. Ibid., p. 14.

50. Ibid., p. 13.

51. See, e.g., Dubler (1998), Dubler and Heyman (1998), Maull (1991a), Robert Wood Johnson Foundation (1995).

52. See the special issue of the Journal of Law, Medicine & Ethics (1999).

53. See e.g., Federal Medical Center (no date), Maull (1991b), National Prison Hospice Association (no date), Seidlitz (1998).

54. See Texas Department of Criminal Justice (1990).

55. Unfortunately, the Texas Department of Criminal Justice (TDCJ) survey did not list the names of the 40 states responding, so it is not possible to determine whether more states initiated compassionate release programs between 1988 and 1990 or were part of the 10 states that did not respond to the TDCJ survey.

56. See Hall (1990:10).

57. The five states are California, Florida, New Jersey, New York, and Texas.

58. The New Jersey Governor's Office had granted "one or two applications for executive clemency" to prisoners with acquired immune deficiency syndrome (AIDS) over a 5-year period. The Texas Governor's Office approved 40 percent of the 145 applications for emergency medical reprieves from 1987 through March 1990, some of which were for prisoners with AIDS. The New York Governor's Office, in spite of a 17- to 20-percent HIV-seropositive rate and 920 AIDS deaths since 1981 in the department of corrections, had not approved a single application for executive clemency for prisoners with AIDS. For more information, see the report by the Correctional Association of New York (1990).

59. Kim Thorburn, MD, has written an excellent article on the medical management of self-mutilation in prisons. See Thorburn (1984).

60. See chapter VII, section C.3.

61. Mental health programs in the following departments of corrections were reviewed: Maryland, New York, South Carolina, South Dakota, Texas, and Vermont.

62. See Texas Department of Criminal Justice (1990:11).

63. Ibid.

64. See, e.g., Danto (1973) and the articles contained therein. Also see the bibliographical listings contained in Hayes and Rowan (1988) and the special issues on jail suicide in Volume 60 of the Psychiatric Quarterly, 1989.

65. See Hayes and Kajdan (1981) and Hayes and Rowan (1988).

66. Ibid.

67. This finding is consistent with the general literature on suicides in the community. For an interesting discussion of why Black suicide rates are lower than white suicide rates, see Griffith and Bell (1989).

68. Anno (1985:87-88) reported a range of time served at the point of suicide from 6 days to more than 5 years. Half of the victims had served a year or less of their sentences and half had served more than a year. Salive et al. (1989:367) reported a range of time served from less than one month to more than 180 months. These findings are very different from those reported in studies of jail suicides, where the majority commit suicide within 24 hours of confinement. See Hayes and Kajdan (1981) and Hayes and Rowan (1988).

69. Anno (1985) reported that 89 percent of the 38 Texas victims died from hanging and Salive et al. (1989) found that 86 percent of the 37 Maryland suicides were by hanging. Other methods reported in both studies included cutting, drug overdoses, and falls from heights.

70. These factors were not examined in the Maryland study.

71. See Anno (1985).

72. See chapter VII, section C.2.

73. See Anno (1985) and Salive et al. (1989).

74. See Anno (1985) and Kennedy and Homant (1988).

75. For additional guidelines, see Atlas (1989), Hayes (1998), Schuster (1980), and Tartaro (1999).

76. Salive et al. (1989:367) found that maximum security inmates had a relative risk of suicide that was 5.1 times that of inmates in other types of custody settings.

77. Most of these elements are addressed further in the National Commission on Correctional Health Care essential standards on suicide prevention in jails and prisons. See National Commission on Correctional Health Care (1996:65-67; 1997:68-69).

78. A sample policy statement and observation checklist are provided in appendix H.

79. Placing an inmate in a psychiatric observation cell is a temporary measure and is not intended to be a lengthy or permanent housing assignment.

80. Guidelines for conducting a psychological autopsy are reviewed in Spellman and Heyne (1989).

81. For a discussion of legal liability in custodial suicides, see O'Leary (1989). See also Cohen (1998).

82. Sex offender treatment is seldom provided in jails because of the generally short stay of these inmates.

83. See, e.g., Brecher (1978), Schwartz (Ed.) and Cellini (1988), and the special volumes of the Pennsylvania Prison Society's The Prison Journal dated Fall-Winter 1988, Spring-Summer 1989, and Fall-Winter 1989. More recent references include Harry and Shank (1996), Quijano (1993), Prendergast (1991), Travin (1994), and Weisman (1998).

84. This information is from Contact Center, Inc.'s Corrections Compendium dated May 1987, as cited in Schwartz (Ed.) and Cellini (1988:1).

85. See Bureau of Justice Statistics (1988:491).

86. Op. cit. in endnote 82.

87. See Bureau of Justice Statistics (1997:518).

88. See, e.g., Darnell (1989), Jenkins and Katkin (1988), and McKenna (1988).

89. See Vaughn and Sapp (1989:77-78).

90. See Schwartz (Ed.) and Cellini (1988).

91. See Dougher (1988).

92. See Green (1988) and Weisman (1998).

93. Schwartz (ed.) and Cellini (1988:2) reported that 46 states offered at least group therapy, while a number had "highly sophisticated, multi-modality programs." Appendix F of that same publication described model programs in 24 departments of corrections. What was most striking to this author was that almost none of the model programs appeared to have evaluation components to measure their effectiveness.

94. See National Institute of Justice (1990:2).

95. In 1997, the National Institute of Justice expanded its drug use forecasting program to 35 sites and now reports statistics for arrestees by type of drug used. See National Institute of Justice (1999a, b, c, and d).

96. See Finn and Newlyn (1993) and Granfield et al. (1998).

97. See Hooper and Wald (1990).

98. See Chaiken (1989a).

99. For more information about the Illinois Department of Correction's substance abuse services, contact Anthony T. Schaab, Ph.D., Chief of Mental Health Services, IDOC, by writing to 4-200 State of Illinois Center, 100 West Randolph Street, Chicago, IL 60601 or by calling (312) 814-3017. For additional information on developing comprehensive drug treatment services, see National Institute of Corrections (1991).

100. For a legal analysis, see Cohen (1998).

101. Chaiken (1989a) provides an indepth look at the success of in-prison programs for drug abusers.

102. See, e.g., Field (1989), Hanlon et al. (1998), Journal of the American Medical Association (1997), Martin and Inciardi (1997), Mecca (1995), Prendergast et al. (1996), and The Prison Journal (1993).

103. See Santamour and West (1977), Coffey et al. (1989), and Santamour (1989).

104. This information is as reported in Coffey et al. (1989).

105. In addition to the retarded, substantial numbers of inmates have learning disabilities or are functionally illiterate. One study reported in Coffey et al. (1989:21) found that 42 percent of inmates were learning disabled. The problems of these latter groups, however, are largely the province of departments of corrections' education divisions.

106. National Commission on Correctional Health Care standards for jails (1996:51) and for prisons (1997:47) mandate that all inmates be screened for mental retardation within 14 days of their admission to the jail or prison system.

107. The most widely accepted definition of mental retardation includes three components: (1) the person must test subaverage in intellectual functioning (and not as a result of cultural, educational, or language deprivations) as determined by an individually administered standardized intelligence test; and (2) he or she must show impairment in adaptive skills (e.g., personal hygiene, feeding, working, socializing) not commensurate with age; and (3) these disabilities must have manifested themselves before the person reached age 18. For more specific information, see Coffey et al. (1989). See Hall (1985) on the problems of identifying and serving the retarded in prison.

108. See Santamour and West (1977) and Coffey et al. (1989).

109. See Kramer (1986) and Coffey et al. (1989).

110. See Hall (1985) and Coffey et al. (1989).

111. See Morton et al. (1986) and Coffey et al. (1989).

112. See Coffey et al. (1989).

113. See Pugh (1986) and Santamour (1989).

114. See Cohen (1998).

115. See the discussion in Rideau and Sinclair (1983:109-111).

116. See Rold, chapter III of this book.

REFERENCES

Articles and Books

American Correctional Association
1999 1999 Directory. Lanham, MD.

Anno, B. Jaye
1985 "Patterns of suicide in the Texas Department of Corrections 1980-1985." 5 Journal of Prison and Jail Health 2:82-93.

Atlas, Randall
1989 "Reducing the opportunity for inmate suicide: A design guide." 60 Psychiatric Quarterly 2:161-172.

Austin, James, and Aaron David McVey
1989 The 1989 NCCD Prison Population Forecast: The Impact of the War on Drugs. San Francisco: National Council on Crime and Delinquency.

Baer, Ora
1989 "Experts see growth in elderly inmate populations." 20 Criminal Justice Newsletter 22:5-7.

Bagby, Rita V., and John H. Clark
1993 "Managing the paraplegic in the correctional setting." 12 Journal of Prison and Jail Health 2:63-72.

Booth, Dorothy E.
1989 "Health status of the incarcerated elderly: Issues and concerns." 13 Journal of Offender Counseling, Services and Rehabilitation 2:193-214.

Braun, M. Miles, Benedict I. Truman, Barbara Maguire, George T. DiFerdinando, Jr., Gary Wormser, Raymond Broaddus and Dale L. Morse
1989 "Increasing incidence of tuberculosis in a prison inmate population: Association with HIV infection." 261 Journal of the American Medical Association 3:393-397.

Brecher, Edward M.
1978 Treatment Programs for Sex Offenders. Washington, DC: U.S. Department of Justice, Law Enforcement Assistance Administration.

Bureau of Justice Statistics
1988 Sourcebook of Criminal Justice Statistics, 1987. Washington, DC: U.S. Department of Justice.

1996 Sourcebook of Criminal Justice Statistics, 1995. Washington, DC: U.S. Department of Justice.

1997 Sourcebook of Criminal Justice Statistics, 1996. Washington, DC: U.S. Department of Justice.

Burnett, Cathleen
1989 "Introduction" in special issue Older Offenders: Current Trends. 13 Journal of Offender Counseling, Services and Rehabilitation 2:1-18.

Carlson, Blair, and Jane A. Kennedy
1998 "The treatment of alcohol and other drug abstinence syndromes." Chapter 23 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Chaiken, Marcia R.
1989a In-Prison Programs for Drug-Involved Offenders. Washington, DC: U.S. Department of Justice, National Institute of Justice.

1989b "Prison programs for drug involved offenders." Research in Action. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Coffey, Osa P., Norma Procopiow and Neal Miller
1989 Programming for Mentally Retarded and Learning Disabled Inmates: A Guide for Correctional Administrators. Washington, DC: U.S. Department of Justice, National Institute of Corrections.

Cohen, Fred
1998 The Mentally Disordered Inmate and the Law. Kingston, NJ: Civic Research Institute, Inc.

Coleman, Tina E., Steven Whitman, Terre Massey, Cecil Patmon and Lambert King
1984 "Attitudes and knowledge of correctional officers toward people with epilepsy." 4 Journal of Prison and Jail Health 1:16-31.

Correctional Association of New York
1990 AIDS in Prison Project Update: A Medical Release Proposal. New York.

Correctional Law Reporter
1990 "Increasing numbers of aged or chronically ill inmates present major challenge for '90's." 2 Correctional Law Reporter 4:57-58.

Criminal Justice Newsletter
1997 "Alcohol and drugs implicated in 80 percent of incarcerations." Volume 28, Number. 245:4-5.

Danto, Bruce L.
1973 Jail House Blues: Studies of Suicidal Behavior in Jail and Prison. Orchard Lake, MI: Epic Publications, Inc.

Darnell, Scott W.
1989 "No more victims: Alternative treatment methods for the incarcerated sex offender." 69 The Prison Journal 1:83-87.

Dougher, Michael J.
1988 "Clinical assessment of sex offenders." Pp. 77-84 in Barbara K. Schwartz (Ed.) and H.R. "Hank" Cellini, A Practitioner's Guide to Treating the Incarcerated Male Sex Offender: Breaking the Cycle of Sexual Abuse. Washington, DC: U.S. Department of Justice, National Institute of Corrections.

Dubler, Nancy N. (Ed.)
1998 "The collision of confinement and care: End-of-life care in prisons and jails." 26 Journal of Law, Medicine and Ethics 149-156.

Dubler, Nancy N., and Budd Heyman
1998 "End-of-life care in prisons and jails." Chapter 30 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Faiver, Kenneth L.
1998 "Special issues of aging." Chapter 7 in Kenneth L. Faiver (Ed.), Health Care Management Issues in Corrections. Lanham, MD: American Correctional Association.

Falter, Robert G.
1999 "Selected predictors of health service needs of inmates over age 50." 6 Journal of Correctional Health Care 2:149-175.

Federal Medical Center
no date Hospice in a Correctional Environment. Fort Worth: Federal Bureau of Prisons.

Field, Gary
1989 "The effects of intensive treatment on reducing the criminal recidivism of addicted offenders." 52 Federal Probation 51-56.

Finn, Peter, and Andrea K. Newlyn
1993 Miami's "Drug Court": A Different Approach. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Gerner, Robert H.
1994 "Pharmacological treatment of violent behaviors." Chapter 61 in Richard Rosner (Ed.), Principles and Practice of Forensic Psychiatry. New York: Chapman & Hall.

Gilliard, Darrell K.
1999 "Prison and jail inmates at midyear 1998." Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Granfield, Robert, Cynthia Eby and Thomas Brewster
1998 "An examination of the Denver drug court: The impact of a treatment-oriented drug-offender system." 20 Law & Policy 2:183-202.

Green, Randy
1988 "Sex offender treatment program evaluation." Pp. 61-68 in Barbara K. Schwartz (Ed.) and H.R. "Hank" Cellini, A Practitioner's Guide to Treating the Incarcerated Male Sex Offender: Breaking the Cycle of Sexual Abuse. Washington, DC: U.S. Department of Justice, National Institute of Corrections.

Greenfeld, Lawrence A.
1997 Sex Offenses and Offenders. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Griffith, Ezra E.H., and Carl C. Bell
1989 "Recent trends in suicide and homicide among blacks." 262 Journal of the American Medical Association 16:2265-2269.

Gross, Donalyn A.
1990 "Thanatology—Help for the terminally ill inmate." 22 The Correctional Psychologist 1:12-15.

Hall, Jane N.
1985 "Identifying and serving mentally retarded inmates." 5 Journal of Prison and Jail Health 1:29-38.

1992 "Correctional services for inmates with mental retardation: Challenge or catastrophe?" Pp. 167-190 in R.W. Conley, R. Luckasson and G.N. Bouthilet, The Criminal Justice System and Mental Retardation. Baltimore: Brooks.

Hall, Marie
1990 Special Needs Inmates: A Survey of State Correctional Systems. Boulder, CO: U.S. Department of Justice, National Institute of Corrections.

Hammett, Theodore M., Rebecca Widom, Joel Epstein, Michael Gross, Santiago Sifre and Tammy Enos
1995 1994 Update: HIV/AIDS and STDs in Correctional Facilities. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Hanlon, Thomas E., David N. Nurco, Richard W. Bateman and Kevin E. O'Grady
1998 "The response of drug abuser parolees to a combination of treatment and intensive supervision." 78 The Prison Journal 1:31-44.

Harry, Rick, and Fred Shank
1996 "Treating sex offenders." 58 Corrections Today 6:82-85.

Hayes, Lindsay M.
1995 "Prison suicide: An overview and a guide to prevention." 75 The Prison Journal 4:431-456.

1996 "National and state standards for prison suicide prevention: A report card." 3 Journal of Correctional Health Care 1:5-38.

1998 "Suicide prevention in correctional facilities: An overview." Chapter 21 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Hayes, Lindsay M., and Barbara Kajdan
1981 "And Darkness Closes in . . . ": National Study of Jail Suicides. Washington, DC: National Center on Institutions and Alternatives.

Hayes, Lindsay M., and Joseph R. Rowan
1988 National Study of Jail Suicides: Seven Years Later. Alexandria, VA: National Center on Institutions and Alternatives.

Healton, Edward B.
1981 "The diagnosis and treatment of epilepsy in a prison setting." 1 Journal of Prison and Jail Health 2:134-143.

Hooper, Robert M., and Bruce Wald
1990 "The key program: Drug treatment within a correctional facility." 4 American Jails 3:50-54.

Hornung, Carlton A., B. Jaye Anno, Robert B. Greifinger and Soniya Gadre
2000a Health Care for Soon-To-Be-Released Inmates: A Survey of State Prison Systems. Volume II of the National Commission on Correctional Health Care/National Institute of Justice's Report to Congress. Washington, DC.

Hornung, Carlton, Robert B. Greifinger and Soniya Gadre

2000b A Projection Model of the Prevalence of Selected Chronic Diseases in the Inmate Population. Volume II of the National Commission on Correctional Health Care/National Institute of Justice's Report to Congress. Washington, DC.

Illinois Department of Corrections

1990 "Plan for substance abuse services." Chicago. Unpublished.

Jenkins, Philip, and Daniel Katkin

1988 "Protecting victims of child sexual abuse: A case for caution." 68 The Prison Journal 2:25-35.

Journal of the American Medical Association

1997 "Health agencies update." Volume 28, Number 7:536.

Journal of Correctional Health Care

1998 Special Issue. Compendium of Articles on HIV Care and Incarcerated Women. Volume 5, Issue 2.

Journal of Law, Medicine & Ethics

1999 "Symposium: Death and dying behind bars—Cross-cutting themes and policy imperatives." Volume 27, Issue 3. Boston: American Society of Law, Medicine & Ethics.

Kennedy, Daniel B., and Robert J. Homant

1988 "Predicting custodial suicides: Problems with the use of profiles." 5 Justice Quarterly 3:441-456.

King, Lambert N., and Bindu Desai

1979 "An epilepsy program for correctional institutions." Pp. 1-14 in Management of Common Medical Problems in Correctional Institutions: Epilepsy and Tuberculosis. Chicago: National Commission on Correctional Health Care.

King, Lambert N., and Steven Whitman

1981 "Morbidity and mortality among prisoners: An epidemiological review." 1 Journal of Prison and Jail Health 1:7-29.

Kramer, Norm

1986 "A treatment program for the developmentally disabled/mentally retarded offender." 66 The Prison Journal 1:85-92.

Martin, Steven S., and James A. Inciardi

1997 "Case management outcomes for drug-involved offenders." 77 The Prison Journal 2:168-183.

Maull, Fleet

1991a Dying in Prison: Sociocultural and Psychological Dynamics. Binghamton, NY: Haworth Press, Inc.

1991b "Hospice care for prisoners: Establishing an inmate-staffed hospice program in a prison medical facility." 7 The Hospice Journal 3:43-55.

May, John P. (Ed.)

2000 Building Violence: How America's Rush to Incarcerate Creates More Violence. Thousand Oaks, CA: Sage Publications, Inc.

McCarthy, Belinda, and Robert Langworthy (Eds.)

1989 Older Offenders: Perspectives in Criminology and Criminal Justice. New York: Praeger.

McCarthy, Brian

1985 "Mentally ill and mentally retarded offenders in corrections." Pp. 13-30 in Sourcebook on the Mentally Disordered Prisoner. Washington, DC: U.S. Department of Justice, National Institute of Corrections.

McKenna, James J., Jr.

1988 "A study of sentenced sexual psychopaths." 68 The Prison Journal 2:36-50.

Mecca, Andrew

1995 "Blending policy and research: The California outcomes study." Connection (June). Washington, DC: Foundation for Health Services Research.

Megargee, Edwin I.

1995 "Assessing and understanding aggressive and violent patients." Chapter 27 in J.N. Butcher (Ed.), Clinical Personality Assessment: Practical Approaches. New York: Oxford University Press.

Moore, Ernest O.
1989 "Prison environments and their impact on older citizens." 13 Journal of Offender Counseling, Services and Rehabilitation 2:175-192.

Morton, Jean, DeAnn Hughes and Eric Evans
1986 "Individualizing justice for offenders with developmental disabilities: A descriptive account of Nebraska's IJP model." 66 The Prison Journal 1:52-66.

Morton, Joann B.
1992 An Administrative Overview of the Older Inmate. Washington, DC: U.S. Department of Justice, National Institute of Corrections.

National Commission on Correctional Health Care
1990 "New Orleans conference to hear experts address aging prison population." 4 CorrectCare 4:1.

1995 "Position statement on the administrative management of inmates with HIV positive test results or AIDS." 2 Journal of Correctional Health Care 1:61-65.

1996 Standards for Health Services in Jails. Chicago.

1997 Standards for Health Services in Prisons. Chicago.

National Commission on Correctional Health Care/National Institute of Justice
2000 Report to Congress: The Health Status of Soon-to-be-Released Inmates. Volume I. Washington, DC.

National Institute of Corrections
1991 Intervening with Substance-Abusing Offenders: A Framework for Action. The Report of the National Task Force on Correctional Substance Abuse Strategies. Washington, DC: U.S. Department of Justice.

National Institute of Justice
1990 1989 Drug Use Forecasting Annual Report. Washington, DC: U.S. Department of Justice.

1996 1995 Drug Use Forecasting Annual Report. Washington, DC: U.S. Department of Justice.

1999a 1998 Annual Report on Cocaine Use Among Arrestees. Washington, DC: U.S. Department of Justice.

1999b 1998 Annual Report on Marijuana Use Among Arrestees. Washington, DC: U.S. Department of Justice.

1999c 1998 Annual Report on Methamphetamine Use Among Arrestees. Washington, DC: U.S. Department of Justice.

1999d 1998 Annual Report on Opiate Use Among Arrestees. Washington, DC: U.S. Department of Justice.

National Library of Medicine
1990 Current Bibliographies in Medicine: Prison Health Care. Washington, DC: National Institutes of Health.

National Prison Hospice Association
no date "Deep in the heart of (East) Texas: The Michael Unit hospice." NPHA News. Boulder, CO.

Neeley, Connie L., Laura Addison and Delores Craig-Moreland
1997 "Addressing the needs of elderly offenders." Corrections Today (August).

O'Leary, William D.
1989 "Custodial suicide: Evolving liability considerations." 60 Psychiatric Quarterly 1:31-72.

Ornduff, Jason S.
1996 "Releasing the elderly inmate: A solution to prison overcrowding." 4 Elder Law Journal 173-200.

Paris, Joseph E.
1998 "Care of the impaired and disabled." Chapter 27 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Parwatikar, S.D., James J. Williamson and Cynthia McGee
1990 "Treatment of hearing impaired in a psychiatric prison setting." Paper presented at the 14th National Conference on Correctional Health Care in New Orleans (September 18).

Petersilia, Joan
1997 "Justice for all? Offenders with mental retardation and the California corrections system." 77 The Prison Journal 4:358-380.

Prendergast, William E.
1991 Treating Sex Offenders in Correctional Institutions and Outpatient Clinics: A Guide to Clinical Practice. New York: Haworth Press.

Prendergast, Michael L., Jean Wellisch, and Mamie Mee Wong
1996 Residential Treatment for Women Parolees Following Prison-Based Drug Treatment: Treatment Experiences, Needs and Services, Outcomes." 76 The Prison Journal 3:253-274.

Price, Cheryl
1999 "To adopt or adapt? Principles of hospice care in the correctional setting." NPHA News (Spring). Boulder, CO.

The Prison Journal
1993 "Special issue: Drug-involved offenders." Volume 73, Numbers 3 and 4.

Pugh, Michael, with Mark Kunkel
1986 "The mentally retarded offenders program of the Texas Department of Corrections." 66 The Prison Journal 1:39-51.

Puisis, Michael, and John M. Robertson
1998 "Chronic disease management." Chapter 6 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Quijano, Walter Y.
1990 "Site visit report: Model mental health programs in prisons." Chicago: National Commission on Correctional Health Care. Unpublished.

1993 "Book review: Treating sex offenders' personality traits—Focus on behavior." 12 Journal of Prison and Jail Health 1:33-46.

Raba, Jack
1998 "Mortality in prisons and jails." Chapter 25 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Raba, John M., and Clare Barrett Obis
1983 "The health status of incarcerated urban males: Results of admission screening." 3 Journal of Prison and Jail Health 1:6-24.

Rideau, Wilbert, and Billy Sinclair
1983 "The mentally retarded offender." 3 Journal of Prison and Jail Health 2:101-111.

Rieder, Hans L., George M. Cauthen, Gloria D. Kelly, Alan B. Bloch and Dixie E. Snider, Jr.
1989 "Tuberculosis in the United States." 262 Journal of the American Medical Association 3:385-389.

Robert Wood Johnson Foundation
1995 On Dying in America. Princeton, NJ.

1998 "Eldercare: Where medicine, economics, and demographics collide." Quarterly Newsletter, Issue 3:1-2.

Rosefield, Herbert A.
1993 "Letter to the editor: The older inmate—Where do we go from here?" 12 Journal of Prison and Jail Health 1:51-58.

Russell, Marjorie P.
1994 "Too little, too late, too slow: Compassionate release of terminally ill prisoners—Is the cure worse than the disease?" Widener Journal of Public Law 3:799-855.

Salive, Marcel E., Gordon S. Smith and T. Fordham Brewer
1989 "Suicide mortality in the Maryland state prison system, 1979 through 1987." 262 Journal of the American Medical Association 3:365-369.

1990 "Death in prison: Changing mortality patterns among male prisoners in Maryland, 1979-87." 80 American Journal of Public Health 12:1479-1480.

Santamour, Miles B.

1989 The Mentally Retarded Offender and Corrections. Laurel, MD: American Correctional Association.

Santamour, Miles B., and Bernadette West

1977 The Mentally Retarded Offender and Corrections. Washington, DC: U.S. Department of Justice, Law Enforcement Assistance Administration.

Sapp, Allen D.

1989 "Arrests for major crimes: Trends and patterns for elderly offenders." 13 Journal of Offender Counseling, Services and Rehabilitation 2:19-44.

Schuster, Dwight W.

1980 The Recognition of Jail Inmates with Mental Illness, Their Special Problems and Needs for Care. Chicago: National Commission on Correctional Health Care.

Schwartz, Barbara K. (Ed.), and H.R. "Hank" Cellini

1988 A Practitioner's Guide to Treating the Incarcerated Male Sex Offender: Breaking the Cycle of Sexual Abuse. Washington, DC: U.S. Department of Justice, National Institute of Corrections.

Seidlitz, Anne

1998 "'Fixin' to die': Hospice program opens at LSP-Angola." NPHA News (Spring). Boulder, CO.

Selwyn, Peter A., Diana Hartel, Victor A. Lewis, Ellie E. Schoenbaum, Sten H. Vermund, Robert S. Klein, Angela T. Walker and Gerald H. Friedland

1989 "A prospective study of the risk of tuberculosis among intravenous drug users with human immunodeficiency virus infection." 320 The New England Journal of Medicine 9:545-550.

Smirnoff, Meg, and Robert Keith

1983 "Hypertension control in a prison setting." 3 Journal of Prison and Jail Health 1:54-62.

Smith, Roger C.

1988 "Program planning and implementation." Pp. 31-41 in Barbara K. Schwartz (Ed.) and H.R. "Hank" Cellini, A Practitioner's Guide to Treating the Incarcerated Male Sex Offender: Breaking the Cycle of Sexual Abuse. Washington, DC: U.S. Department of Justice, National Institute of Corrections.

Spellman, Anthony, and Barbara Heyne

1989 "Suicide? Accident? Predictable? Avoidable? The psychological autopsy in jail suicides." 60 Psychiatric Quarterly 2:173-184.

Tardiff, Kenneth

1994 "Violence: Causes and non-psychopharmacological treatment." Chapter 60 in Richard Rosner (Ed.), Principles and Practice of Forensic Psychiatry. New York: Chapman & Hall.

Tartaro, Christine

1999 "Reduction of suicides in jails and lock-ups through situational crime prevention: Addressing the needs of a transient population." 6 Journal of Correctional Health Care 2:235-263.

Texas Department of Corrections and Sam Houston State University

1989 Transferring Special Needs Offenders to Community-Based Programs. Huntsville, TX.

Texas Department of Criminal Justice

1990 A Treatment Program For the Aggressive Mentally Ill Offender. Huntsville, TX.

Thorburn, Kim Marie

1984 "Self-mutilation and self-induced illness in prison." 4 Journal of Prison and Jail Health 1: 40-53.

Travin, Sheldon
1994 "Sex offenders: Diagnostic assessment, treatment, and related issues." Chapter 75 in Richard Rosner (Ed.), Principles and Practice of Forensic Psychiatry. New York: Chapman & Hall.

Vaughn, Michael S., and Allen D. Sapp
1989 "Less than utopian: Sex offender treatment in a milieu of power struggles, status positioning, and inmate manipulation in state correctional institutions." 69 The Prison Journal 2:73-89.

Veneziano, Louis, Carol Veneziano and Charles Tribolet
1987 "The special needs of prison inmates with handicaps: An assessment." 12 Journal of Offender Counseling, Services and Rehabilitation 1:61-72.

Walsh, C. Eamon
1989 "The older and long term inmate growing old in the New Jersey prison system." 13 Journal of Offender Counseling, Services and Rehabilitation 2:215-248.

Weiner, Janet, and B. Jaye Anno
1992 "The crisis in correctional health care: The impact of the National Drug Control Strategy on correctional health services." 117 Annals of Internal Medicine 1:71-77.

Weisman, Andrea
1998 "Mental health outpatient services in correctional settings." Chapter 19 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Wilcock, Karen, Theodore M. Hammett, Rebecca Widom and Joel Epstein
1996 Tuberculosis in Correctional Facilities 1994-95. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Court Case

Clark v. California, 123 F.3d 1267 (9th Cir. 1997).

Bibliography on Self-Mutilation and Explosive Disorders

Aldridge, D., and J. Rossiter
1984 "A strategic assessment of deliberate self-harm." 6 Journal of Family Therapy 113-129.

Baumeister, A.A., and W. MacLean, Jr.
1984 "Declaration of self-injurious and stereotypic responding by exercise." 5 Applied Research in Mental Retardation 385-393.

Bennum, I.
1984 "Psychological models of self-mutilation." 14 Suicide and Life-Threatening Behavior 3:167-186.

Cavanaugh, J.L., Jr., and R.D. Marciniak
1989 "Atypical impulse control disorder." Pp. 2477-2486 in Treatments of Psychiatric Disorders, Volume 3. Washington, DC: American Psychiatric Association.

Cookson, H.M.
1977 "A survey of self-injury in a closed prison for women." 17 British Journal of Criminology 4:332-347.

Cooper, H.H.
1971 "Self-mutilation by Peruvian prisoners." 3 International Journal of Offender Therapy 180-188.

Edelson, S.M.
1984 "Implications of sensory stimulation in self-destructive behavior." 89 American Journal of Mental Deficiency 2:140-145.

Farberow, N.L. (Ed.)
1980 The Many Faces of Suicide. New York: McGraw-Hill.

Favazza, A.R.
1989 "In reply to V. Siomopoulos' self-mutilation." 40 Hospital and Community Psychiatry 8:856-857.

Favell, J.E., N.H. Azrin, A.A. Baumeister, E.E. Carr, M.F. Dorsey, R. Forehand, R.N. Foxx, O.I. Luvaas, A. Rincover, T.R. Risely, R.G. Romanczyk, D.C. Russo, S.R. Schroeder and J. Solnick
1982 "The treatment of self-injurious behavior." 13 Behavior Therapy 529-554.

Feldman, M.C.
1988 "The challenge of self-mutilation: A review." 29 Comprehensive Psychiatry 3:252-269.

Feldman, T.B.
1990 "Further thoughts on self-mutilation following trauma." 147 American Journal of Psychiatry: 8, 1105.

Green, A.H.
1967 "Self-mutilation in schizophrenic children." 17 Archives of General Psychiatry 234-244.

Horner, R.D., and E.S. Barton
1980 "Operant techniques in the analysis and modification of the self-injurious behavior: A review." 1 Behavior Research of Severe Developmental Disabilities 61-91.

Jones, A.
1986 "Self-mutilation in prison." 13 Criminal Justice and Behavior 3:286-290.

Lion, J.R.
1989 "Intermittent explosive disorder." 3 Treatments of Psychiatric Disorders 2473-2476.

Martinez, M.E.
1980 "Manipulative self-injurious behavior in correctional settings: An environmental approach." 4 Journal of Offender Counseling, Services and Rehabilitation 3:275-283.

O'Farrell, T.J., and D.S. Goodenough
1981 "Behavioral contracting for repeated suicide attempts." 5 Behavior Modification 2:225-272.

Pitman, R.K.
1990 "Letter to the editor: Self-mutilation in combat-related PTSD." 147 American Journal of Psychiatry 123-124.

Poling, A., K.D. Gadow and J. Cleary
1991 Drug Therapy for Behavior Disorders. Elmsford, NY: Pergamon Press.

Reiger, W.
1971 "Suicide attempts in a federal prison." 25 Archives of General Psychiatry 465-469.

Rosen, P.M., W.W. Walsh and S.A. Rode
1990 "Interpersonal loss and self-mutilation." 20 Suicide and Life-Threatening Behavior 2:177-184.

Ross, R.R., and H.B. McKay
1979 Self-Mutilation. Toronto: D.C. Heath Company.

Sandyk, R.
1988 "Self-mutilation in Tourette's syndrome." 3 Journal of Child Neurology 147-148.

Tobias, C., D.M. Turns, S. Lippman, R. Pary and T.B. Oropilla
1988 "Evaluation and management of self-mutilation." 81 Southern Medical Journal 10:1261-1263.

Walsh, B.W., and P.M. Rosen
1988 Self-Mutilation. New York: Guilford Press.

Women's Health Needs and Services

Chapter IX

Chapter IX

Women's Health Needs and Services

A. Introduction

Women offenders are one of the fastest growing segments of the correctional population. Although still a minority in terms of absolute numbers of those incarcerated, the rate of incarceration for females doubled during the 1980s[1] and again during the 1990s.[2] In 1998, an estimated 3.2 million females were arrested, representing about 22 percent of all arrests that year.[3] In 1998, women represented about 11 percent of the total jail population and about 6 percent of the state and federal prison populations with nearly 150,000 females behind bars.[4]

Who are these women? Most of them are poor, largely uneducated, and, disproportionately, women of color. About two-thirds of the women in local jails and state and federal prisons are black or Hispanic.[5] Violent offenses account for only 28 percent of the women incarcerated in state prisons, and for only 12 percent and 7 percent, respectively, of the women incarcerated in local jails or federal prisons.[6] About one-third of the women in local jails and state prisons in 1998 were there for drug offenses, whereas 72 percent of the women in federal prisons were there for drug offenses.[7] In fact, much of the increase in the incarcerated female population during the past two decades is attributable to "the war on drugs," including changes in enforcement and sentencing patterns.[8] This led one group of researchers to conclude that "the 'war on drugs' has become a war on women" (Bloom et al., 1994, as cited in Veysey, 1997).

Although most of these women are relatively young—more than half are under age 35—the majority have engaged in unhealthy behaviors, including tobacco use, drug and alcohol use, sex work, and/or having multiple sexual partners, which places them at high risk for a number of chronic and communicable diseases.[9] They also have unique health needs associated with the female reproductive system. Thus they require the same types of basic and specialty health care as males but also need access to obstetrical and gynecological services. In addition, they have a greater need for mental health services.

The sections that follow discuss the health status of women offenders as well as the services required to address their needs.

B. Women's Health Needs

1. Basic Medical Needs

Adult female offenders are subject to the same types of chronic and communicable diseases and other physical impairments as their male counterparts, although sometimes at different rates. Hammett et al. (1995) report that in nearly all correctional systems with mandatory human immunodeficiency virus (HIV) testing, HIV seroprevalence rates are higher among women than among male offenders. This may be in part because of the greater incidence of intravenous (IV) drug use

among female offenders, but it also is associated with the way this disease is spread. Women are much more likely to contract HIV from sexual activity with an infected male than men are from having sexual intercourse with an infected female. Preliminary data from Hammett et al. (1995) also showed generally higher rates of syphilis among women offenders than among males. In some large jail systems reporting (e.g., Cook County, Illinois, and Philadelphia, Pennsylvania), female syphilis rates were three to four times those for males. Shuter (2000) states that syphilis cases diagnosed at the Cook County Jail in 1996 accounted for 22 percent of all newly diagnosed cases in Chicago that year.

When Lachance-McCullough and colleagues (1994) looked at HIV seroprevalence rates of female inmates in New York state prisons, they found an overall seroprevalence rate of 13.4 percent for their sample of 219 women. In reviewing the health history and risk behaviors of this sample, 58.8 percent of the women said they had a history of sexually transmitted disease (STD), 40.7 percent said they had sex with an IV drug user or someone known to be HIV positive, 36.1 percent said they had engaged in homosexual or bisexual activity, 31 percent admitted to IV drug use, and 20.8 percent admitted to prostitution.

Similar results have been obtained in jail studies. Minshall et al. (1993) found that 2.5 percent of the arrestees at the Lake County Jail in Indiana had serological evidence of syphilis, which was significantly associated with the female gender (13.6% for females versus 0.7% for males) and with a reported history of prostitution. They also found hepatitis B infection rates of 31.8 percent for females (versus 20.4% for males) and HIV infection rates of 2.3 percent among female arrestees (versus 1.6% for males).

Female inmates also have much higher rates of other STDs than male offenders, including gonorrhea (Hammett et al., 2000), chlamydia (Hammett et al., 2000), and trichomoniasis at astonishingly high rates. Shuter (2000) reports a trichomoniasis rate of 43 percent among a sample of female detainees in Rhode Island and 47 percent among female arrestees in the New York City jail in two different studies conducted there in the 1990s.

Unfortunately, we have considerably less data on the prevalence rates of specific chronic diseases among either male or female offenders. Hornung et al. (2000) developed a projection model to estimate the prevalence of asthma, diabetes, and hypertension among prison inmates. Rates of asthma were projected to be higher among white and black female offenders when compared with their male counterparts. This was not the case for female Hispanic offenders, however, who had only two-thirds the rate of male Hispanic inmates. Black and Hispanic female offenders were expected to have higher rates of diabetes than male offenders of the same ethnic groups. White female offenders had a somewhat lower expected rate of diabetes than white male inmates. Female offenders were projected to have higher rates of hypertension than male offenders in all three major ethnic groups.

2. *Special Medical Needs*

In addition to basic medical needs that are common to both genders, women have special medical needs associated with their reproductive systems. These include breast diseases, menstrual irregularities, a host of other gynecological problems, and pregnancy. Keamy (1998) has written an excellent article that provides guidance to clinicians in managing women's special health needs.

Unfortunately, aside from pregnancy and STDs, we have little information about the prevalence of women's health problems behind bars. Only a handful of studies describe the frequency of specific complaints and diseases of incarcerated women.[10] Fogel (1991) conducted interviews with a sample of 135 women inmates in a maximum security prison in a Southern state. Nearly 75 percent of them reported menstrual difficulties, including dysmenorrhea, irregular bleeding, and excessive bleeding. They also reported alcohol abuse (60.7%), drug abuse (39.6%), tobacco use (70%), a history of sexually

transmitted disease (25.6%), and abnormal Pap smears (12.6%). Fogel also reviewed their medical records. She indicated that "the physical examination upon entry to prison revealed that more than 40% of the subjects had abnormal pelvic findings, usually of an infectious nature" (1991:49). More than half of the subjects had a vaginal infection, which was usually trichomoniasis, and more than half of the subjects were obese (defined as a weight of 20 percent or more over the midpoint of weight for height). Except for this study, though, recent profiles of women offenders' overall health status are seriously lacking.

In contrast, much has been written about the health needs of pregnant offenders.[11] Studies consistently show that about 6 percent of women offenders in both jails and prisons were pregnant on admission (Greenfeld and Snell, 1999; Snell and Morton, 1994). While 80 percent of pregnant prison inmates reported receiving prenatal care, only about half of the jail inmates said they had received such services (Greenfeld and Snell, 1999). An additional 15 percent of women offenders said they had recently delivered a child.

Due to their unhealthy lifestyles on the outside and their general lack of prenatal care, most pregnancies of female offenders are classified as high risk. Their pregnancies also may be complicated by a positive HIV status and/or the presence of other STDs, by nutritional risk factors including obesity or malnourishment, by a lack of exercise, and by emotional concerns including increased levels of anxiety, stress, and depression (Fogel, 1995; Goldkuhle, 1999; Hufft et al., 1993).

3. Mental Health Needs

Existing data suggest that women offenders' needs for mental health services are substantial. These include treatment for major mental illnesses, substance abuse, and sexual abuse and victimization as well as suicide prevention and emotional issues concerning parenting. Each of these topics is discussed briefly below.

a. Mental Illness

Good studies regarding the prevalence of major mental illnesses among female offenders are lacking. One exception is the work done by Teplin and colleagues (1996) at the Cook County Jail in Chicago. They assessed the extent of major mental illness among 1,272 randomly selected females at the time of jail booking and found that acute symptoms of major mental illness were present in 15 percent of the females compared to about 6 percent of males in the same system. Although fewer women offenders were diagnosed with schizophrenia than males (1.8% versus 3.0%, respectively), women had four times the rate of depression (13.7% versus 3.4% for males) and nearly twice the rate of bipolar disorder (2.2% versus 1.2% for males). In addition, the rate of dysthymia was 6.5% for females and their rate of posttraumatic stress disorder (PTSD) was 22.3%. Veysey (2000) derived prevalence estimates of psychiatric morbidity in the general population. She, too, found that women had higher rates of major depression, dysthymia, PTSD, and anxiety disorders than men.

Similar research on the prevalence of major mental illness among female prison inmates has not been done. However, a 1991 survey of inmates in 277 prisons nationwide revealed that 15.6 percent of female state prison inmates reported having received prescription medication for an emotional or mental problem since admission, and 11.5 percent said they previously had stayed in a mental health treatment facility (Snell and Morton, 1994). In a more recent survey of incarcerated females, 17 percent of female jail inmates and 23 percent of female prison inmates indicated they were receiving medication for an emotional disorder (Greenfeld and Snell, 1999). In her study, Fogel (1991) found much higher rates of self-reported mental disorder among female prisoners. Using standard psychological instruments, Fogel found that 66 percent of her sample exhibited depressive symptomatology indicative of clinical depression. They also had high levels of psychological distress and anxiety. Reporting on a study of health needs of female inmates in the

Hampden County Correctional Center in Ludlow, Massachusetts, DeCou (1998) found that 15 percent had severe mental illness and 50 percent reported symptoms of PTSD.

In spite of their substantial needs, many mentally ill female offenders are not receiving treatment. Teplin et al. (1997) reported that fewer than 25 percent of the women in their study who needed mental health treatment received it while incarcerated. In a larger study of the availability of mental health services in jails with a rated capacity of 50 or more detainees, Steadman and Veysey (1997) found that although 83 percent of the responding jails provided intake screening, only 60 percent said they provided mental evaluations and only 42 percent provided psychiatric medications. The record for state prisons is better but still needs improvement. Veysey (2000) reports that 83 percent of state-operated facilities provide both intake screening and followup mental health assessments, and 80 percent offer medication and medication monitoring for the mentally disordered offender.

b. Substance Abuse

In a disturbing turn of events, the National Center on Addiction and Substance Abuse reported in 1996 that:

> In the worst way, American women are closing the gap with men: Women are increasingly likely to abuse substances at the same rate as men and women are starting to smoke, drink and use drugs at earlier ages than ever before. Women get drunk faster than men, become addicted quicker and develop substance abuse-related diseases sooner. At least one of every five pregnant women uses drugs, drinks or smokes, putting herself and her newborn in great and avoidable danger. . . . The percent of drug addicts who are women doubled between 1960 and the late 1970s. Today, some 40 percent of crack addicts are women. The percentage of women (3.7 percent) and men (3.9 percent) who abuse prescription drugs is *already equal. Women receive two-thirds of prescriptions for tranquilizers and anti-depressants.* (Executive Summary and Foreword)

The truth of these statements is borne out by the statistics regarding substance abuse among women in jails and prisons. Snell (1992) reported that in general, female jail inmates used more drugs and used them more frequently than their male counterparts. More than half of the convicted females in jail said they had used drugs in the month prior to their current offense and 40 percent admitted to being daily users. One in four of these women said they had committed their current offense to buy drugs. Greenfeld and Snell (1999) reported similar results in their survey of females confined in state prisons. About half of these women said they had been using drugs, alcohol, or both at the time of the offense for which they were incarcerated. Drug use was a bigger problem than alcohol use for these women. Forty percent said they had been under the influence of drugs at the time of their offense, 29 percent said they had been consuming alcohol. Studies at individual women's facilities show even higher rates of substance abuse. In her study in North Carolina, Fogel (1991) found that more than 60 percent of her sample reported abuse of alcohol at the time of their arrest and 44 percent said they had a history of drug abuse. Goldkuhle (1999) found that 84 percent of her sample of women inmates in Hawaii had a history of drug abuse. DeCou (1998) reported that 82 percent of the female offenders at the Hampden County Correctional Center were arrested for drug offenses.

Again, in spite of the significant needs of incarcerated women for substance abuse treatment, few receive it while behind bars. Greenfeld and Snell (1999) stated that only 20 percent of substance-abusing women in state prisons had received treatment for this problem since their admission to prison. Women in jail settings fare even less well. Only about 10 percent of these women report receiving treatment while incarcerated (Snell, 1992). Ironically, even where treatment is available, a number of substance abuse programs for female offenders

exclude two of the subgroups with the greatest needs—those who are pregnant and those with co-occurring mental disorders.[12]

c. Suicide

While the overwhelming majority of suicide victims in jails are male, women commit suicide at a rate commensurate with their proportion in the general jail population. In their national study of jail suicides, Hayes and Rowan (1988) found that 94.4 percent of the victims were male and only 5.6 percent were female. They note, however, that this reflected the approximate male/female ratio in jails at that time. In addition, women attempt suicide more often than males. Goldkuhle (1999) reported that 32 percent of her sample of female prison inmates had a history of attempted suicide.

d. Physical and Sexual Abuse and Victimization

In national studies, nearly 45 percent of female jail inmates (Snell, 1992) and more than 43 percent of female prison inmates (Snell and Morton, 1994) stated they had been physically and/or sexually abused prior to their incarceration. One-third of female jail inmates said they had been physically abused and 36.5 percent said they had been sexually abused (Snell, 1992). An estimated 34 percent of female prison inmates reported they had been physically abused; the same percentage reported being sexually abused (Snell and Morton, 1994). Again, reported abuse rates in individual studies of women offenders are even higher. In her study of women with drug convictions in Pennsylvania, Hirsch (1999) noted that 81 percent of the women interviewed said they had been abused as children, adults, or both. In their study of incarcerated women in Massachusetts, Stevens et al. (1995) indicated that 58 percent of the women they interviewed reported past sexual abuse.

A history of physical and/or sexual abuse has profound consequences for females. In their interviews with women offenders, both Hirsch (1999) and Stevens et al. (1995) stated that many of these women reported turning to drugs or alcohol as a way to cope with the abuse. In addition, survivors of sexual abuse were twice as likely to engage in sex work (Stevens et al., 1995), more likely to commit a violent offense (especially homicide) (Snell and Morton, 1994), and more likely to be a violent recidivist (Snell, 1992) than women offenders who had not experienced such abuse.

e. Parenting Issues

Most of the women incarcerated in both jails and prisons are mothers. National surveys indicate that 74 percent of female jail inmates (Snell, 1992) and 76 to 78 percent of female prison inmates (Greenfeld and Minor-Harper, 1991; Snell and Morton, 1994) have children. The vast majority of their children are under age 18. Greenfeld and Snell (1999) reported that an estimated 70 percent of women in local jails, 65 percent of those in state prisons, and 59 percent of women in federal prisons have minor children. Most of these children had lived with their mothers prior to the latter's incarceration.[13]

Separating mothers and children has profound social and emotional effects on both groups. Compounding the guilt women may feel about the crimes they committed is the guilt they may feel about having to leave their children. "Their incarceration serves as a daily reminder that they are failures at the one thing all women are expected naturally to be—namely, good mothers."[14] Concern for their children on the outside contributes to the stress, anxiety, and depression that many women in jails and prisons experience. The realities of incarceration are even harsher for mothers sentenced to state and federal prisons than for those confined in local jails. It is not just that prison inmates are away from home for longer periods of time. Because many prison systems have only one or two female facilities, the cost of travel and the distance from home may make it impossible for their children to visit them. Hagan and Dinovitzer (1999:142) report that "at least half the children of imprisoned mothers have either not seen or not visited their mothers since incarceration."

The effects on children of having either parent incarcerated can be substantial, but they are usually more devastating when the parent is the mother. Before a parent was incarcerated, most of these minor children lived only with their mothers rather than both parents or only their fathers. When fathers are incarcerated, children tend to remain with their mothers, but when mothers are imprisoned, it often means disruption of the family unit. Children must be placed with relatives (usually grandparents) or in foster care and may be separated from their siblings.[15] Such children often exhibit behavioral problems as well as difficulties with school performance.[16] A number of them end up becoming part of the next generation behind bars.

Incarcerated women also must worry about regaining custody of their children on release. Federal laws prohibiting welfare entitlements for convicted drug offenders (Hirsch, 1999) as well as state laws and regulations governing child welfare may make it difficult for such women to resume their parental rights (Brooks and Bahna, 1994; Johnson, 1995).

Women who are pregnant when they enter jail or prison and who deliver while incarcerated have special emotional concerns. Although a few prison systems permit these mothers to keep their babies with them for a limited period of time,[17] most prisons and jails do not. The issues of whether babies should be kept in jail or prison with their mothers or what should be done to foster mother-child relationships for incarcerated women are too complex to resolve here.[18] Nonetheless, jails and prisons that hold females should be prepared to deal with the emotional crises that such separation brings.

4. Dental Health Needs

Few studies have examined the oral health status of women inmates. One exception is a study conducted by Badner and Margolin (1994) of dental needs among female inmates at Rikers Island Correctional Facility in New York City. They interviewed a sample of 183 women detainees to determine their past dental experience and provided an oral examination by a dentist to determine their current oral health status and dental needs. Their study revealed that only 41 percent of these women had any dental treatment within the past year and only 66 percent had received treatment within the past 2 years. Of those reporting treatment within the past 2 years, most often the treatment consisted of a tooth extraction. One-third of the women indicated they were currently experiencing oral pain.

Oral examinations by a dentist showed that this sample of female detainees had significant dental needs. Using the decayed, missing, and filled teeth (DMFT) index, the authors found that the mean DMFT was 9.9. This represented an average of 2.37 decayed teeth, 3.5 missing teeth, and 4.05 filled teeth. The data demonstrated that these women had substantial needs for restorative care and prosthetic devices, especially considering their relatively young age (92 percent of the women were between 20 and 40 years of age).

In spite of their extensive needs, few female detainees (or male detainees) receive dental care while in jail. Even at Rikers Island, Badner and Margolin reported that neither a dental needs assessment nor a dental examination were provided routinely to detainees.

C. HEALTH SERVICES FOR INCARCERATED WOMEN

Any institution that houses women must provide for their extensive health needs. In addition to the basic and specialty services offered to males, a number of special services should be available to females. Basic health services for all offenders were outlined in chapter VII and special services for subgroups (e.g., the chronically ill, the elderly, the terminally ill) were described in chapter VIII. The sections below address additional services specific to female offenders. Essentially, they are a compilation of recommendations regarding health care for incarcerated women gleaned from national standards (Dubler, 1986; National Commission on Correctional

Health Care, 1996; 1997), position statements of the American Correctional Association (1996) and the National Commission on Correctional Health Care (1995), and recent literature.

1. Intake Services

The intake history should include questions regarding the patient's menstrual cycle and any abnormalities, the number of pregnancies and their outcome, a history of breast disease, and past gynecological problems. The family history portion should include questions about female relatives' history of breast or ovarian cancer and osteoporosis. In addition, women in both prisons and jails should be asked about domestic violence as well as any history of physical or sexual abuse. Keamy (1998) and Faiver and Rieger (1998) also recommend including questions regarding the care and safety of minor children at home.

The intake examination for women entering both jails and prisons should include a pelvic exam and a breast exam. Women in prison also should receive a Pap smear and, depending on their age, a baseline mammogram, which generally is recommended at age 35. These latter services should be provided to jail inmates who stay long enough for the information to be useful. Keamy (1998) notes that providing Pap smears to jail inmates is complicated because many of them give false names and addresses and are released before their results come back. She also indicates that Pap smears should not be performed when women are actively menstruating or have an acute inflammation, but should be deferred until menstruation is over or treatment for the inflammation has been started.

Laboratory tests to detect STDs, including those for gonorrhea, syphilis, and chlamydia, should be provided for all females, especially because many women are asymptomatic for STDs. Depending on their medical and sexual histories, pregnancy testing should be offered to women of childbearing age in both jails and prisons. Although there is controversy about whether this testing should take place during the admission health assessment,[19] practical considerations as well as the need to identify pregnant offenders quickly dictate including it as part of the intake process.[20] Women who are known to be (or found to be) pregnant should be offered an HIV test if they have not had one recently. Fink and colleagues (1998:209) stress the importance of HIV testing among pregnant women, "given the effectiveness of antiretroviral therapy in preventing pre-natal HIV transmission."

Special care is required in managing pregnant offenders who are still using drugs or alcohol on admission. This is a particular problem in jails because offenders enter directly from the street. Richardson (1998:181) states that "the greatest risk of poor perinatal outcome occurs between the time of arrest and presentation to the medical staff at the jail." Heroin-addicted pregnant women should be started (or continued) on methadone maintenance to prevent complications and fetal distress.[21] The management of alcohol withdrawal for pregnant offenders should occur in a hospital setting because, as Richardson (1998:185) notes, "progression to delirium tremens is an obstetric emergency."

The frequency of repeating certain tests, exams, and procedures (e.g., Pap smears, mammograms) should be based on guidelines established by such professional groups as the American Cancer Society and the American College of Obstetricians and Gynecologists and should consider age and risk factors of the female prison and jail populations.

2. Basic Medical Care

Except for diseases and conditions associated with their reproductive systems, basic medical care for males and females should be the same. Women should be enrolled in regular care programs to address their chronic and infectious diseases. Those with progressive illnesses should have access to palliative care and special programs for the elderly, the infirm, and the terminally ill. Programs should be in place to meet the needs of physically handicapped female offenders.

Women should have ready access to personal sanitary supplies, including tampons.[22] Consistent with state and federal laws and regulations, pregnant offenders should retain the right to choose abortion or continuation of pregnancy. Pregnancy counseling and abortion services must be available in both jails and prisons.[23] Pregnant inmates must have access to regular prenatal care and receive dietary supplements (e.g., milk, extra food, prenatal vitamins) as prescribed by their physician.[24]

As women age, their need for special services increases. Most menopausal and postmenopausal women can benefit from hormone replacement therapy. It not only provides relief from the discomfort of hot flashes and other symptoms, but has been shown to help reduce the incidence of heart disease and stroke. Keamy (1998) reports that a meta-analysis of 21 studies showed that hormone replacement therapy reduced the risk of coronary events by half.

Osteoporosis is another condition that primarily affects older women. It is defined as a loss of bone density that causes an increased risk of fractures and other sequelae. Keamy (1998) notes that risk factors for osteoporosis include calcium deficiency, a lack of exercise, smoking, and heavy alcohol and caffeine use—many of which are health behaviors exhibited by incarcerated women. Longer term correctional facilities should institute screening, treatment, and prevention programs for osteoporosis. Prevention includes educating women regarding the deleterious effects of alcohol, tobacco, and caffeine; offering opportunities for weight-bearing exercise; and ensuring that the diet offered has sufficient calcium to meet the needs of both younger and older incarcerated women.[25]

Except as indicated by their specific health conditions, women do not require special medical housing based on gender alone. Most of their unique health needs can be managed adequately in ambulatory settings, with followup in obstetrics/gynecology (OB/GYN) specialty clinics as required. One potential exception is pregnant inmates. Because of the large percentage of high-risk pregnancies among prisoners, some departments of correction (DOCs) house all pregnant inmates in the same area. This facilitates the medical monitoring of their pregnancies, makes it easier to determine who is complying with their prenatal regimens, and provides a built-in peer support group. Any prison or jail that houses pregnant inmates must have immediate access to appropriately equipped and staffed emergency services.

Work and program limitations based on gender alone apply primarily to pregnant inmates. Restrictions for other women depend on age and disease/condition factors.

Equipment requirements for treating females' unique ambulatory health needs are minimal (e.g., exam table with stirrups, gooseneck lamp, instruments and supplies to conduct pelvic exams and Pap smears). Few DOCs house a sufficient number of women 35 years and older to justify a mammography machine in-house, but use of a portable mammography service should be considered to reduce the transportation costs and security risks associated with outside consults. However, babies born to inmates always should be delivered in a licensed hospital that has facilities for high-risk pregnancies. Health staff should work with custody staff to ensure that women in labor are not restrained inappropriately during either transfer or delivery.

Another issue concerning women is contraceptives. American Public Health Association (APHA) standards[26] state that contraceptives should be continued for women who request it. This makes perfect sense for jail inmates who will be incarcerated only for short periods of time, but not for the majority of state prisoners serving sentences of several months or years. Occasionally, a patient has birth control pills prescribed as treatment for menstrual irregularities, and the pills should be continued at the discretion of the prison physician. Additionally, women who are on birth control pills when they are admitted to a state or federal prison should be allowed to complete their current cycle. Otherwise, continuing women on birth control pills or other contraceptive devices throughout their prison

incarceration is expensive, impractical, and unnecessary. Some may argue that in the absence of contraceptives, female offenders are at risk for pregnancy, STDs, or HIV infection. Although they are, the possibility of becoming pregnant or contracting STDs or HIV while incarcerated in a women's prison is remote. Male staff members who engage in sexual activities with female offenders are subject to immediate dismissal and, sometimes, criminal prosecution. Furthermore, evidence of female-to-female transmission of HIV and STDs is rare. A more practical policy is for DOCs to provide contraceptive devices for women based on medical need or potential risk (e.g., females who reside in coed institutions or who anticipate being placed on furlough or in a work-release program).

3. Mental Health Care

The initial mental health assessment on intake to jails and prisons should be essentially the same for males and females. Key components include determining suicide potential, identifying major mental illness, assessing substance abuse treatment needs, and administering an intelligence test to diagnose mental retardation and developmental disabilities. Mental health programs and services for males and females, however, may differ. Female offenders tend to require more social planning services and more supportive therapy than males, often revolving around issues of pregnancy and children. They also can benefit from anger management education and group therapy to help them come to terms with past sexual and physical abuse. Their high rates of PTSD and clinical depression often are related to issues concerning past victimization.

Because of the shorter length of stay for most jail inmates, typical mental health services offered tend to be medication management, suicide prevention, and crisis intervention services. At least one more should be offered: substance abuse programs. Such programs are especially important for female inmates because their rates of substance abuse and HIV-positive status are higher than those for male inmates. In addition, jails that provide substance abuse services report success with their women offenders who use them. Staff at the Salt Lake County Jail state that females request and use mental health services, including both drug counseling and drug education programs, much more frequently than male inmates do (Rice et al., 2000). The New York City and the Rhode Island programs have noted reductions in recidivism rates for HIV-positive women who receive substance abuse treatment and other services while incarcerated, coupled with links to community services upon release.[27]

What types of substance abuse programs should be available? In their review of existing treatment programs, Wellisch and colleagues (1994:25) state that components of effective jail programs for drug-abusing women offenders include "assessment of the inmate to identify the drug treatment and supportive services required; case management and planning for the offender's therapeutic program and supportive services; and transition into the community with continuation of treatment, support, and monitoring." If the drug-abusing woman is also pregnant, she will need "treatment to stabilize the fetus (e.g., through methadone-assisted detoxification, if indicated); assessment of individual needs; treatment of acute medical conditions and chronic diseases/infections; prenatal care; orientation to drug treatment; and case planning for community reentry and rehabilitation" (Wellisch et al., 1994:26). This article also includes an indepth description of the Alcohol and Drug Abuse Prenatal Treatment (ADAPT) Program in Multnomah County, Oregon, which is a combined effort of the county departments of community corrections, social services, and health.

Another substance abuse treatment program that can be effective is the therapeutic community (TC). Such programs are becoming more common in prisons, but still are not provided by a majority of jails.[28] Practical barriers exist to the use of TCs in jails because treatment usually is predicated on the offender staying in the program for a minimum number of months. Nonetheless, the Substance Abuse Intervention Division's program for women detainees at Rikers Island in New York City has had

some success using a modified TC approach.[29] This program requires only 4 to 5 weeks of residence. Unfortunately, it excludes from participation women who are pregnant, who are using psychotropic medications, or who have a history of a psychiatric disorder. Prendergast and colleagues (1995) argue that such restrictive screening criteria often leave untreated those women who are most in need of substance abuse services. They also caution that any substance abuse program for women must be gender sensitive. Programs developed for men are not likely to transfer well when used for substance-abusing women.

A key factor in the success of any in-jail or in-prison substance abuse treatment program is whether the inmates are linked to social services and community substance abuse programs when they are released. In their survey, Prendergast et al., (1995) found that few correctional drug treatment programs had strong transitional components. Although most prisons and jails responding to the survey said they made arrangements for inmates to continue substance abuse treatment in the community, few provided assistance with housing needs, sources of income, or obtaining services from social, medical, or welfare agencies. Preliminary research suggests that in the absence of such support services, substance abusers relapse into their old habits even if they received substance abuse treatment behind bars.[30]

Another difficulty with many substance abuse programs is that they are not a part of health services but are operated separately by a different section of the DOC or through a separate contract. Where this is the case, substance abuse programs should, at a minimum, be linked to medical and mental health services within the prison or jail so that information on women with co-occurring disorders can be shared.

4. Health Education Services

All females should be provided with health education information on breast self-examination, contraception, and pregnancy. They also can benefit from education programs that address cessation of use of tobacco, alcohol, and other drugs. Two other key health education topics for females involve HIV harm-reduction classes and parenting issues, which are discussed briefly below.

Incarceration provides an excellent opportunity to educate women on HIV risk-taking behaviors and harm-reduction strategies. Although IV drug use and risky sexual practices are not encouraged or condoned, harm-reduction programs tend to focus on reducing the risk of HIV transmission in addition to eliminating the behaviors that lead to HIV. Hence, harm-reduction education programs include information on using condoms and sterilizing needles with bleach as well as other information about the disease and how it is transmitted. Morrill and colleagues (1998) emphasize the need to involve other offenders in both developing the curriculum and presenting the information. They stress that peer-led programs are likely to be more effective.

One successful HIV harm-reduction effort for women offenders is the AIDS Counseling and Education (ACE) program at the Bedford Hills Correctional Facility in New York. Initiated by inmates in 1988, "ACE provides HIV/AIDS education to approximately 6,000 women yearly and certification in pre/post HIV test counseling to 75 women yearly. Open daily, all ACE programs and materials target both English and Spanish speakers" (Morrill et al., 1998:230). The women developed a book, "Breaking Through the Walls of Silence," which describes the program. It, too, is available in both English and Spanish. Similar HIV harm-reduction programs have been developed for offenders in jails.[31]

In recent years, more emphasis has been placed on parenting classes and programs for offenders, particularly because research has shown that children who have had a parent incarcerated are at high risk for becoming offenders themselves.[32] Brooks and Bahna (1994:298) state that such efforts "fall into five categories: family time programs, inmate educational programs involving children, parenting education programs, family service programs and family education programs." Family time programs give offenders an opportunity to visit with relatives as a

family unit. Inmate educational programs involving children focus on providing parents with basic reading and writing skills that they can pass on to their children during visits. "Motherread" is one such program operating in the women's prison in North Carolina (Brooks and Bahna, 1994).

Parenting education programs teach basic parenting skills, whereas family service programs seek to provide financial advice, transportation for visits, and other services that will help the family maintain its bonds while a parent is incarcerated. Aid to Imprisoned Mothers, Inc, is one such program operating to assist females in Georgia (Brooks and Bahna, 1994). Family education programs tend to take a holistic approach by integrating basic education, family unity efforts, and inmate parenting skills. Another innovative program, Girl Scouts Behind Bars, seeks to strengthen mother-daughter bonds. It began as a National Institute of Justice program in Maryland in 1992 and has been implemented in female prisons in Florida and Ohio as well as in the Maricopa County (Phoenix, Arizona) jail (Moses, 1995). Finally, there appears to be a renewed interest in residential programs that keep incarcerated mothers and their children together. A 1996 article in *Corrections Today* described two such programs that help to foster the mother-child bond behind bars.[33]

D. CONCLUSIONS

Women offenders use health services more frequently than male inmates do.[34] This should not be surprising. Not only are women socialized to do so (females use health services more frequently in the community as well), but women offenders are clearly sicker than their male counterparts. They have higher rates of diabetes, HIV, and other STDs than male inmates. They also have higher rates of serious mental illness, drug use, depression, PTSD, and other emotional problems often associated with past victimization and parenting issues. In addition, they have a host of problems associated with their gender, including menstrual difficulties, breast disease, gynecological disorders, and high-risk pregnancies. Jails and prisons that house women offenders must be prepared to address their increased needs and plan for the higher cost of providing health care to this population. Women require special staffing, including health educators, pregnancy counselors, and OB/GYN specialists as well as an increased number of social workers and mental health counselors.

One final point should be made: The literature on female offenders is replete with examples of inequality in their housing arrangements, the availability of programs, and their access to services when compared with their male counterparts.[35] Both APHA and the National Commission on Correctional Health Care standards are predicated on the assumption that females have access to the same basic and specialty care as males *in addition to* services designed to meet their unique health needs. Several articles discuss the legal implications of failing to provide parity in services and programs for female offenders.[36] All conclude that DOCs can anticipate increased litigation around these issues, especially because the female population is growing both in absolute numbers and in the percentage of those incarcerated.

NOTES

1. See Greenfeld and Minor-Harper (1991).

2. See Greenfeld and Snell (1999)

3. Ibid.

4. In 1998, there were 63,800 women in jails, 75,200 women in state prisons, and 9,200 women in federal prisons. See Greenfeld and Snell (1999:7).

5. Ibid.

6. Ibid.

7. Ibid.

8. See Anno (2000); Mumola and Beck (1997); Snell and Morton (1994); Veysey (1997); and Weiner and Anno (1992).

9. See Anno (1997).

10. For listings of articles on female offenders and their health needs, see the bibliographies by the National Institute of Corrections (1996); the National Library of Medicine (Gordner, 1990); and the American Civil Liberties Union's National Prison Project (1985). See, e.g., U.S. General Accounting Office (1979); Comptroller General of the United States (1980); Pennsylvania Prison Society (1983); and Rafter (1985). See also the special issue of The Prison Journal (1995) devoted to women in prisons and jails; the special issue of the Journal of Correctional Health Care (1998) that presents a compendium of articles on HIV infection and incarcerated women; and the special issue of the New England Journal on Criminal and Civil Confinement (1998) that reports on a symposium on women in prison. The National Center on Addiction and Substance Abuse (1996) at Columbia University has an extensive bibliography on women and substance abuse. For historical discussions of the health needs of and services for female offenders, see Brecher and Della Penna (1975); Comptroller General of the United States (1980); Dubler (1986); McGaha (1987); and Resnick and Shaw (1980).

11. Recent articles include Fogel (1995); Hufft et al. (1993); Richardson (1998); Ryan and Grassano (1993); and Wellisch et al. (1994).

12. See Prendergast et al. (1995).

13. See also Baunach (1985).

14. See Anno (1994).

15. See Brooks and Bahna (1994); Clark (1995); and Hagan and Dinovitzer (1999).

16. Ibid.

17. See Brooks and Bahna (1994) and Clark (1995). See also exhibits VIII-1 and VIII-2 in chapter VIII of this book. Seven of the 28 responding prison systems (but no jails) said they had programs for babies to live with their mothers.

18. For a discussion of these and other issues on mothers in prison and some policy recommendations, see Baunach (1985); Brooks and Bahna (1994); Hagan and Dinovitzer (1999); and Hirsch (1999).

19. Keamy (1998:191) suggests that pregnancy testing should be deferred because if it is done during the intake process, some women may have just conceived, "but may be within the 2-week 'window,' which results in a false negative test."

20. See Richardson (1998).

21. For general information on methadone maintenance programs in jail, see Parrino (2000).

22. A number of correctional facilities that house females still prohibit the use of tampons "for security reasons." The usual explanation is that tampons can be used to hide drugs or for purposes of masturbation or homosexual activity. This is nonsense. Prohibiting tampons will not deter any of these activities because the tampon is not a necessary component of any of them.

23. This is consistent with requirements of American Correctional Association standards (1990:130); American Public Health Association standards (Dubler, 1986); and National Commission on Correctional Health Care standards (1996:70-71; 1997:73). See also chapter III on the legal issues surrounding abortion for prisoners.

24. See Richardson (1998) for additional information on the clinical management of pregnant inmates.

25. Keamy (1998) states that premenopausal women should receive 1,200 milligrams of calcium daily, whereas postmenopausal women need 1,500 milligrams daily.

26. See Dubler (1986:7).

27. See Mitty et al. (1998).

28. In their survey of 16 jail and 53 prison programs for female substance abusers, Wellisch and colleagues (1994) reported that only 5 jails and 14 prisons had therapeutic communities (TCs). In her survey of prison and jail systems, Anno found that 21 of 28 prison systems but only 1 of 8 jail systems operated TCs. See exhibits VIII-1 and VIII-2 in chapter VIII of this book.

29. See Natarajan and Falkin (1997).

30. See Prendergast et al. (1996).

31. However, see Alarid and Marquart (1999) who stated that increasing risk education did not appear to reduce risk behavior among female jail inmates in their study.

32. See, e.g., Bloom (1993) and the references cited therein.

33. See Williams (1996).

34. See Fogel (1991) and Goldkuhle (1999).

35. See, e.g., U.S. General Accounting Office (1979); Comptroller General of the United States (1980); Pennsylvania Prison Society (1983); and Rafter (1985).

36. See Rafter (1990) and Veysey (1997).

REFERENCES

Alarid, Leanne Fiftal, and James W. Marquart

1999 "HIV/AIDS knowledge and risk perception of adult women in an urban area jail." 6 Journal of Correctional Health Care 1:97-127.

American Correctional Association

1990 Standards for Adult Correctional Institutions (third edition). Lanham, MD.

1996 Public Policy on Correctional Health Care. Lanham, MD.

Anno, B. Jaye

1994 "Women's health needs—Toward a new philosophy of care." Keynote address. The National Commission on Correctional Health Care's 18th National Conference on Correctional Health Care in San Diego (November).

1997 "Health behavior in prisons and correctional facilities." Chapter 14 in David S. Gochman (Ed.), Handbook of Health Behavior Research III. New York: Plenum Press.

2000 "Inappropriate prison populations." Chapter 13 in John P. May (Ed.), Building Violence: How America's Rush to Incarcerate Creates More Violence. Thousand Oaks, CA: Sage Publications, Inc.

Badner, Victor, and Robert Margolin

1994 "Oral health status among women inmates at Rikers Island Correctional Facility." 1 Journal of Correctional Health Care 55-72.

Baunach, Phyllis Jo

1985 Mothers in Prison. New Brunswick, NJ: Transaction Books.

Bloom, Barbara

1993 "Incarcerated mothers and their families: Maintaining family ties." Chapter XI in Female Offenders: Meeting Needs of a Neglected Population. Lanham, MD: American Correctional Association.

Bloom, Barbara, Meda Chesney-Lind and Barbara Owen

1994 Women in California Prisons: Hidden Victims of the War on Drugs. San Francisco: Center on Juvenile and Criminal Justice.

Brecher, Edward M., and Richard D. Della Penna

1975 Health Care in Correctional Institutions. Washington, DC: U.S. Department of Justice, Law Enforcement Assistance Administration.

Brooks, Justin, and Kimberly Bahna

1994 "'It's a family affair'—The incarceration of the American family: Confronting legal and social issues." 28 University of San Francisco Law Review 2:271-308.

Clark, Judith

1995 "The impact of the prison environment on mothers." 75 The Prison Journal 3:306-329.

Comptroller General of the United States

1980 Women in Prison: Inequitable Treatment Requires Action: Report to the Congress of the United States. Gaithersburg, MD: U.S. General Accounting Office.

DeCou, Kate
1998 "Responding to the comprehensive needs of incarcerated women: Management and treatment challenges." 5 Journal of Correctional Health Care 2:129-137.

Dubler, Nancy (Ed.)
1986 Standards for Health Services in Correctional Institutions (second edition). Washington, DC: American Public Health Association.

Faiver, Kenneth L., and Dean P. Rieger
1998 "Women's health issues." Chapter 8 in Kenneth L. Faiver (Ed.), Health Care Management Issues in Corrections. Lanham, MD: American Correctional Association.

Fink, Mary Jo, Anne Kathryn Goodman, Ellen Hight, Ellen Miller-Mack and Anne De Groot
1998 "Critical prevention, critical care: Gynecological and obstetrical aspects of comprehensive HIV prevention and treatment among incarcerated women." 5 Journal of Correctional Health Care 2:201-223.

Fogel, Catherine Ingram
1991 "Health problems and needs of incarcerated women." 10 Journal of Prison and Jail Health 1:43-57.

1995 "Pregnant prisoners: Impact of incarceration on health and health care." 2 Journal of Correctional Health Care 2:169-190.

Goldkuhle, Ute
1999 "Health service utilization by women in prison: Health needs indicators and response effects." 6 Journal of Correctional Health Care 1:63-83.

Gordner, Ronald L.
1990 Prison Health Care: January 1986 Through September 1990. Current Bibliographies in Medicine. Bethesda, MD: U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, National Library of Medicine. No. 90-12.

Greenfeld, Lawrence A., and Stephanie Minor-Harper
1991 Women in Prison. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Greenfeld, Lawrence A., and Tracy L. Snell
1999 Women Offenders. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Hagan, John, and Ronit Dinovitzer
1999 "Collateral consequences of imprisonment for children, communities, and prisoners." Pp. 121-162 in Michael Tonry and Joan Petersilia (Eds.), Prisons. Chicago: University of Chicago Press.

Hammett, Theodore M., Patricia Harmon and William Rhodes
2000 The Burden of Infectious Disease Among Inmates and Releasees From Correctional Facilities. Volume II of the National Commission on Correctional Health Care/National Institute of Justice's Report to Congress on the Health Status of Soon-To-Be-Released Inmates. Washington, DC.

Hammett, Theodore M., Rebecca Widom, Joel Epstein, Michael Gross, Santiago Sifre and Tammy Enos
1995 1994 Update: HIV/AIDS and STDs in Correctional Facilities. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Hayes, Lindsay, M., and Joseph R. Rowan
1988 National Study of Jail Suicides: Seven Years Later. Alexandria, VA: National Center on Institutions and Alternatives.

Hirsch, Amy E.
1999 "Some days are harder than hard." Welfare Reform and Women with Drug Convictions in Pennsylvania. Washington, DC: Center for Law and Social Policy.

Hornung, Carlton, Robert B. Greifinger and Soniya Gadre

2000 "A projection model of the prevalence of selected chronic diseases in the inmate population." Volume II of the National Commission on Correctional Health Care/National Institute of Justice's Report to Congress. Washington, DC.

Hufft, Anita G., Lena Sue Fawkes and W. Travis Lawson

1993 "Care of the pregnant offender." Chapter X in Female Offenders: Meeting Needs of a Neglected Population. Lanham, MD: American Correctional Association.

Johnson, Denise

1995 "Child custody issues of women prisoners: A preliminary report from the CHICAS Project." 75 The Prison Journal 2:222-239.

Journal of Correctional Health Care

1998 Special Issue. Compendium of Articles on HIV Care and Incarcerated Women. Volume 5, Issue 2.

Keamy, Lisa

1998 "Women's health care in the incarcerated setting." Chapter 17 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Lachance-McCullough, Malcolm L., James M. Tesoriero, Martin D. Sorin and Andrew Stern

1994 "HIV infection among New York State female inmates: Preliminary results of a voluntary counseling and testing program." 74 The Prison Journal 2:198-219.

McGaha, Glenda S.

1987 "Health care issues of incarcerated women." 12 Journal of Offender Counseling, Services and Rehabilitation 1:53-60.

Minshall, Michael E., Daniel J. Dickinson and Mary Lou Fleissner

1993 "Prevalence of syphilis, hepatitis B virus, and human immunodeficiency virus (HIV) infection in new arrestees at the Lake County Jail, Crown Point, Indiana." 12 Journal of Prison and Jail Health 2:135-155.

Mitty, Jennifer A., Leah Holmes, Anne Spaulding, Timothy Flanigan and JoAnne Page

1998 "Transitioning HIV-infected women after release from incarceration: Two models for bridging the gaps." 5 Journal of Correctional Health Care 2:239-254.

Morrill, Allison C., Elizabeth Mastroieni and Sarah Roskam Leibel

1998 "Behavioral HIV harm reduction programs for incarcerated women: Theory and practice." 5 Journal of Correctional Health Care 2:225-237.

Moses, Marilyn C.

1995 Keeping Incarcerated Mothers and Their Daughters Together: Girl Scouts Behind Bars. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Mumola, Christopher J., and Allen J. Beck

1997 Prisoners in 1996. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Natarajan, Mangai, and Gregory P. Falkin

1997 "Can corrections operate therapeutic communities for inmates?: The impact on the social environment of jails." 4 Journal of Correctional Health Care 1:19-36.

National Center on Addiction and Substance Abuse

1996 Substance Abuse and the American Woman. New York: Columbia University.

National Commission on Correctional Health Care

1995 Women's Health Care in Correctional Settings. Chicago.

1996 Standards for Health Services in Jails. Chicago.

1997 Standards for Health Services in Prisons. Chicago.

National Institute of Corrections
1996 Women Offender Issues: Annotated Bibliography. Longmont, CO: U.S. Department of Justice, National Institute of Corrections Information Center.

National Prison Project
1985 Bibliography of Material on "Women in Prison" Contained in National Prison Project Files. Washington, DC.

New England Journal on Criminal and Civil Confinement
1998 Symposium: Women in Prison. Volume 24, Issue 2:339.

Parrino, Mark W.
2000 "Methadone treatment in jail." 14 American Jails 2:9-12.

Pennsylvania Prison Society
1983 Women in Prison, I. 63 The Prison Journal 2:1-66.

Prendergast, Michael L., Jean Wellisch and Gregory P. Falkin
1995 "Assessment of and services for substance-abusing women offenders in community and correctional settings." 75 The Prison Journal 2:240-256.

Prendergast, Michael L., Jean Wellisch and Mamie Mee Wong
1996 "Residential treatment for women parolees following prison-based drug treatment services." 76 The Prison Journal 3:253-274.

Rafter, Nicole Hahn
1985 Partial Justice: Women in State Prisons, 1800-1935. Boston: Northeastern University Press.

1990 "Equal protection forcing changes in women's prisons." 2 Correctional Law Reporter 4:49-52.

Resnick, Judith, and Nancy Shaw
1980 "Prisoners of their sex: Health problems of incarcerated women." In Ira Robbins (Ed.), Prisoners' Rights Source Book: Theory, Litigation, and Practice, Volume II. New York: Clark Boardman Co., Ltd.

Rice, Allan F., Larry L. Smith and Fred V. Janzen
2000 "Mental health services and women inmates." 14 American Jails 2:39-42.

Richardson, Stamatia Z.
1998 "Preferred care of the pregnant inmate." Chapter 16 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Ryan, T.A., and James B. Grassano
1993 "Pregnant offenders: Profile and special problems." Chapter IX in Female Offenders: Meeting Needs of a Neglected Population. Lanham, MD: American Correctional Association.

Shuter, Jonathan
2000 Public Health Opportunities for the Correctional Intervention on Inmates With Communicable Disease. Volume II of the National Commission on Correctional Health Care/National Institute of Justice's Report to Congress on the Health Status of Soon-To-Be-Released Inmates. Washington, DC.

Snell, Tracy L.
1992 Women in Jail 1989. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Snell, Tracy L., and Danielle C. Morton
1994 Women in Prison. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Steadman, Henry J., and Bonita M. Veysey
1997 Providing Services for Jail Inmates With Mental Disorders. Research in Brief. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Stevens, Jessica, Sally Zierler, Diane Dean, Anne Kathryn Goodman, Betsy Chalfen and Anne S. De Groot

1995 "Prevalence of prior sexual abuse and HIV risk-taking behaviors in incarcerated women in Massachusetts." 2 Journal of Correctional Health Care 2:137-149.

Teplin, Linda A., Karen M. Abram and Gary M. McClelland

1996 "Prevalence of psychiatric disorders among incarcerated women." 53 Archives of General Psychiatry 505-512.

1997 "Mentally disordered women in jail: Who receives services?" 87 American Journal of Public Health 4:604-609.

The Prison Journal

1991 Special Issue: Women in Prisons and Jails. Volume 75, Number 2.

U.S. General Accounting Office

1979 Female Offenders: Who Are They and What Are the Problems Confronting Them? Washington, DC.

Veysey, Bonita M.

1997 "Specific needs of women diagnosed with mental illnesses in U.S. jails." Pp. 368-389 in Women's Mental Health Services: A Public Health Perspective. Thousand Oaks, CA: Sage Publications, Inc.

2000 Providing Mental Health Services in Corrections. Volume II of the National Commission on Correctional Health Care/National Institute of Justice's Report to Congress.

Weiner, Janet, and B. Jaye Anno

1992 "The crisis in correctional health care: The impact of the National Drug Control Strategy on correctional health services." 117 Annals of Internal Medicine 1:71-77.

Wellisch, Jean, Michael L. Prendergast and M. Douglas Anglin

1994 "Jail: A found opportunity for intervening with drug-abusing pregnant women." 1 Journal of Correctional Health Care 17-38.

Williams, Elizabeth Friar

1996 "A tie that binds—Fostering the mother-child bond in a correctional setting." 58 Corrections Today 6:80-81.

Health Promotion and Disease Prevention

Chapter X

Chapter X

Health Promotion and Disease Prevention

A. Introduction

This chapter focuses on important concepts, standards, and strategies for developing and maintaining programs in the areas of environmental health and safety, communicable disease and infection control, and health education. Some information in each of these sections overlaps. Developing and implementing successful programs in these three areas can result in numerous positive outcomes for the institution or agency willing to invest the necessary time and effort. In the long run, successful programs in each of these areas will provide savings to the taxpayer and allow administrators to manage their institutions more effectively. Additionally, many believe that effective programming in these three areas is an important contribution by the health care program to the potential rehabilitation of the incarcerated offender.

Good environmental health and safety programs prevent accidents and injuries, thus diminishing medical expenditures and protecting the institution against avoidable litigation. Furthermore, such programs enable institutions to use their scarce material resources as effectively as possible. To the extent that suitable communicable disease and infection control programs are implemented, the spread of disease is minimized, medical and litigation expenditures are reduced, and, equally important, medical and correctional staff develop professional attitudes and skills. Additionally, the public health of the community is enhanced by improving the health of incarcerated individuals.

Finally, by initiating a health education program as part of the strategy to create a safe and healthier environment, an institution can reduce its long-term medical expenditures. Intake screening for communicable diseases and education programs such as those for AIDS, violence reduction, and sexually transmitted diseases allow both inmates and staff to participate in creating a healthier environment. By using clinics for chronic illnesses such as hypertension, diabetes, tuberculosis, asthma, and seizure disorders and specific educational programs designed for each of these illnesses, the health care staff may help empower inmates with the knowledge to enhance their long-term health and well-being.

A knowledgeable administrator will appreciate the long-term benefits to be gained from the initial investment in staff, training, and equipment required to develop effective programming in these areas. Policy guidelines should be developed by the health services central office. Once these policies have been promulgated, implementation procedures should be developed that are tailored to each institution. By combining written policies and procedures with initial and ongoing training programs for both medical and nonmedical staff, jail and prison administrators can ensure that they remain up to date in their management practices.

This chapter was developed by Peter Kwasnik, Ronald M. Shansky, and Judy Coe.

B. ENVIRONMENTAL HEALTH AND SAFETY

A safe and sanitary environment is fundamental to public health. For the incarcerated, it also is a constitutional right because inadequate living conditions have been judged to be in violation of the eighth amendment to the U.S. Constitution (see chapter III).

The need for a comprehensive and effective environmental health program in corrections is crucial, especially in institutions where overcrowding is the rule rather than the exception. An inmate population in excess of design capacity not only affects the quality of housing but also places pressure on all areas of administration and operation of the institution, especially the health program. Overcrowding is a major factor in increasing the risk of disease transmission, accidental injury, and violence. Although overcrowding cannot be condoned, when it occurs, its potential adverse effects on health must be minimized in accordance with the rules and principles of community hygiene and safety.

1. Administration

To ensure its inclusion in a comprehensive health plan that coordinates clinical efforts with disease and accident prevention measures, the environmental health and safety (EH&S) program should be part of the health services system recommended in chapter V. It should not be part of a risk management program because there is a distinct philosophical difference between loss prevention and health maintenance. In risk management, economic issues tend to skew program emphasis and direction, and may result in sidestepping the underlying health and safety issues.

The systemwide EH&S program should be managed at the central office level by an individual with education and experience in the multidisciplinary field of institutional environmental health and safety. A Registered Sanitarian[1] who also is a Certified Safety Professional[2] is an ideal candidate for this position. The EH&S program manager should report directly to the systemwide health services director and have line authority over any other EH&S program staff who work for health services. Sanitarians also should be employed at each institution; however, if not in conflict with sanitarian registration laws of the state, trained EH&S technicians[3] under the direction of the systemwide EH&S program manager can fulfill this function.

The mission of the EH&S program manager is to plan, develop, organize, and direct the systemwide EH&S program. Responsibility for program implementation, however, should be at the institutional level because the chief administrative officer has authority to control practices and conditions. A collateral activity of the program manager is to help facilities achieve accreditation by the American Correctional Association (ACA), the National Commission on Correctional Health Care (NCCHC), or the Joint Commission on Accreditation of Healthcare Organizations.

Correctional institutions are encouraged to address health and safety matters internally through an EH&S committee that is chaired by the facility sanitarian/EH&S technician. The committee should analyze self-inspection and incident/accident reports, formulate and communicate action plans, monitor action plan implementation, and develop facility-specific policies and procedures. A copy of the meeting minutes should be submitted to the central office EH&S program manager for review and comments.[4]

2. General Concepts and Applications

a. Air Quality

Health effects of bioaerosols (fungi and bacteria), volatile hydrocarbons, and other airborne contaminants are well known. Building-associated diseases related to air quality include allergic respiratory diseases and infections, mucous membrane irritation, dermatitis, and ophthalmologic problems. More recently, passive inhalation of tobacco smoke

has been recognized as a leading health issue in corrections. Good indoor air quality can be assured by removing sources of air pollution and providing effective ventilation. Administrative controls that limit or prohibit smoking,[5] specify cleaning methods and frequency, and define the types of chemicals to be used for housekeeping (e.g., strippers, floor finishes, disinfectants) are examples of source elimination. Mechanical ventilation that is capable of introducing sufficient volumes of fresh air and exhausting excessive heat, moisture, and pollutants is essential for the comfort and well-being of occupants.

Mechanical ventilation should conform to the most recent standards of the American Society of Heating, Refrigerating and Air-Conditioning Engineers and to those of ACA and the American Public Health Association (APHA).[6] The location of air intake vents should make entrainment of sewer gas and previously exhausted air unlikely. Air handling systems require periodic balancing to ensure air pressure relationships appropriate to the area. As a rule, areas that are frequently damp and/or odorous, such as toilet rooms, shower areas, janitor closets, smoking rooms, and rooms used for respiratory isolation (e.g., for tuberculosis), should be vented to the outside and maintained under a negative air pressure relative to adjacent areas. Odorants (chemicals that mask odors) should not be used because they can cause allergies and trigger asthma attacks. Where available, smoke evacuation systems should augment air handling systems for the prompt evacuation of tear gas.

Workplace exposure to airborne contaminants should meet Occupational Safety and Health Administration (OSHA) standards. Air quality should be monitored and mechanical ventilation systems should receive regularly scheduled preventive maintenance.

b. Lighting

For security reasons, sufficient illumination is necessary in all areas used by inmates, visitors, and staff. It also enables them to engage in activities safely and efficiently. Good lighting is generally a design consideration incorporating natural and artificial illumination.

A number of standards quantify illumination for various tasks and conditions. As a rule, these standards require general illumination of 2 to 10 footcandles on walking surfaces and in storage areas, 20 to 30 footcandles in general services areas, and 50 to 60 footcandles for specific industrial tasks. Local illumination for invasive medical and dental procedures should be at least 200 footcandles. It is recommended that correctional institutions meet or exceed the illumination standards of the Illuminating Engineering Society of North America and those of ACA and APHA.[7]

Good lighting design must consider the visual task, the size and configuration of the room or area, and the texture and color of finishes.[8] The types of light fixtures used and their placement should not cause glare or troublesome shadows. They should be tamper resistant and free of obstructions that may adversely affect the quantity and quality of illumination. A source of natural light should be provided for all habitable rooms and cells. The window area should be approximately 10 percent of the floor area, but in no case less than 3 square feet.[9]

A lighting system maintenance program that includes light meter readings, fixture cleaning, and lamp replacement is highly recommended. Systems degrade with time and lose as much as 50 percent of their ability to illuminate. Timely replacement of flickering lamps is particularly important in psychiatric units.

c. Noise

Exposure to excessive levels of noise can adversely affect health, safety, and the morale of inmates and staff. Too much noise is irritating and may be the cause of stress and hearing loss. Therefore, acoustical considerations play an important role in the correctional environment.

Engineering controls to limit noise transmission should be part of the original design or retrofit of the facility. These controls should include sound barriers such as doors, walls, or partitions (unless prohibited by fire codes) and noise dampers (e.g., acoustical tiles, carpeting) to limit background noise to

acceptable levels. Because of the unusual nature of correctional institutions, particularly those of older design, such engineering controls often are insufficient and must be augmented with administrative controls.

Televisions and radios for communal use should be located in rooms or areas where the sound will not disturb resting or sleeping inmates. Volume controls should be governed to levels acceptable in that particular area. Inmate-owned televisions and radios should be equipped and used with headsets. Housekeeping and nonemergency maintenance activities should be scheduled during normal working hours and utilize equipment that is designed and maintained for quiet operation. If possible, inmates with work assignments during irregular hours should be afforded separate housing to accommodate their work-sleep regimen.

ACA recommends that noise levels in inmate housing units not exceed 70 decibels (dBA) during the day and 45 dBA at night.[10] Night noise limits may be difficult to achieve in facilities that do not provide for single-occupancy rooms or in areas where ventilation fans are in use; however, efforts should be made to limit background noise in sleeping areas to levels that will not interfere with sleep, rest, and meditation. For occupational noise, OSHA standards provide exposure limits and criteria for an effective hearing conservation program.[11]

d. Water Supply and Sewage Disposal

The water supply must be safe for human consumption, adequate to meet the needs of the correctional facility, and adequate for firefighting purposes.[12] The treatment of water and its quality and distribution should meet applicable federal and state laws, rules, and regulations.[13]

Each institution should employ qualified plumbers to maintain, modify, and expand the water distribution system and also to identify and correct any condition that has the potential for adversely affecting water quality and availability.[14]

Plumbing fixtures should be installed to conform to local plumbing codes. They should be sufficient in number, be accessible, have adequate water pressure, and be kept clean and in good repair.[15] Combination faucets (faucets that allow the user to blend hot and cold water to a desired temperature) are recommended for all handwashing sinks. Self-closing, slow-closing, or metering faucets should provide a flow of water for at least 10 seconds.[16] Fixtures and facilities (toilets, drinking fountains, handwashing sinks, and shower facilities) that meet the design criteria of the American National Standard for Building and Facilities, ANSI 117.1-1986, should be provided for individuals with physical disabilities (American National Standards Institute, Inc., 1986).[17]

Hot water for showers should be thermostatically controlled to temperatures between 100°F and 120°F.[18] Temperatures below 100°F are uncomfortable and may deter good personal hygiene. Temperatures above 120°F may cause scalding. The risk of legionella infections is elevated with low-temperature hot water systems. Therefore, facilities with susceptible populations should develop and implement a protocol for detecting and preventing the occurrence of the legionella organism. This protocol may include environmental sampling of hot water tanks, faucets, and shower heads, and periodic disinfection of the system.

The waste water disposal system should conform to applicable federal, state, and local laws, rules, and regulations.[19] Sewage (including mop water and wastes from other wet cleaning processes) requires disposal in a sanitary sewer. A system for maintaining traps (e.g., periodically filling them with water) is recommended for infrequently used floor drains and fixtures to prevent sewer gas from entering the structure.

e. Solid Waste Disposal

Refuse must be handled, stored, and disposed of in a safe and sanitary manner and in conformance with applicable laws, rules, and regulations. A sufficient number of suitable waste containers should be available and conveniently located to accommodate the

refuse that is generated. The containers should be of a type and design that will make their contents inaccessible to insects and rodents. Nonmetal wastebaskets should be of safe material and listed by Underwriters Laboratories or another recognized testing organization for fire safety.[20]

General nonhazardous waste should be collected and disposed of daily or at a frequency that has been specified by the health authority.[21] Provisions should be made for reclaiming recyclable materials. The facility's solid waste management plan should include provisions for handling, storing, and disposing of hazardous chemical, infectious, and radioactive waste.

f. Pest Control

Each facility should have a pest control program for managing, if not eliminating, vectors of disease.[22] To be effective, the program must emphasize environmental measures designed to prevent insects and rodents from entering the structure and to deny them food, shelter, and a medium for breeding. Pesticides should be used only to augment environmental control efforts and to eliminate existing infestations. This concept is referred to as integrated pest management.

Good housekeeping and proper waste and food storage practices are essential for an effective pest control program. Outside trash storage facilities should be maintained in a sanitary condition to avoid attracting vermin. Supplies should be stored neatly to lessen the opportunity for harborage and nesting of pests.[23] Buildings should be free of cracks and other openings that could serve as infiltration sites by insects and rodents. Breaks in structure such as cracks under doors, around utility lines, etc., that are 1/4 inch or larger should be eliminated. Windows that open should be protected with screens no less than 16 mesh to the inch. Doors that are kept open for extended periods of time should have air curtains to exclude flying insects.

Use of chemical pesticides is the least preferred method of eliminating insect, bird, and rodent infestations. Traps and electrocution devices generally are safer than chemical agents and should be used as the primary method of eliminating a pest problem. When chemical control is necessary, however, the pesticide must be applied intelligently and in accordance with federal and state laws.[24] Facilities should maintain records that identify the names of the pesticides used, their formulation, and where, when, and in what manner they were applied.[25] Written policies and procedures should be available for handling parasite-infested laundry and environments.

Pest control services may be more effective and economical if performed by a staff pest control technician. A contractual operator usually should be accompanied by a staff member for control of keys and other security reasons, which adds to the cost of the service. A staff technician will be more familiar with the facility and its operation and may not require a security escort. Furthermore, he or she may be more inclined to use and promote environmental measures to control pest problems.

g. Housekeeping

A clean and orderly environment is important for reasons of health, safety, and esthetics. A clean facility is less likely to have problems with pests and accidental injuries and may have a positive impact on attitudes and morale.

The facility should have a comprehensive housekeeping plan that identifies what is to be cleaned, at what frequency, by whom, and how, and who is responsible for evaluating cleaning effectiveness.[26] The evaluation process is critical and should be in accordance with ACA, APHA, and NCCHC standards.[27] The housekeeping plan should include cleaning procedures for specialized areas such as health services areas, dietary facilities, industrial plants, and exhaust ducts.

Sufficient and appropriate cleaning equipment and supplies should be made available for use throughout the institution.[28] Products should be evaluated for flammability/combustibility, toxicity, corrosiveness, and any other potentially deleterious characteristic. (A good resource for evaluating cleaning agents is a

material safety data sheet.) The safest cleaning agents appropriate for the job should be selected. Water-soluble cleaning compounds should never be mixed with anything other than water. Cleaning agents must be kept in labeled containers and stored in a safe, secure location away from food and medical supplies. Workers should be given training on the safe storage, formulation, and use of housekeeping supplies and equipment.

Floors, walls, windows, doors, ceilings, fixtures, equipment, and furnishings should be cleaned as often as needed to keep them free of dust, dirt, spillage, and debris. Cleaning procedures should be designed to minimize dust, noise, slip hazards, and disruption. Common-use fixtures (e.g., drinking fountains, sinks) should be sanitized at a frequency dictated by use. Shower floors, walls, and toilet seats must be cleaned and disinfected at appropriate intervals. Exterior environments (grounds) should be kept free of litter. Walkways should be cleared of ice and snow in a timely manner.

h. Maintenance

Each facility should have a formal plan for maintenance.[29] The plan should require regularly scheduled inspections, the servicing of all heavy equipment (e.g., heating, ventilation, and air conditioning plant; generators; kitchen equipment), and the repair of interior and exterior building components. Structures should be kept weather tight, vermin proof, and in good repair. Plumbing, electrical, and mechanical systems and their appurtenances should be maintained in a safe and functioning condition. Walking surfaces should be kept free of trip and other hazards.

All staff should be responsible for submitting maintenance work orders. Work orders should be logged and prioritized according to health and safety needs by the facility sanitarian or other designated official. Outstanding work orders classified as important or critical to life and health should be reported to the facility administrator and the systemwide EH&S program manager.

The correctional facility is best served if its maintenance department is operated under the supervision of a qualified engineer or person with commensurate experience. This person must be familiar with accreditation standards and public health, fire safety, environmental, and worker protection laws, rules, and regulations. He or she should ensure that maintenance and repairs are conducted in a timely manner and in accordance with applicable codes and regulations.

3. Specific Applications

a. Housing

Overcrowded, poorly designed, and inadequately maintained living environments increase the risk of disease transmission, accidental injuries, and injuries resulting from aggressive and self-destructive behavior. According to APHA, structures intended for housing should satisfy fundamental physiological and psychological needs, protect against communicable disease, and protect against accidents (American Public Health Association, 1971). These principles are applicable to correctional housing facilities.

Housing units should have adequate space for living, sleeping, eating, and recreation.[30] Various standards could be applied; however, in a correctional setting, the ACA standard that requires a minimum unobstructed area of 35 square feet per inmate is recommended.[31] This implies that ceiling height, substantial overhead protrusion, door swing, furnishings, fixtures, and stored supplies do not impede normal activities. Ceilings, light fixtures, fans, utility lines, and other overhead structures should be at least 7 feet above the floor.

Single-occupancy sleeping rooms/cells should be the standard in a correctional facility. In facilities where this standard cannot be met, however, a 3-foot isolation distance between beds or a head-to-foot sleeping arrangement is necessary to minimize the potential for transmitting respiratory infections. Each inmate should be furnished with a

single bed, clean mattress, pillow, pillow case, sheets, blankets, and a locker or cabinet for the safe and orderly storage of personal property.[32] Sufficient and conveniently located electrical outlets are necessary to accommodate inmate-owned appliances without the need for extension cords.[33]

Toilets (urinals), sinks, showers, and drinking fountains should be available in sufficient numbers and in a usable condition to meet the needs of the inmate population.[34] Water fountains, toilets, and handwashing facilities must be accessible to inmates at all times. Toilet and bathing facilities are to provide as much privacy as possible without compromising security. Privacy partitions are to be of a type and design that conform to fire safety and sanitation requirements.

Artificial illumination should be sufficient for grooming, reading, safety, and security.[35] Light fixtures should not be altered or shaded by inmates. Areas of extended occupancy (10 hours or more) should be provided with natural illumination.

Ventilation should be adequate for controlling air pollutants, odors, and excessive heat.[36] During the summer months, temperatures within the housing units should not exceed outside temperatures by more than 10°F. If interior temperatures rise above 90°F for 8 or more consecutive hours, a heat stress program should be initiated that makes ice, fluid replacement, fans, and showers available. High-risk inmates (e.g., those on psychotropic medicine) must be monitored closely. Medical staff are advised to make frequent tours of the housing areas to assess inmates' health and the effectiveness of the heat stress program.

The heating system should be able to maintain ambient air temperatures within the winter comfort zone (suggested at not less than 65°F at 18 inches above the floor).[37] The emergency plan should contain provisions for heating system failures that result in air temperatures below 60°F for 12 or more hours.

Interior finishes should be smooth, easily cleanable, and conform to fire safety and sanitation requirements. Light-colored surfaces will accommodate housekeeping standards and enhance illumination. Rugs and rug-like floor coverings should be kept to a minimum. If used, they are to be located and maintained in a condition that will not contribute to slips and trips.

b. Dietary

For the incarcerated, mealtime is one of the more significant events in the routine of prison or jail life. How food tastes, its appearance and presentation, and the conditions under which it is served can affect the health and mood of an entire institution. People expect to be served food that is wholesome, appetizing, and safe to eat. This expectation may have greater validity for the incarcerated than for the public because the inmate has little choice in where or what he or she eats. Therefore, inadequacies in food service sanitation can result not only in foodborne illnesses, but also can be the source of discontent and unrest in the prison.

Compliance with the provisions of the most recent edition of the Food Code (U.S. Public Health Service, 1997) is considered a health protection strategy that generally is accepted by state and local health departments and meets the food service sanitation criteria of NCCHC, ACA, and APHA.[38] Therefore, the Food Code should be used for evaluating in-house and contractual food service operations.[39]

The food protection program must be comprehensive and include all areas where food is stored, prepared, served, transported, and consumed. Sanitation issues relating to commissary items, religious diets, and sack lunches should not be overlooked. A recommendation is the development and implementation of a Hazard Analysis Critical Control Point (HACCP) program that ensures food safety from the time it is received until it is served. The HACCP program identifies any biological, chemical, and physical hazards of the food; defines the sanitary controls to be implemented for reducing the risk inherent to the food or process; and establishes monitoring procedures and corrective actions to

be taken when sanitary controls have not been met. HACCP should be part of production sheets or the dietary operations manual.

The quality of a food service operation depends on the professionalism of its staff. Supervisory personnel must have training and experience in mass food production and should be certified in food service sanitation.[40] Furthermore, the dietary manager should have formal training in nutrition and dietetics and at least 1 year of professional experience in food service management. Promoting untrained correctional staff to dietary positions is not recommended.

Preferably, inmate workers will have the commitment and desire to work in food service. If institutional dietary work assignments are relatively well paid, inmate workers may be more inclined to be productive and dependable. If these assignments are involuntary or without incentives, the work crew may be more difficult to manage and may engage in activities that are detrimental to food safety.

Routine physical examinations of food handlers provide little, if any, benefit in the prevention of foodborne diseases. These should be required only in those states where they are mandated by public health laws.[41] Otherwise, they are unnecessary for food service work. A better medical clearance method for food service personnel is to conduct medical record reviews to look for seizure disorders, history of foodborne illnesses, and current infections. During each shift, the food supervisor should conduct visual inspections for skin lesions.[42] Proper supervision and training in the principles of food service sanitation are more meaningful than routine exams in disease prevention.

c. Health Care Facilities

The principles of safety and sanitation for correctional health care facilities are no different than those for hospitals. The extent to which they apply depends on the services and care provided. A few correctional health facilities may qualify as full-service hospitals and, therefore, should conform with the hospital licensing standards of the state.[43] Facilities that provide outpatient services should be required to meet the standards that apply to clinics or ambulatory care facilities.[44] In general, the EH&S requirements for correctional health care facilities should be directed to expedite the recovery of the patient, prevent nosocomial infections, and ensure a safe and sanitary physical plant, equipment, and supplies.

Health care facilities should have infection control policies that include written procedures for handwashing, housekeeping, decontamination, disinfection and sterilization of equipment and supplies, medical isolation, handling of infectious and parasitic laundry, disposal of infectious waste, pest control, and elimination of parasite-infested environments.[45]

Handwashing stations should be located in or convenient to treatment areas, nurses' stations, examination rooms, the pharmacy, the laundry, radiology, the laboratory, toilet rooms, and other areas where handwashing is necessary. Handwashing sinks should have combination faucets or mixing valves that can be operated with foot, knee, or wrist controls.[46] Smoking and the consumption of food and drink should be prohibited in all treatment areas, the pharmacy, all diagnostic facilities, anywhere oxygen is stored and used, and where food, pharmaceuticals, clean linen, and clean and sterile supplies are stored.

Pharmaceuticals, food, and medical supplies should be stored in clean areas and in a manner that protects them from contamination. They should be kept off the floor, on shelves, in cabinets, or on appropriate dunnage racks or pallets. Such items should not be stored under sinks or under unprotected water and sewer lines. Food, pharmaceuticals, laboratory specimens, disinfectants, and toxic, caustic, infectious, or otherwise hazardous substances should be stored physically separate from each other.[47] Dated supplies and medications should be removed from stock at or prior to their expiration date.

The health care unit should be designed and equipped to accommodate the physically handicapped.[48] Audible and/or visual means for signaling nurses or for summoning help should be available at patient beds, in

toilet rooms, and in bath areas. The signal activation mechanism should be within easy reach.

Patient beds should have nonabsorbent, fire-resistant mattresses or mattress covers and clean bedding consisting of a pillow, pillow case, two sheets, and, if necessary, draw sheets and blankets. Bed linens should be changed when medically indicated, when climate conditions dictate, and when soiled. In no case should linen be used for more than 1 week or for more than one patient. Each bed should be accompanied by appropriate furniture for the orderly storage of personal belongings and to accommodate in-bed and out-of-bed dining. After the patient is discharged, the bedframe, mattress, and bedside furniture should be cleaned effectively and disinfected.

The health care unit should have a biomedical electronics safety program that includes semiannual checks of defibrillators, isolation transformers, and other electric/electronic equipment. Such checks should be performed by qualified technicians and documented in facility records.

The health care unit should have policies and procedures for cleaning clinical areas and fixtures and for decontaminating environmental surfaces soiled with blood and other bodily excretions and secretions.[49] Biological monitoring (e.g., taking bacterial cultures of environmental surfaces) is not recommended for other than educational purposes.

d. Laundry

A sufficient supply of clean linen and clothing should be available for reasons of inmate health, personal hygiene, comfort, and dignity. Minimally, each inmate is to be afforded three clean changes of clothing per week;[50] one clean set of clothing each day is preferable. Bed linen and towels should be changed and laundered at least weekly.[51] More frequent bedding and clothing changes are required for incontinent and enuretic inmates and for inmates with special clothing needs based on their work assignments. Facility-issued clothing should be well fitting, clean, in good repair, and appropriate to the season. Threadbare and tattered bed linen should be taken out of service and replaced.

Laundry services should be provided by an in-house central laundry or a contractual commercial linen service, augmented by self-service washers and dryers whenever possible.[52] The central laundry should be supervised by an individual familiar with the equipment, supplies, and processes of a commercial laundry operation and with infection control policies and procedures. Laundry workers should receive training in appropriate linen handling and processing techniques as well as safety.

Laundry soiled with human excretions and secretions may become a source of disease to the unprotected worker. Individuals handling soiled linen should wear gloves, aprons, smocks, or other protective garb, and maintain high standards of personal hygiene. Laundry that is known or suspected to be infectious or parasite infested requires special handling. Items should be bagged at the point of collection and labeled or otherwise identified as infectious laundry. Double bagging using a water-soluble inner bag is highly recommended. Such laundry should be rendered safe by machine washing at temperatures at or above 160°F for 20 minutes or by any other method approved by the health authority.[53]

Clean and soiled laundry should be physically and procedurally separated. Clean linen and clothing should be protected from all sources of contamination and stored off the floor on clean surfaces in clean areas. Carts used for transporting linen should be clean, covered, and used for no other purpose.

e. Barber and Beauty Shops

Barber and beauty shops should be operated in conformance with applicable laws, rules, and regulations.[54] They should be located in enclosed areas dedicated for such purposes. If these operations share a common passage with sensitive service areas (e.g., dietary, commissary, laundry), then they should have self-closing doors that are kept shut when not in actual use.

Barber and beauty shops should have conveniently located handwashing facilities and be provided with equipment and supplies for disinfecting tools and instruments. Chemical disinfectants and ultraviolet lights should be changed at a frequency that ensures bactericidal efficacy. Ultraviolet light tubes should be kept clean to maximize their effectiveness.

The use of razors, shaving brushes, and mugs by more than one person must not be permitted. Disposable straight razors should not be stropped because this practice could result in cross-contamination and transmission of disease. For these reasons, combs, brushes, shears, electric shavers, and other tools should never be carried in the pocket of the barber or cosmetologist.[55]

4. Safety and Emergency Operations

a. Accident Prevention/Safety

Living, working, and other areas of occupancy must be free of conditions that lead or contribute to accidents. Engineering (maintenance) and administrative controls are to be used to prevent conditions that cause fires, electric shock, cuts, scalds, burns, trips, slips, and falls. Written policies and procedures should be available and address safety requirements for conformance with electrical and fire safety standards and worker protection laws.[56] Employees and inmate workers should receive safety training as part of an orientation program as required by worker protection standards, as needed based on work practices, and whenever new methods, products, and equipment are used. Vocational training for inmates should include a shop safety curriculum.

Internal and external safety inspections should be conducted as required by NCCHC, APHA, and ACA standards.[57] The institutional environmental health technician should collect data on all inmate and staff injuries and illnesses that may be related to the physical plant, equipment, work practices, living arrangements, and recreation activities. This information should be used for formulating an action plan, which should be submitted to the central office EH&S program manager for possible systemwide application.

b. Emergency Planning

Each correctional institution should have a written and periodically rehearsed emergency action plan for natural and human-caused disasters such as floods, tornados, fires, explosions, utility outages, accidental releases of hazardous chemicals, etc.[58] It should be developed and updated annually in cooperation with law enforcement and public health agencies, fire departments, ambulance services, hospitals, and other emergency response units. The plan should establish a chain of command to minimize confusion and to identify the individuals that are to respond to the emergency. It should include methods of reporting the emergency and procedures for all response activities, including evacuation, control/security, and the employment of internal and external resources and support systems. The responsible individuals should be trained for each type of disaster so they become familiar with what actions are required. Training is necessary for staff at least annually, whenever the plan is updated or revised, and when rehearsals indicate a need for improvement and for all new employees.[59]

The facility's written emergency plan should specify the role of the health care unit. At a minimum, it must specify the custody and medical chain of command and should address the procedures for setting up a medical base of operations outside the health care unit. It also should include procedures for triage, the kinds of equipment to be used for each situation, transport and security of medications, and a list of coordinating support services to be used, including ambulances and hospitals. The health services disaster plan should be practiced at least annually by health staff on all shifts,[60] although more frequent drills are desirable. Each drill needs to be critiqued so that any problems identified in the procedures can be corrected and positive actions reinforced.

C. COMMUNICABLE DISEASE AND INFECTION CONTROL

In the previous section, many of the environmental health issues that confront institutions were discussed. Communicable diseases also can result in short- or long-term problems that stress an institution. Most communicable disease outbreaks can be prevented and/or contained to a great degree. To deal more effectively with communicable diseases in the correctional setting, it is important to understand the types of diseases that are most likely to occur and the measures, either preventive or reactive, that can be taken in response. In this section, information is presented to help institutions develop effective communicable disease and infection control programs.

1. Prevalent Infectious Diseases in Inmate Populations

Sexually transmitted diseases (STDs) frequently are discovered in inmates during intake physical examinations. Syphilis, gonorrhea, and chlamydia are found in both adult and juvenile inmate populations. STDs are linked increasingly to illegal drug use. Prostitution for drugs is a common occurrence. Even the best sex education lessons may be lost when a person is in a drug-induced mental state. Multiple sexual partners without the protection of condoms can result in repeated infections with the potential for long-term problems, including those associated with late latent syphilis, neurosyphilis, syphilis in pregnancy, congenital syphilis, and pelvic inflammatory diseases that can lead to sterility and ectopic tubal pregnancies.[61]

A study by Raba and Obis (1983) at the Cook County Jail in Chicago demonstrates data rather typical of large urban jails and descriptive of the majority of persons from urbanized areas who are committed to prison systems. All detainees entering the jail were tested by urethral culture before urination. More than 5 percent had positive cultures for gonorrhea, which suggests annual incidence rates at least 11.2 times greater than the U.S. population rate, 4.85 times greater than the Chicago rate, and 3.4 times greater than the U.S. rate for African Americans. Nearly all these men were symptom free, thus exploding the myth that male carriers of gonorrhea always have symptoms. Additionally, 3 percent of the men admitted to the jail were found to have true positive tests for syphilis of undetermined stage.

A more recent study by the Chicago Department of Public Health of syphilis screening among women arrestees at the Cook County Jail revealed the following data (Centers for Disease Control and Prevention, 1998c). An "immediate rapid plasma reagin" (STAT RPR) project provided testing on admission to all women arrestees entering Cook County Jail from 3 p.m. to 11 p.m., Monday through Friday, beginning January 6, 1996. Of the 616 women with positive STAT RPR tests, 158 (26%) had indications that treatment was needed. Of these, 125 (79%) received treatment the same day, 8 (5%) received treatment at a later date, and 25 (16%) were released before treatment could be provided. Rapid STD diagnosis and treatment before release are critical for syphilis control and prevention in incarcerated populations because many inmates are released within a few days after entering a jail facility. After release, many are difficult to reach, may not seek treatment, and may have limited access to health care.[62]

An assessment of STD services in city and county jails in the United States, reported by the Division of STD Prevention, National Center for HIV, STD, and TB Prevention (Centers for Disease Control and Prevention, 1997), indicated that most facilities had a policy of STD screening based on symptoms or arrestee requests. Less than half of the arrestees were actually tested. Many STDs, including chlamydia, gonorrhea, and syphilis, can be asymptomatic and detected only through routine screening activities. Therefore, establishing routine testing policies and greater implementation of these policies in jails can increase STD diagnosis and treatment. Health

departments and correctional facilities can benefit from a partnership that facilitates STD testing and treatment in jails in areas with high rates of disease.[63]

While STDs alone affect a person's health, they also may predispose a person to bloodborne viremia. Open sores created by STDs can be portals of entry for the almost always lethal human immunodeficiency virus (HIV). HIV infection, hepatitis B virus (HBV), and hepatitis C virus (HCV) are classified as sexually transmitted and bloodborne diseases.[64] All are found in ever-increasing numbers in inmate populations.

Each year, an estimated 300,000 persons (primarily young adults) are infected with HBV. One-quarter become ill with jaundice, more than 10,000 require hospitalization, and an average of 250 die of fulminant disease. The United States currently contains an estimated pool of 750,000 to 1 million infectious HBV carriers. Approximately 25 percent of carriers develop chronic active hepatitis, which often progresses to cirrhosis. Furthermore, HBV carriers have a risk of developing primary liver cancer that is 12 to 300 times higher than that of other persons. An estimated 4,000 persons die each year from hepatitis B-related cirrhosis, and more than 800 die from hepatitis B-related liver cancer.[65]

Studies have indicated a higher prevalence of HBV in prison populations than in community populations. Reports of seroepidemiology studies of HBV in Tennessee prisoners noted a 2.3- to 4.1-percent prevalence of hepatitis B surface antigen (HBsAg) among men on admission to prison, a finding suggesting a high level of HBV transmission in this group before their entry to prison.

A prevalence serosurvey performed on an 11.7-percent sample of the 6,503 adult male inmates in Tennessee prisons showed that 0.9 percent of the prisoners possessed hepatitis B surface antigens, and 29.5 percent had one or more serum markers for HBV.[66]

Nearly 4 million Americans are estimated to be infected with the HCV. This virus is found in the blood of persons who have the disease. Infection is spread by contact with the blood of an infected person. HCV is serious for some persons, but not for others. Most people who get HCV carry the virus for the rest of their lives. Most of these persons have some liver damage, but many do not feel sick from the disease. Some persons with liver damage from HCV may develop cirrhosis of the liver and liver failure, which may take many years to develop. Some require liver transplants. Others have no long-term effects.

People may be infected with HCV in the following ways:

- If they have ever injected street drugs, even if it occurred once, many years ago. Many detainees and prisoners may have been infected this way.
- If they received a blood transfusion or organ transplant prior to 1992.
- If they were treated with a blood product for clotting problems before 1987.
- If they were ever on long-term kidney dialysis.
- If they were ever a health care worker and had frequent contact with blood in the workplace, especially accidental needlesticks.
- If they ever had sex with a person infected with HCV.
- If they ever had multiple sex partners.
- If their mother had HCV at the time she gave birth.
- If they lived with someone who was infected with HCV and shared items such as razors or toothbrushes that might have had blood on them (U.S. Department of Health and Human Services, 1997).

HIV infection continues to be an extremely serious public health problem in the United States and around the world. Through June 1998, the cumulative total of persons meeting the Centers for Disease Control and Prevention (CDC) definition for AIDS in the United States was 665,357 (Centers for Disease Control and Prevention, 1998b). Sixty percent of these persons identified exposure to the infection from male homosexual/bisexual contact, 24 percent

reported intravenous (IV) drug use, 8 percent identified homosexual/bisexual contact and intravenous drug use, and 5 percent specified heterosexual contact. Since the virus was first identified and methods of transmission recognized, massive education programs have brought about behavior changes in the male homosexual community, resulting in fewer infections. Unfortunately the same cannot be said for IV drug users. Their numbers continue to increase for both men and women. Heterosexual HIV infection also is increasing. Frequently this is a result of the female being infected by her male IV drug-using partner. She then can infect her babies during pregnancy or the birth process. Heterosexuals also must be educated to practice "safe sex" to slow the spread of the disease.

Data from a National Institute of Justice (NIJ)/CDC survey (Hammett et al., 1995) revealed that the racial composition of people with AIDS who are incarcerated in state and federal prisons is disproportionately skewed toward Black and Hispanic populations in comparison to the distribution of infections in the United States as a whole. There is an even greater disproportionate prevalence of AIDS in minority groups in jails than in prisons. The same survey data revealed that the occurrence of AIDS within correctional settings was the highest on the east coast, especially in New York and New Jersey. This high prevalence is partly related to the large percentage of Puerto Rican inmates in the New York City system, many of whom travel back and forth to Puerto Rico, which also has a very high AIDS rate.

Both the survey mentioned above and the information received anecdotally from several systems reveal that at least two-thirds to three-fourths, if not more, of inmates who are identified as having HIV disease indicate their probable source of exposure was intravenous IV drug use. This is not surprising because a large percentage of incarcerated individuals admit to IV drug use. It is still not clear whether increasing numbers of inmates will attribute their infections to heterosexual contact. AIDS rates among incarcerated women do appear to be significantly higher than among incarcerated men (Hammett et al., 1995). Unquestionably, the apparent higher rates among women are because they acquired the infection not only through IV drug use but also through heterosexual activity.

AIDS education is the most critical component in the management of HIV infection in correctional settings. All staff must be schooled in the management of persons with HIV infection. A thorough understanding of the modes of transmission of this infection will allay fears and foster a therapeutic climate for both staff and inmates.

Health care staff must be trained to identify those inmates who have experienced high-risk behavior and to recognize those persons who possibly are infected. They must be knowledgeable about the etiology, diagnosis, and treatment of all phases of HIV infection. They also must be familiar with the CDC surveillance definition of AIDS.[67]

Inmates must be provided with information about HIV infection that is easily understood. Educational materials also should be available in Spanish to serve the large number of Hispanic inmates in some systems. Inmates need an understanding of how this disease is transmitted and how they may prevent themselves from becoming infected. The risks of tattooing, sharing needles and razors, and anal intercourse must be emphasized. Recognition of early symptoms of the disease, such as white patches in the mouth, weight loss, fatigue, swollen glands, and diarrhea, is important. This knowledge allows inmates to present themselves to health care providers for supportive treatment.

Tuberculosis (TB) continues to be a significant problem in U.S. correctional facilities. TB rates in prison populations consistently are higher than the rates in the general population. TB poses a unique challenge in correctional environments today because the increase in inmate populations and the resulting overcrowding make an outbreak of TB a serious threat. During 1993, the rate of TB infection in the New York State correctional system was more than six times the rate for the total population of New

York. In one California state prison in 1991, the incidence of TB was 10 times greater than the statewide incidence rate (Centers for Disease Control and Prevention, 1996b).

The primary reason for the high incidence of TB infection and TB disease is the disproportionate number of inmates who have risk factors for exposure to tuberculosis. Risk factors that must be considered include being a member of a lower socioeconomic population with poor access to health care, living in densely populated areas, experiencing substance abuse, and having HIV infection. Persons who are coinfected with HIV and TB have a much greater risk of developing active TB. In 1993, CDC determined that an HIV-positive person with active TB met the CDC case definition for AIDS.

HIV infection in persons with latent TB infection appears to create a high risk for developing TB. One review among inmates in selected New York correctional facilities found TB in 22 (7%) of 319 persons with AIDS (Centers for Disease Control and Prevention, 1989c).

An effective screening program for TB must be implemented as part of the reception process. Because this disease is spread primarily as a result of inhaling airborne droplets from an infected person who has coughed, this screening should be completed before inmates are transported to their permanent institutions. The intradermal Mantoux tuberculin skin test should be administered upon intake for prison inmates and detainees, at the time of employment for staff, and annually thereafter for all groups. TB skin tests should be interpreted in light of HIV or other complicating diseases by current guidelines developed and published by CDC. All inmates and staff with positive tuberculin reactions who have not previously completed an adequate course of therapy should be considered for preventive therapy unless there are medical contraindications. Treatment guidelines are fully described in CDC publications (Centers for Disease Control and Prevention, 1995 and 1996b).

2. Need for Immunizations for Inmate Populations

The best way to reduce vaccine-preventable disease is to immunize the population. Universal immunization is a critical part of good health care and should be carried out in all physician offices and public health clinics. School entry laws requiring up-to-date immunizations were passed in the early 1980s, but because of their ages, most inmates have not been affected by the recent school entry laws. Also, many inmates are minorities from the inner cities who have not had early infant and childhood preventive health care.

During intake to a correctional setting, each inmate should be questioned regarding his or her disease and immunization history. If the inmate does not know the required information, the appropriate vaccine(s) should be administered. Persons living in a closed environment are most susceptible to disease. Also, a person who is HIV positive is especially vulnerable to all infections.

3. Basic Immunizations Required

All adults should receive a primary series of tetanus and diphtheria toxoids, then receive a booster every 10 years. Persons more than 65 years old and all adults with medical conditions that place them at risk for pneumococcal disease or serious complications of influenza should receive one dose of pneumococcal polysaccharide vaccine and annual injections of influenza vaccine. In addition, immunization programs for adults should administer the MMR (measles, mumps, and rubella) vaccine whenever possible to anyone believed susceptible to these diseases. The MMR vaccine ensures that the recipient has been immunized against three diseases, and it causes no harm if he or she already is immune to one or more of its components (Centers for Disease Control and Prevention, 1989b). Hepatitis B vaccine and the new varicella (chickenpox) vaccine should be considered for all staff and inmates. This can be a very expensive venture, however.

4. Infection Control

Basic hygiene is important for all staff and inmates. Soap, water, and towels must be readily available. Handwashing is the single most important means of preventing the spread of infection. Clean clothing and linens should be provided on a regular basis. Every inmate should have his or her own toothbrush, toothpaste, comb, and razor. These items should be not be shared with anyone. A routine of housekeeping chores should allow the inmate to properly manage personal items and dispose of waste.

a. Universal Precautions

The increasing prevalence of HBV, HCV, and HIV infections increases the risk that health care workers will be exposed to blood from infected patients. This section emphasizes the need for health care workers to consider all patients as potentially infected with HIV or other bloodborne pathogens and to adhere rigorously to infection control precautions to minimize the risk of exposure to blood and bodily fluids of all patients.[68] The premise that all bodily fluids are potentially hazardous is the cornerstone of universal precautions in infection control procedures.

Universal precautions are intended to prevent parenteral, mucous membrane, and nonintact skin exposures of health care workers to bloodborne pathogens. In addition, immunization with the HBV vaccine is recommended as an important adjunct to universal precautions for all health care workers exposed to blood. Universal precautions apply to blood and to other bodily fluids containing visible blood. Occupational transmission of HIV and HBV to health care workers by blood has been documented, although not in a correctional setting (Centers for Disease Control and Prevention, 1990b). Blood is the single most important source of HIV, HBV, HCV, and other bloodborne pathogens in the occupational setting, and infection control efforts for these pathogens must focus on preventing exposure to blood and administering HBV vaccines.[69] The use of gowns, goggles, and other equipment is indicated only when there is a likelihood of blood contamination.

b. Virus Transmission in the Workplace

Although the potential for HBV transmission in the workplace is greater than for HIV, the modes of transmission for these two viruses are similar. Both have been transmitted in occupational settings only by percutaneous inoculation or by contact of blood or blood-contaminated body fluids with an open wound, nonintact skin (e.g., chapped, abraded, weeping, or inflamed), or mucous membrane. Even though nationally there are hundreds of daily occurrences of inmates spitting, biting, and throwing bodily waste on officers, there is no documented instance of HIV transmitted to an officer as a result of such behavior.

Because of the frequency of urine and feces exposures in correctional facilities and the accompanying fears, a new strategy was developed by the Illinois Department of Corrections. The Illinois Department of Public Health was asked to provide an information pamphlet that discussed the possible health problems that could ensue following urine and fecal exposures. This information was then incorporated in the occupational exposure manual and included in training sessions. The information is to be used in counseling officers when an incident is reported to health care staff. As a result of these efforts, reported occupational exposure incidents decreased by half.

A section of the CDC guidelines for preventing transmission of HIV and HBV to health care and public safety workers is devoted to risks encountered by law enforcement and correctional facility officers during the conduct of their duty.[70] Correctional officers often are required to search prisoners and their cells for hypodermic needles and weapons. In accomplishing this task, they must be ever vigilant to prevent puncture wounds from possibly contaminated needles or weapons. Great caution should be used in searching clothing. The inmate should be asked to empty pockets and turn them inside out for better visibility. Flashlights should be used when

searching dark or hidden areas. The officer should never reach into a darkened area without first ascertaining by a visual inspection that the area is safe. Caution should be foremost in the officer's mind during any search.

Use of latex gloves is necessary only when exposure to blood is possible. Latex gloves will not prevent needle or puncture sticks—here only careful vigilance prevents contamination.

Correctional officers may be exposed to blood during assaults, fights, stabbings, nosebleeds, sports injuries, or any number of other ways. If a situation occurs where exposure to a person's blood is anticipated, protective clothing such as latex gloves and disposable gowns, masks, and goggles should be worn, then disposed of as infectious waste. If skin is accidentally exposed to blood, the skin should be washed immediately with soap and water. Soiled clothing should be removed and properly laundered. Blood spills should be removed by someone wearing latex gloves. The contaminated area should be cleaned with soap and water followed by a 1:10 solution of household bleach and water.

c. Isolation Procedures

When an inmate is suspected to have or diagnosed as having a communicable disease, the inmate must be examined promptly by a physician. The inmate should be kept in a room separate from other inmates until the need for and type of isolation required is determined. It is always safer to overisolate than to underisolate when the diagnosis is uncertain. This is especially true in a closed environment. Also, when a need for isolation has been identified, all personnel must comply carefully with any posted precautions.

For isolation, a private infirmary room with handwashing, bathing, and toilet facilities is required most often. An infirmary room with special ventilation (vented to the exterior) is necessary for a respiratory disease such as TB. Isolating an individual with the use of masks, gowns, and gloves is covered completely in other literature, along with information on bagging of used articles, disposal of infectious waste, and other environmental issues.

5. Appropriate Isolation Precautions for Diagnosed Infectious Diseases

The CDC *Guidelines for Prevention and Control of Nosocomial Infection* (1983) and *Guidelines for Isolation Precautions in Hospitals* (1996a) are designed for use by personnel responsible for infection surveillance and control. These guidelines are printed in loose-leaf form to allow for periodic updates and revisions. The guidelines for hospital isolation precautions are extremely useful because they provide specific directions for precautions, which are summarized in tables by category (e.g., contact, enteric, respiratory) and by disease. The latter table (Table B. Disease-Specific Isolation Precautions) has columns that list the disease; whether a private room is needed; whether masks, gowns, and gloves are needed; which materials may be infective; how long precautions are to be applied; and specific helpful comments.

This document should be made available to all health care units. All staff should be notified of its contents and location. It is a ready reference for determining the appropriateness of isolation and other infection control precautions that will provide a safer environment for inmates and staff.

D. HEALTH EDUCATION

Most inmates have enjoyed few of the socioeconomic benefits of our society. From the time of conception, their health may have been adversely affected by inadequate or absent prenatal care, by maternal substance abuse, or by trauma. During childhood, there may have been inadequate preventive health care, inadequate nutrition, environmental stressors, trauma, substance abuse, and/or inadequate or absent medical care and the knowledge to maintain good health. Thus, many inmates come into correctional facilities with chronic illnesses and complications that could have been prevented. The inmates' lifestyles have created situations in which their physiological age frequently exceeds their chronological age. To identify inmates' health problems, appropriately treat all

of their conditions, and provide previously neglected health education are mammoth challenges for correctional health staff.

A screening of each individual's health during the intake process is a critical beginning to the management of incarcerated populations. A detailed history should be taken by a health professional who can communicate effectively with the inmate. Care must be taken to address health care issues that are seen frequently in this population (e.g., trauma, substance abuse, TB, venereal diseases). A thorough physical examination by a physician or physician extender should follow. Mental and dental health should be evaluated and care provided as needed (see chapter VII).

Careful assessment and treatment at the time of intake protect the health of all inmates as well as staff.[71] This protection is extremely critical in the closed environment of a correctional facility. Also, the information obtained from the assessments will aid in the development of health promotion activities based on need.

1. Need for Health Education for Inmates

Assisting inmates in taking responsibility for their own health through lifestyle changes is a major challenge for health care staff. Clearly life can be extended and the quality of life improved by practicing good health habits. With ever-increasing inmate populations, health promotion has a financial aspect that cannot be ignored. Diminishing resources dictate that administrators spend wisely. Investing resources in health education and preventive health programs may prove more economical than dealing with the escalating costs of treating many illnesses and their complications.

Providing health education to inmates not only helps them to take better care of themselves, but also may help them use health services on a more rational basis. The more they understand about their bodies and their illnesses, the less likely they are to misuse the services available.

2. Role of the Health Services Central Office Personnel

The systemwide health services director should assign a health care professional, preferably a health educator, to coordinate the health education program. This person should be knowledgeable about the special needs of the inmate population and be able to communicate effectively to institutional personnel about methods to assist in the health education process. The systemwide health education coordinator generally is responsible for assembling resources such as informational articles, bibliographies, audiovisual materials, and pamphlets. He or she also often provides additional programs by compiling or developing curriculums and lesson plans for group health education.

Education materials should be developed at a level that can be readily communicated to and understood by inmates. This usually requires the assistance of a professional educator. Alternatively, the health education coordinator can check with national clearinghouses and organizations to determine what resources designed for an inmate population are available.[72] Given the large number of Spanish-speaking persons in the prison populations of several states, educational materials should be provided in both Spanish and English whenever indicated.

3. Role of Institutional Health Personnel

Institutional health personnel can provide regularly scheduled programs of interest to the inmate population. Education about AIDS, STDs, common chronic illnesses, and other topics can be targeted to inmates' special needs and help promote their health and well-being.

Methods of informing inmates are many and the cost of a health education program can be minimal. In addition to one-on-one counseling at the time of health encounters, classes led by a health professional can be very successful. Time should be allowed for

appropriate interaction between the health professional and inmates. Question-and-answer sessions promote improved inmate understanding. Topics should be varied and presented in an interesting fashion using multiple media resources whenever possible.

Information pamphlets are another excellent means of providing instruction. Also, if closed-circuit television is available, instructional videotapes can be aired at scheduled times throughout the day. Videotapes can be borrowed from local health departments and service agencies such as the American Red Cross, American Lung Association (ALA), American Heart Association, American Cancer Society, dairy councils, and public libraries.

4. Basic Health Education Topics

The five leading causes of death in the United States are heart disease, cancer, stroke, accidents, and chronic obstructive pulmonary disease.[73] Persons identified during the intake process as having a chronic disease such as hypertension, diabetes, asthma, or seizure disorder should be managed in a chronic illness clinic and their clinical status evaluated by a health care professional on a regularly scheduled basis. Health education is a critical component of these clinics.

All inmates should receive information on nutrition, weight control, exercise, stress reduction, violence reduction, the dangers of tobacco use, the dangers of tattooing, and the avoidance of STDs. Women should be taught the importance of performing monthly breast self-examination and receiving Pap smears regularly, and men should know the importance of performing testicular self-examination.

At a minimum, two topics should be addressed aggressively in every institution: tobacco use, because of its high prevalence among inmates and its deleterious effects on health status, and AIDS, because of the fear associated with it and its fatality rate. In both instances, providing health education can lead to changes in behavior.

a. Tobacco Use

Tobacco use is responsible for more than one of every six deaths in the United States and is the single most preventable cause of death and disease in our society. Tobacco use is a major risk factor for diseases of the heart and blood vessels; chronic bronchitis and emphysema; cancers of the lungs, larynx, pharynx, oral cavity, esophagus, pancreas, and bladder; and other problems such as respiratory infections and stomach ulcers. Passive or involuntary smoking also causes disease, including lung cancer, in healthy nonsmokers.

Annually an estimated 400,000 deaths in the United States are directly attributable to cigarette smoking. Cigarette smoking is responsible for 40 percent of all coronary heart disease deaths, 83 percent of lung cancer deaths, and 35 percent of all cancer deaths in the United States. Among men, lung cancer death rates began to climb sharply in the 1930s, 20 to 30 years after men began smoking in large numbers. Among women, a nearly identical increase in lung cancer deaths began in 1960, 20 to 30 years after the post-World War II surge in women's smoking. As a result of the declining prevalence of smoking among men, lung cancer death rates for men have begun to level off. Among women, lung cancer death rates continue to increase and, in 1986, lung cancer nearly equaled breast cancer as the leading cause of cancer death for women.

Since 1965, we have seen a dramatic reduction in tobacco use in this country. Total and per capita cigarette consumption have declined steadily. The prevalence of smoking among adults has decreased from 40 percent in 1965 to 25 percent in 1995. The decline in smoking has been substantially slower among women than men. The prevalence of smoking also remains disproportionately high among Black people, blue-collar workers, and people with fewer years of education—essentially the same population seen in U.S. prisons and jails.

Because of the magnitude of health problems created by cigarette smoking, the inmate population should be educated continually about its hazards. Inmates

and correctional staff traditionally are known to be frequent users of tobacco products. In a survey conducted on May 1, 1990, in a women's prison in Illinois, 81 percent of those completing the survey were cigarette smokers, with 73 percent reporting smoking at least one package of cigarettes per day. Earlier surveys of male prisoners have shown smoking prevalence rates of about 85 percent, which is nearly three times that of the noninstitutionalized population.[74]

What can be done to educate inmates on the hazards of smoking and assist those who want to quit? The American Lung Association and the American Cancer Society have an extensive list of informational materials available. Some are available without charge and others are available at a minimal cost.

The Supply Service Catalog provided by ALA of Illinois lists available products and their costs. ALA has developed "In Control," a stop-smoking program on videocassette. The person watches one 9-minute video segment each day for 13 days. Each segment gives motivation, encouragement, and specific techniques on how to become a permanent ex-smoker.

Identifying inmates who want to quit and meeting with them regularly in a group can assist them in attaining their goal. Education must be ongoing. Inmates should be allowed to choose to live in smoke-free environments whenever possible. Lessening the number of smokers in correctional facilities will go far toward improving the health of all staff and inmates.

b. AIDS Education

The number of U.S. AIDS cases reported to CDC continues to increase. As of June 1998, CDC had received reports of 665,357 persons with AIDS in the United States.[75]

Since late 1985, NIJ has sponsored annual surveys of the prevalence and management of AIDS in the nation's federal and state prison systems and in some of the larger jails. The 1994 NIJ/CDC survey revealed a cumulative total of 4,588 inmate AIDS deaths since the start of the epidemic. At the time of their responses to that survey, correctional systems reported 5,279 current cases of AIDS among inmates. Cases continue to be unevenly distributed across systems and regions, with the highest number of cases in the Middle Atlantic region. Blacks and Hispanics are overrepresented among AIDS cases in correctional systems, as they are among cases in the total population. AIDS incidence rates are substantially higher among inmates (518 cases per 100,000 state/federal inmates and 706 per 100,000 city/county inmates in 1994-95) than in the total U.S. population (41 per 100,000 in 1993). HIV seroprevalence rates also generally are higher in prison and jail populations than in the population at large, with a few systems having rates as high as 20 to 26 percent. Most correctional systems, however, continue to have inmate seroprevalence rates below 2 percent, and seroprevalence rates appear to be either stable or declining in most systems. Seroprevalence often is higher among female inmates than among male inmates. STD testing reveals varying rates of infection, with higher rates generally found in the East and South, and among women.

As in previous years, there have been no documented cases of occupational HIV transmission from inmates to correctional staff. Studies have shown that inmate-to-inmate HIV transmission occurs, but at quite low rates. The only controlled study to date of HIV transmission in correctional facilities was carried out among male inmates in the Illinois Department of Corrections between 1988 and 1990. Of nearly 24,000 inmates who were HIV seronegative on entry to the system, 7 had documented HIV seroconversions after 1 year of incarceration. This represents an annual incidence rate of 0.3 percent. Given high recidivism rates across the country, proof of low transmission within prisons is shown by declining seroprevalence rates on entry to such large systems as New York State (personal communication with Medical Director, New York Department of Corrections) and Illinois, whose rates were as high as 4.15 percent in 1991 and decreased to 1.62 percent in 1998.

In the absence of an AIDS vaccine, educating individuals about how the disease is contracted and what they can do to reduce their chances of becoming infected remains the best hope for reducing the incidence of HIV infection and AIDS. NCCHC recommends that AIDS education be offered to all inmates and to all correctional and medical staff (National Commission on Correctional Health Care, 1995). Educational sessions using live instructors are preferred because this strategy allows inmates to voice their own fears and concerns and have their questions answered on the spot. Live sessions can be supplemented with written materials and audiovisual presentations tailored to the correctional population. Such materials are readily available (Hammett et al., 1995).

Some systems are experimenting with peer education (i.e., inmate trainers) to get the message across to prisoners about the consequences of their risk-taking behaviors. Peer education programs are expected to be more widely accepted by inmates.[76] Inmates selected to be peer trainers should receive thorough training and complete a program certifying that they have the skills to perform both group and one-on-one counseling. The recent surveys conducted by NIJ/CDC indicate that the use of peer education programs has only spread to a minority of the prison systems in this country and even fewer city and county jail programs. No large-scale studies have been conducted to measure the effectiveness of these programs.

The content of AIDS education programs for inmates remains somewhat controversial because the risk-taking behaviors that should be discussed (namely, IV drug use and unsafe sexual practices) are activities prohibited by correctional systems. Nonetheless, it is imperative that inmates receive information about how to protect themselves from this disease. The full extent of HIV infection in corrections is unknown. HIV seroprevalence rates vary widely from system to system. As indicated previously and from discussions with medical directors of a number of prison systems, HIV rates generally have been stable or declined over the past 5 years.

Although information about unsafe sexual practices is an important component of AIDS education programs for inmates, providing information about cleaning drug injection equipment is equally important because IV drug use is the activity that puts more inmates at risk of becoming HIV infected. No U.S. system has suggested that inmates be issued clean drug injection equipment while incarcerated, in contrast with suggestions regrading condoms. Still, it seems extremely shortsighted not to provide inmates with information they can use to protect themselves from HIV infection when they are released. The NIJ/CDC survey indicates that some systems (in Europe) provide information on safer injection practices. This approach remains controversial, which reflects a difference between health care professionals who emphasize public health goals and outcomes and correctional officials who are primarily concerned with security and believe that providing such information tacitly condones illicit behavior. The Canadian Expert Committee on AIDS in Prisons has recommended making small quantities of full-strength bleach easily and discreetly accessible to inmates. It will be interesting to see whether such a program is implemented and, if so, whether it has any impact on the transmission of HIV disease in a correctional setting (Hammett et al., 1995).

c. Other Topics

Health education for inmates in most systems is a very low priority. In NCCHC accreditation surveys, staff consistently find that the standard on health promotion and disease prevention is either unmet or only minimally met by providing health education materials in the medical unit. The effectiveness of health education as a preventive step is always difficult to measure because the evidence is indirect and often not immediately demonstrated. It is sometimes difficult to convince administrators that they should allocate scarce resources to a program whose results are not easily seen, but implementing health education programs can be an effective cost-saving strategy in the long run. Almost no one would contest the fact that the Surgeon General's educational campaign

against smoking has resulted in dramatic decreases over time in the percentage of Americans who smoke. Once a constitutional system of care is in place, correctional health professionals need to turn their energies toward the development of extensive health education programs for inmates.

The Illinois Department of Corrections has initiated an intensive STD/HIV prevention education program in all work release centers. An experienced counselor provides classroom information to residents during their first week in the center. Before their first independent release into the free community, they receive a one-on-one counseling session reinforcing health promotion attitudes and risk-reduction behaviors. After their return to the center and before a longer weekend release, they again receive a one-on-one counseling session. STD/HIV prevention measures are stressed in addition to behavioral changes needed to promote personal safety. Residents are provided with information on health care resources to use in their home community.

A program also has been developed for pregnant women received in Illinois prisons. If they meet established criteria, they often are housed with their infants after delivery in one of two facilities available in the community. Programming for the women includes prevention of substance abuse and domestic violence. Parenting skills, anger management, and hygiene skills are promoted in their daily activities. They are required to do community service, and there is a permanent resident available for childcare when mother and infant are required to be separated. This program promotes bonding of the mother with her infant. The life skills are provided for the family to safely assimilate in the free community.

Health fairs have been well received by both staff and inmates. Topics chosen should be of current interest. Successful topics include oral hygiene, breast health care, self-esteem and exercise promotion, STD prevention, and smoking cessation. Providing information on community health care resources can be very helpful, especially to the previously medically underserved of the nation (Hammett et al., 1995).

E. CONCLUSIONS

In many correctional systems, just meeting inmates' day-to-day health care needs can seem an overwhelming task. As a consequence, health promotion and disease prevention activities are given a low priority when, in fact, the opposite should occur. Failure to adequately address environmental health issues, to control the spread of infection, and to provide health education for inmates leads to increases in the use of already overburdened health services. Strong emphasis should be placed on preventive health measures. One of the most effective ways to reduce disease and control costs is to ensure that inmates live in healthful surroundings and are provided with information on improving their own health status.

Correctional health administrators and clinicians are urged to explore liaisons with their county and state public health departments. These agencies have the necessary expertise and resources to assist in the development and implementation of preventive health programs, including immunizations, infectious disease control, environmental sanitation measures, and health education efforts.

NOTES

1. Registration through the National Environmental Health Association, 720 South Colorado Boulevard, Suite 970, Denver, CO 80222, is recommended in states without sanitarian registration/licensing requirements.

2. Safety professionals obtain certification through the Board of Certified Safety Professionals, 208 Burwash, Savoy, IL 61874.

3. It is suggested that the technician be someone who has attained at least 30 college credits in physical and biological sciences and has completed the following or equivalent courses of study:

- Environmental Health Sciences (home study course SS3010) from the Centers for Disease

Control and Prevention, Public Health Training Network, 1-800-41-TRAIN.

- Trainer Course in Occupational Safety and Health Standards for General Industry (course 501) and Fire Protection and Life Safety (course 207) from the Occupational Safety and Health Administration (OSHA) Training Institute, 1555 Times Drive, Des Plaines, IL 60018, or other OSHA Training Institute Education Centers.
- Certification course in Applied Food Service Sanitation through the Education Foundation of the National Restaurant Association, 250 South Wacker Drive, Suite 1400, Chicago, IL 60606.

4. See National Commission on Correctional Health Care Standards P-15 (1997) and J-13 (1996) and American Public Health Association Environmental Standard F-2 (Dubler, 1986:88-89).

5. See National Commission on Correctional Health Care Standards P-50 (1997) and J-48 (1996) and American Correctional Association Standard 3-ALDF-2D-08 (1991).

6. See American Society of Heating, Refrigerating and Air-Conditioning Engineers Standard 62-1989 (1989); American Correctional Association Standards 3-4144 and 3-4154 (1990); and American Public Health Association Environmental Standard B-1 (Dubler, 1986:66).

7. See Illuminating Engineering Society of North America Standards RP-29 Lighting for Hospitals and Health Care Facilities (1995), RP-7 Industrial Lighting (1991), RP-1 Office Lighting (1993), RP-3 Educational Facilities Lighting (1988), and RP-5 Daylighting (1979); American Correctional Association Standards 3-4138 through 3-4142 (1990); and American Public Health Association Environmental Standard B-7 (Dubler, 1986:71-72).

8. See American Correctional Association Standards 3-4138 (1990) and 3-ALDF-2D-01 (1991).

9. See American Correctional Association Standards 3-4141 (1990) and 3-ALDF-2D-04 (1991).

10. See American Correctional Association Standard 3-4143 (1990).

11. See Occupational Safety and Health Standards 29 CFR 1910.95 (U.S. Department of Labor, 1998).

12. See American Public Health Association Environmental Standard B-12 (Dubler, 1986:75).

13. See American Correctional Association Standards 3-4311 (1990) and 3-ALDF-4D-02 (1991) and American Public Health Association Environmental Standard B-12 (Dubler, 1986:75).

14. See American Public Health Association Environmental Standard B-18 (Dubler, 1986:72).

15. See American Correctional Association Standards 3-4131 through 3-4134 (1990) and 3- ALDF-2C-08 through 3-ALDF-2C-10 (1991); American Public Health Association Environmental Standards C-1, pp. 75-76, C-2, pp. 76-77, and E-3 (Dubler, 1986:78); and Occupational Safety and Health Standard 1910.141 (U.S. Department of Labor, 1998).

16. See American Public Health Association Environmental Standard B-8 (Dubler, 1986:72).

17. See American Correctional Association Standards 3-4137 (1990) and 3-ALDF-2C-13 (1991).

18. See American Correctional Association Standards 3-4134 (1990) and 3-ALDF-2C-10 (1991) and American Public Health Association Environmental Standard B-8 (Dubler, 1986:72).

19. See American Correctional Association Standards 3-4312 (1990) and 3-ALDF-4D-03 (1991) and American Public Health Association Environmental Standard B-11 (Dubler, 1986:74).

20. See American Correctional Association Standards 3-4202 (1990) and 3-ALDF-3B-04 (1991).

21. See American Public Health Association Environmental Standard B-9 (Dubler, 1986:73)

22. See American Correctional Association Standards 3-4313 (1990) and 3-ALDF-4D-04 (1991).

23. See American Public Health Association Environmental Standard B-10 (Dubler, 1986:73-74).

24. Ibid.

25. Ibid.

26. See National Commission on Correctional Health Care Standards P-15 (1997) and J-13 (1996) and American Correctional Association Standards 3-4314 (1990) and 3-ALDF-4D-05 (1991).

27. See National Commission on Correctional Health Care Standards P-15 (1997) and J-13 (1996); American Correctional Association Standard 3-4310 (1990); and American Public Health Association Environmental Standards B-5 (Dubler, 1986:69-70) and F-2 (Dubler, 1986:88-89).

28. See National Commission on Correctional Health Care Standards P-15 (1997) and J-13 (1996); American Correctional Association Standards 3-4155 (1990) and 3-ALDF-2E-09 (1991); and American Public Health Association Environmental Standard B-5 (Dubler, 1986:69-70).

29. See National Commission on Correctional Health Care Standards P-15 (1997) and J-13 (1996) and American Correctional Association Standards 3-4206 (1990) and 3-ALDF-3B-08 (1991).

30. See American Correctional Association Standards 3-4128, 3-4130, 3-4135 through 3-4137, 3-4147, 3-4148, 4-4308 (1990), 3-ALDF-2C-01, 3-ALDF-2C-03, 3-ALDF-2C-05, 3-ALDF-2C-12, and 3-ALDF-2E-05 (1991) and American Public Health Association Environmental Standard E-4 (Dubler, 1986:86-87).

31. See American Correctional Association Standards 3-4128, 3-4136 (1990), 3-ALDF-2C-01, and 3-ALDF-2C-12 (1991).

32. See National Commission on Correctional Health Care Standards P-15 (1997) and J-13 (1996); American Correctional Association Standards 3-4321 (1990) and 3-ALDF-4D-11 (1991); and American Public Health Association Environmental Standard B-4 (Dubler, 1986:69).

33. See National Commission on Correctional Health Care Standards P-15 (1997) and J-13 (1996).

34. See National Commission on Correctional Health Care Standards P-49 (1997) and J-47 (1996); American Correctional Association Standards 3-4132 through 3-4134 (1990) and 3-ALDF-2C-08 through 3-ALDF-2C-10 (1991); and American Public Health Association Environmental Standard E-3 (Dubler, 1986:86).

35. See American Correctional Association Standards 3-4138, 3-4139 (1990), 3-ALDF-2D-01, and 3-ALDF-2D-02 (1991) and American Public Health Association Environmental Standard B-7 (Dubler, 1986:71-72).

36. See American Correctional Association Standards 3-4144, 3-4145 (1990), 3-ALDF-2D- 07, and 3-ALDF-2D-08 (1991) and American Public Health Association Environmental Standard B-1 (Dubler, 1986:65-66).

37. See American Correctional Association Standards 3-4146 (1990) and 3-ALDF-2D-09 (1991).

38. See National Commission on Correctional Health Care Standards P-16 (1997) and J-14 (1996); American Correctional Association Standards 3-4302, 3-4303 (1990), and 3-ALDF-4C-09 (1991); and American Public Health Association Environmental Standard B-4 (Dubler, 1986:68-69).

39. See National Commission on Correctional Health Care Standards P-16 (1997) and J-14 (1996); American Correctional Association Standards 3-4302 through 3-4305, 3-4310 (1990), 3-ALDF-4C-11, and 3-ALDF-4D-01 (1991); and American Public Health Association Environmental Standard B-4 (Dubler, 1986:69).

40. Training should be equivalent to the Applied Food Service Sanitation Certification Course of the National Restaurant Association Education Foundation, 250 South Wacker Drive, Suite 1400, Chicago, IL 60606.

41. See American Correctional Association Standards 3-4303 (1990) and 3-ALDF-4C-11 (1991).

42. See National Commission on Correctional Health Care Standards P-16 (1997) and J-14 (1996) and American Correctional Association Standards 3-4303 (1990) and 3-ALDF-4C-11 (1991).

43. See National Commission on Correctional Health Care Standards P-30 (1997) and J-29 (1996) and American Correctional Association Standard 3-4332 (1990).

44. For example, they should be required to meet standards through National Commission on Correctional Health Care accreditation.

45. See National Commission on Correctional Health Care Standards P-14, P-17, (1997) J-12, and J-15 (1996) and American Public Health Association Environmental Standard C-47 (Dubler, 1986:77-78).

46. See National Commission on Correctional Health Care Standards P-28 (1997) and J-27 (1996) and American Public Health Association Environmental Standard B-8 (Dubler, 1986:72).

47. See National Commission on Correctional Health Care Standards P-27 (1997) and J-26 (1996) and American Public Health Association Environmental Standard C-4 (Dubler, 1986:77-78.).

48. See American Correctional Association Standards 3-4137 (1990) and 3-ALDF-2C-13 (1991).

49. Policies and procedures should be similar in scope to those of the American Society for Healthcare Environmental Services of the American Hospital Association (1991).

50. See National Commission on Correctional Health Care Standards P-15 (1997) and J-13 (1996); American Correctional Association Standard 3-4319 (1990); and American Public Health Association Environmental Standard E-1 (Dubler, 1986:84-85).

51. See National Commission on Correctional Health Care Standards P-15 (1997) and J-13 (1996); American Correctional Association Standards 3-4321 (1990) and 3-ALDF-4D-11 (1991); and American Public Health Association Environmental Standard E-2 (Dubler, 1986:85).

52. See American Correctional Association Standard 3-4319 (1990).

53. See American Public Health Association Standard B-6 (Dubler, 1986:70-71).

54. See American Correctional Association Standard 3-4325 (1990).

55. See American Public Health Association Environmental Standard C-3 (Dubler, 1986:77).

56. See American Correctional Association Standards 3-4120, 3-4121, 3-4199 through 3-4203, 3-4401 (1990), 3-ALDF-3B-01 through 3-ALDF-3B-05, and 3-ALDF-5A-13 (1991) and American Public Health Association Environmental Standards D-1 (Dubler, 1986:79-80), D-3 (Dubler 1986:80-82), D-4 (Dubler, 1986:82-83), and D-6 (Dubler, 1986:83-87).

57. See National Commission on Correctional Health Care Standards P-15 (1997) and J-13 (1996); American Correctional Association Standards 3-4199, 3-4200, 3-4401 (1990), 3-ALDF-3A-11, 3-ALDF-3B-01, 3-ALDF-3B-02, 3-ALDF-4C-09, and 3-ALDF-5A-13 (1991); and American Public Health Association Environmental Standards F-2 (Dubler, 1986:88-89) and F-3 (Dubler, 1986:89).

58. See National Commission on Correctional Health Care Standards P-07 (1997) and J-06 (1996); American Correctional Association Standards 3-4208 through 3-4212 (1990) and 3-ALDF-3B-10 (1991); and American Public Health Association Environmental Standard D-2 (Dubler, 1986:80).

59. See National Commission on Correctional Health Care Standards P-07 (1997) and J-06 (1996) and American Correctional Association Standards 3-4208 (1990) and 3-ALDF-3B-10 (1991).

60. See National Commission on Correctional Health Care Standards P-07 (1997) and J-06 (1996).

61. See Centers for Disease Control and Prevention (1998a).

62. See Centers for Disease Control and Prevention (1998c).

63. Ibid.

64. See Centers for Disease Control and Prevention (1990a).

65. Ibid.

66. See Decter et al. (1984).

67. See U.S. Department of Health and Human Services (1990).

68. See Centers for Disease Control and Prevention (1987).

69. See Centers for Disease Control and Prevention (1988 and 1989a) and U.S. Department of Health and Human Services (1989).

70. See Centers for Disease Control and Prevention (1989a).

71. See chapter VII for more information on the health intake process.

72. A number of national health organizations, including the American Lung Association, American Diabetes Association, and Epilepsy Foundation of America, have patient education materials that can be useful. Additionally, the following two national clearinghouses compile materials specific to corrections:

National Criminal Justice Reference Service
P.O. Box 6000
Rockville, MD 20849-6000
(800) 851-3420
E-mail address: *askncjrs@ncjrs.org*
World Wide Web address:
http://www.ncjrs.org

National Institute of Corrections
Information Center
1860 Industrial Circle, Suite A
Longmont, CO 80501
(800) 877-1461
E-mail address: *asknicic@nicic.org*
World Wide Web address:
http://www.nicic.org

73. See Centers for Disease Control and Prevention (1990b)

74. See Romero and Connell (1988) and the studies cited therein. Also see Skolnick (1990).

75. See Centers for Disease Control and Prevention (1998b).

76. For more information on this program, contact Judy Coe, Illinois Department of Corrections, Springfield, IL, at (217) 522-2666.

REFERENCES

Articles and Books

American Correctional Association
1990 Standards for Adult Correctional Institutions (third edition). Laurel, MD.

1991 Standards for Adult Local Detention Facilities (third edition). Laurel, MD.

1998 Standards Supplement. Lanham, MD.

American National Standards Institute, Inc.
1986 Providing Accessibility and Usability for Physically Handicapped People, ANSI Standard 117.1-1986. New York.

American Public Health Association
1971 Basic Principles of Healthful Housing, Washington, DC.

American Society for Healthcare Environmental Services
1991 Policy & Procedure Manual for Environmental Services. Chicago: American Hospital Association.

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.
1989 Ventilation for Acceptable Air Quality. Atlanta.

Centers for Disease Control and Prevention

1983 Guidelines for Prevention and Control of Nosocomial Infection. Washington, DC: Superintendent of Documents (No. CDC 83-8314).

1987 36 Morbidity and Mortality Weekly Report Supplement 25 (August 21). Atlanta.

1988 37 Morbidity and Mortality Weekly Report Update 24 (June 24). Atlanta.

1989a Guidelines for Prevention of Transmission of Human Immunodeficiency Virus and Hepatitis B Virus to Health Care and Public Safety Workers, a response to P.L. 100-607, The Health Omnibus Programs Extension Act of 1988 (February). Atlanta.

1989b 38 Morbidity and Mortality Weekly Report 13 (April 7). Atlanta.

1989c 38 Morbidity and Mortality Weekly Report 18 (May 12). Atlanta.

1990a 39 Morbidity and Mortality Weekly Report RR-2 (February 9). Atlanta.

1990b 43 Morbidity and Mortality Weekly Report 12 (March 30). Atlanta.

1995 Controlling TB in Correctional Facilities. Atlanta.

1996a Guidelines for Isolation Precautions in Hospitals. Atlanta.

1996b "Prevention and control of tuberculosis in correctional facilities," 45 Morbidity and Mortality Weekly Report RR-8 (June 7). Atlanta.

1997 An Assessment of Sexually Transmitted Disease Services in City and County Jails, United States. Atlanta.

1998a Guidelines for the Treatment of Sexually Transmitted Diseases. Atlanta.

1998b HIV/AIDS Surveillance Report: U.S. HIV and AIDS Cases Reported Through June 1998. Atlanta.

1998c 47 Morbidity and Mortality Weekly Report 21 (June 5). Atlanta.

Decter, Michael D., William K. Vaughn, Jamies S. Madie, Robert H. Hutcheson, Jr., and William Schaffner

1984 "Seroepidemiology of hepatitis B in Tennessee prisoners." 150 Journal of Infectious Diseases 3.

Dubler, Nancy N. (Ed.)

1986 Standards for Health Services in Correctional Institutions (second edition). Washington, DC: American Public Health Association.

Hammett, Theodore M., Rebecca Widom, Joel Epstein, Michael Gross, Santiago Sifre and Tammy Enos

1995 1994 Update: HIV/AIDS and STDs in Correctional Facilities. Washington, DC: U.S. Department of Justice, National Institute of Justice, and Centers for Disease Control and Prevention.

Illuminating Engineering Society of North America

1979 Daylighting Standards, RP-5. New York.

1988 Educational Facilities Lighting Standards, RP-3. New York.

1991 Industrial Lighting Standards, RP-7. New York.

1993 Office Lighting Standards, RP-1. New York.

1995 Lighting for Hospitals and Health Care Facilities, RP-29. New York.

National Commission on Correctional Health Care

1995 "Position statement on the administrative management of inmates with HIV positive test results or AIDS." 2 Journal of Correctional Health Care 1:61-65.

1996 Standards for Health Services in Jails. Chicago.

1997 Standards for Health Services in Prisons. Chicago.

Raba, John M., and Clare Barrett Obis
1983 "The health status of incarcerated urban males: Results of admission screening." 3 Journal of Prison and Jail Health 1:6-24.

Romero, Colin A., and Frederick A. Connell
1988 "A survey of prison policies regarding smoking and tobacco." 7 Journal of Prison and Jail Health 1:27-36.

Skolnick, Andrew
1990 "While some correctional facilities go smoke-free, others appear to help inmates light up." 264 Journal of the American Medical Association 12:1509, 1513.

U.S. Department of Health and Human Services
1989 Guidelines for Prevention of Transmission of Human Immunodeficiency Virus and Hepatitis B Virus to Health-care and Public-Safety Workers. Washington, DC: National Institute for Occupational Safety and Health.

1990 HIV/AIDS Surveillance Report. Washington, DC (June).

1997 If You Have Hepatitis C. Washington, DC.

U.S. Department of Labor
1998 General Industry Standards, 29 CFR 1910. Washington, DC: Occupational Safety and Health Administration.

U.S. Public Health Service
1997 Food Code. Washington, DC: Food and Drug Administration.

Planning Correctional Health Facilities

Chapter XI

Chapter XI

Planning Correctional Health Facilities*

A. Introduction

The health program in correctional institutions has assumed major importance in the past few years, mainly because of court involvement and the costs of health delivery. Aside from any moral considerations concerning medical care for inmates, court decisions have indicated clearly that inmates' health needs must be met. Concomitantly, issues of medical malpractice and potential legal costs make it imperative that the delivery of health services be professional and meet accepted standards of practice. At the same time, cost containment in community health care delivery has become an important national concern. Similar scrutiny by legislative appropriations committees and others concerned with reducing the costs of health care to prisoners is common.

Health care issues in corrections have been addressed in other chapters of this book and need not be discussed here; however, the efficiency and effectiveness of the health program depend, in part, on the physical environment in which it functions. Therefore, planning for the health unit is a critical activity.

Health needs have high visibility among the inmate population and can be a source of negative attitudes that permeate the inmate body and contribute to unrest. Poor treatment in the form of untimely response, perceptions of uncaring attitudes of health staff, or frustration with unmet needs can result in inmate control problems for custody staff. The health program also has an influence on custody staff training. In many systems, preservice and inservice training programs for correctional staff now include instructions on infectious and chronic diseases, mental illness, addiction, suicide prevention, and certification in cardiopulmonary resuscitation and first aid. Such training results in custody staff who are knowledgeable about the functions of the health program and sensitive to the problems and needs of the health staff and inmates.

This chapter presents an approach to planning a health unit in a correctional facility. The variables that must be considered, the organization of the process that will address those variables, and the nature of the report that is a prerequisite to a successful design are discussed as well.

Planning health facilities in correctional institutions is a complex process and should not be viewed simply as another allocation of program space. The same planning techniques and attention to detail applied to designing a facility must be used to design the health unit if it is to be an effective and coordinated program. Whether the health unit is to undergo major renovation or is to be a new structure within an existing prison or jail, or is to be part of the design of a new facility, it is a health system within a correctional organization and thus any planning must reflect a systems approach.

Planning is a process that aims to reconcile competing needs: those of the system, the individual facility, the patients, and the staff who will work in the newly designed environment. Health staff are concerned with having space that is large enough for their

* This chapter was developed by Nick Pappas.

activities and designed for efficiency. Office and storage space, always scarce in health units, may be viewed as costly and nonfunctional by the administration, but that space is critical to health staff. Examining rooms that afford privacy, standard requirements for health staff, may pose problems for custody staff. These competing concerns need to be addressed and resolved in the planning process.

To address these rival priorities, the planning process must incorporate the concerns of the major parties: the correctional administration, the health professionals and their patients, and the custody staff. The design of a health unit cannot be the sole responsibility of the administration or the central office health staff or the facility health staff or the architect. All the major parties who have an interest and concern must be included in the process. Each group brings a frame of reference to the planning, none of which alone is sufficient for an effective planning effort.

The planning process is complex, so participants must be selected for their experience, knowledge, and credibility: for example, participants may include a health administrator, physician, director of nursing, and custody administrator. The planning committee must be viewed as an organization of equals. The attributes the individuals bring to the planning process are expertise and knowledge in their specialty area and the ability to address and resolve issues.

The planning committee's tasks are to define and describe the health program, including its mission, objectives, organization, and operation, and to provide information on space needs that will give direction to the designer. At the outset, all parties must understand that no planning process will result in a perfect design; however, planning will minimize error. The more rigorous the process, the smaller the probability of error.

The following discussion addresses the organization of the planning process. It assumes that planning requires the undivided attention of at least one person for varying blocks of time, regardless of the size of the effort. The composition of the planning committee and its reporting requirements may vary based on the nature of the project and the size of the organizational structure of the correctional system; however, the basic outline of the planning effort should not vary significantly from that discussed.

B. ORGANIZING THE PLANNING PROCESS

1. Creating the Planning Committee

Creating a planning committee is the first critical task in the planning process; it also is difficult because it runs counter to the bureaucratic culture. Staff may have difficulty taking on an unfamiliar assignment, especially one that has high visibility and high risk, and one that may not contribute to their career advancement. Managers resist the loss of a person for blocks of time to an activity over which they have no control.

Appointment to the planning committee should be made by the director/commissioner to whom the committee should report. The level of appointment and reporting responsibility indicates the level of importance of the task. If appointment by the top administrator in the system is followed by delegating oversight responsibility to a significantly lower level of administration, the planning assignment will be downgraded in importance.

Authorization of the committee and its membership should be in writing, with a clear statement that the planning schedule takes precedence over other routine assignments. A planning committee usually requires the full-time commitment of at least one person, the project director, and the part-time commitment of all other members. Support staff also may be needed to perform clerical functions.

The planning committee should be small and have the authority to call on specific staff from any office in the system to serve as consultants. This will provide

flexibility in the use of staff, making it possible to call in knowledgeable individuals for short periods of time as needed. The committee will need the input of a wide range of staff at various planning stages. Therefore, the requisite expertise should be made available on an ad hoc basis rather than by expanding the size of the committee. The committee should be allocated a budget that can be used for short-term hiring of outside experts if the knowledge needed is not available within the system. Special studies may also be needed if they cannot be done internally because of time and staff constraints. The correctional system's usual contracting process should be used for this purpose.

a. Selecting Official Participants

(1) Project Director

The project director should have expertise as a health provider or a medical administrator. Because he or she will be responsible for planning and dealing with medical issues, knowledge of the health field is paramount. This position should be filled by a person in an administrative capacity. The job level of the project director indicates the importance attached to the task by the correctional and health administrations. The appointment of the project director should be made by the agency director in consultation with the systemwide health services director. The appointment should be in writing and include:

- Reporting responsibility: reports to the agency head or deputy.
- Scope of authority:
  - — Schedules meetings.
  - — Makes assignments to planning committee members.
  - — Sets deadlines and issue progress reports.
  - — Requests the assistance of department staff as consultants.
  - — Uses outside consultants for expertise not available in the department.
  - — Arranges site visits to other facilities, if appropriate.
  - — Initiates contract requests for special studies as needed.
  - — Conducts a postoccupancy evaluation of the health unit.

The appointment also should state the tasks of the committee, timelines for progress reports, and a deadline for completion of the planning process.

(2) Medical Representative

The planning committee must include a medical staff member from the facility. If the planning addresses a health unit in a new facility, the medical representative should be from the staff of a facility as close as possible in size and scope of services to the one being planned. The committee needs the input of someone who has had the day-to-day experience of working in a medical unit and who can contribute insights on the arrangement of space. This individual may bring his or her biases to the planning; however, the group process should neutralize any extremes.

(3) Custody Representative

The representative from the custody staff is as important to the planning process as medical personnel. The health unit depends on the cooperation of custody staff in coordinating activities such as scheduling inmates for appointments, supervising inmates in the health unit, transporting inmates for care, and dealing with inmates' complaints. Custody staff are responsible for the institution as a whole, and the health unit, to a large extent, must arrange its schedule around security counts, meals, visiting, recreation, and inmate work schedules.

Correctional staff will be concerned with the location of the health unit and with the control and security of drugs, syringes, needles, and medical and dental instruments. If the health unit is to have an infirmary, it will maintain security for patients and staff. Finally, custody staff can contribute to the design by ensuring that the layout allows ease of inmate supervision.

(4) Administrator

The person appointed from the division of administration offers a broad view of the system. Input may include political concerns (intra- and interdepartmental), knowledge of the system's long-range goals, staffing plans and problems, and an understanding of the need for balancing priorities. The level of the person appointed is not as important as that individual's ability to convey the perspective of the administration and the political climate.

(5) Budgeting/Procurement Representative

The planning process includes discussion of cost and cost containment issues that need to be addressed regarding the level of services desired, alternatives to and costs of various service options, equipment costs, staffing costs, and the like. A fiscal representative can contribute expertise in financing the various components and options of the plan, and provide information on how the financial and procurement process operates and how it can be used in the planning process.

Some systems may have individuals who are skilled in both administrative and financial matters. If so, one participant can assume the responsibilities listed in (4) and (5).

(6) Research/Electronic Data Processing Systems Representative

The planning process will require information about the inmate population to be served, including inmate health care profiles, sick call volume, type and frequency of diagnostic referrals, and inpatient utilization data. If this information is not readily available, it will need to be generated or estimated for planning. Alternative methods may include estimates of utilization or sample surveys of utilization in certain areas such as number of sick call requests, clinic logs, pharmaceutical costs, and hospital trip logs. Chapter XII on data management and documentation provides more detail on health care information needs and data collection strategies.

The health unit should be included in the facility's management information system. A research representative with knowledge of computerized systems is needed on the planning committee to provide data and to discuss database development and the use of information systems in management.

b. Using Ad Hoc Consultants

The delivery of health care includes a range of programs and special services, each of which has various space and equipment needs. The planning group should use representatives from these programs and special services as ad hoc consultants in the planning process. For example, dental care requires dedicated space and equipment; mental health professionals need privacy for interviews and evaluation and space to conduct group sessions; and physical therapy requires special equipment. Professionals representing these services should be used as needed to provide data to the committee on program and space requirements.

c. Liaison With Others

(1) Facility Planning and Engineering Office

The state or county office responsible for facility planning should be brought into the planning process as early as possible, usually when the administration has decided that new construction or renovation is needed. This office can help the planning committee refine its program and space requirements into performance characteristics and serve as the committee's liaison to the designer/architect. The planning committee should establish a close working relationship with this office.

(2) Coordination With Other Planning Groups

If planning addresses a new facility, the health planning committee should collaborate with the facility's overall planning organization through joint meetings, through the appointment of the health planning project director to the larger planning group, or both. This coordination is imperative to reach agreement on issues such as location of the health

unit, provision of health services to segregation and isolation areas, specifications and location of special housing for medical watch inmates, location of the medication window, and development of emergency plans.

Care should be taken to involve the health planning committee at a stage that is early enough to allow effective input into larger decisions affecting the rest of the new facility under design. All too often, health care issues are an afterthought in correctional settings. Input from the medical staff is sought at the last minute, after all other decisions have been made. This approach usually results in a less than ideal solution for all concerned. Communication between the health planning committee and the facility planning organization should be interactive and iterative, so that each group builds on the expertise of the other. Sound creative solutions become possible in this kind of environment.

(3) Designer/Architect

It is difficult to pinpoint exactly when coordination with the designer/architect should occur. The planning process should begin early, with the identification of needs that will justify a building/renovation program. The state's or county's contracting requirements, which are usually out of the control of the health planning committee, generally determine when a designer/architect will be available. The planning committee should work closely with the designer as soon as he or she is selected; however, much of the committee's work can proceed before the designer is available.

2. Defining Tasks and Responsibilities

The first task of the planning committee is to define its scope of activities. These include:

- Identifying information needs.
- Surveying medical resources.
- Examining options for health care delivery (including costs).
- Determining levels of care.
- Developing a medical unit budget.
- Developing a staffing pattern.
- Identifying equipment needs.
- Determining the ideal location for the health unit.

The second step is to clarify the duties and responsibilities of individual members. Although each member is selected for his or her particular expertise, it must be made clear that this is a committee of equals and that anyone can make a contribution outside his or her specialty area.

The planning committee is not responsible for creating a design; instead, it provides the designer/architect with the information necessary to develop a design. Regarding programming, one writer said:

> Analysis studies and evaluates, while programming ORDERS the evaluation, establishing patterns by which courses of action can be taken. Programming is thus the decision-making process through which a conceptual layout of spatial requirements and their relationships will be accepted, modified, adjusted, or even changed in order to produce a final composite of determinants making up the initial postulates from which any design process must derive. (Marti, 1981)

Another author addressing medical facility planning had this to say:

> Simply stated, functional planning of hospital facilities relates to those efforts before design that determine operational concepts and specify functions (in terms of procedures, required equipment and numbers and categories of space users) that will take place in the spaces of a proposed structure, both individually and collectively. However, the scope of functional planning duties has now been extended to include

> the actual descriptions of facilities, in narrative or graphic form, that deal with interdepartmental and intra-departmental relationships, traffic flows of all types, and methods for obtaining flexibility and expansibility—all of which were once considered the province of the design architect. (Hardy and Lammers, 1986)

These two comments clearly lay out the responsibilities of the planning committee and its relationship with the designer/architect. The end product of the committee's efforts is to produce an architectural program that will provide the basis for the design of the health unit.

3. Defining the Objectives of the Health Program

The objectives of the health program may be an iteration of the system's health objectives. If objectives have never been formulated, this is the time to do so. The primary objective should be to provide high-quality, timely, and cost-effective health care. One strategy for attaining this goal may be to meet the health standards of the National Commission on Correctional Health Care, the American Correctional Association, or another standard-setting body, and to comply with state regulations regarding licensure of health staff and facilities.

C. DETERMINING THE INFORMATION NEEDS

The success of planning will depend on the accuracy of the information that is available or generated. The planning committee will need to know what health conditions exist in the system's population to predict what needs must be met as well as the required staff, equipment, and space for specific health services. For example, knowing how many inmates are expected to come to sick call daily helps to determine the size of the inmate waiting area. Furthermore, experience with the health needs of specific age groups will help determine the extent of special needs and whether they can be met by the health unit or must be referred to the community. Additionally, providing inmates with ancillary services (e.g., laboratory, radiology) in the community may be less expensive than providing them in the health unit.

The options regarding where and how to provide which types of health care rest on a number of variables that must be identified and analyzed if informed decisions are to be made. The following listing indicates the types of variables that need to be considered and the data that should be gathered. The planning committee should ensure that the data reflect anticipated population needs and utilization and not what existing resources can handle.

1. Inmate Health Profile and Utilization of Health Services

- Population characteristics: health profile correlated with age, gender (if coed use of the health unit is planned),[1] and security level.
- Frequency of health service provided by category of complaint (e.g., general, chronic, dental, dermatological, mental health).
- Average daily number of inmates scheduled for sick call.
- Average daily number of inmates seen by the physician(s).
- Average daily number of inmates seen by nurses.
- Average daily number of inmates seen by mental health providers.
- Average daily number of inmates seen by the dental department.
- Average monthly referrals to community providers (e.g., diagnostic services and specialty consultants).
- Average daily census in medical and mental health infirmary beds.

- Community hospital days (for both medical and mental conditions). These can be calculated on an annual basis. If a particular condition causes patients to use the most hospital days, this should be noted in the planning.
- Annual number of emergency transfers (both within the system and to community hospital emergency departments).

2. Health Resources

- Health resources within the system: specific institutions and their medical facilities.
- Health resources in county or state agencies: facilities that are available for diagnostic and inpatient care.
- Community hospitals, clinics, and consultants.

3. Cost Estimates

- Staff costs for the health unit (medical and custody).
- Equipment costs for the health unit.
- Transportation costs for all prisoner-escorted trips for health care (emergency and routine), including security costs.
- Costs for all community services, including diagnostic services, hospital days, and specialty consultants.
- Other costs, if any.

D. ANALYZING THE DATA

The planning committee will need to analyze the information from section C and develop expectancy tables, resource lists, staffing categories and salaries, and cost estimates by service so that it can choose options. The following discussion addresses some of the analyses that should occur.

1. Population Characteristics

The health profile of the system's population should provide information on the kinds of medical conditions and their frequency (e.g., per 100 inmates). It should be possible to determine the conditions that can be expected in a population by age category (e.g., an older population can be expected to have higher rates of heart disease, hypertension, and diabetes than a younger one, and younger inmates will have higher rates of sports-related injuries) and by gender (e.g., women will need obstetric and gynecological services). Also, inmates' security levels should be considered in projecting utilization data if they affect staff and space considerations. For example, in some facilities maximum security inmates can be brought to the health unit only one at a time. If the prison or jail has a large number of such inmates, fulfilling their health care needs will affect the use of staff and space and the staff's availability to serve the rest of the population.

If a facility's existing health unit is being renovated, the experience of that unit may be used in developing an inmate health profile; however, the usefulness of this information depends on the stability of the population. If the mission of the prison or jail is changing (e.g., it will house short-term, prerelease inmates instead of longer term inmates), the population profile for the facility based on the previous inmates held will not be valid. In this instance, a systemwide health profile may be more appropriate in determining health needs at the individual facility level.

Some systems use medical classifications (e.g., Classes I through IV, or the military PUHLES system). Although such classifications can provide a useful base from which to develop a health profile, they are not sufficient unless particular health conditions are specified.

2. Evaluating Health Resources

A health unit often requires support services from other correctional institutions in the system, from the community, or both. A correctional health unit, unless it is unique, also will require the use of other medical resources for diagnostic procedures that may involve specialized staff or expensive equipment. Thus, an inventory should be taken of the health

resources available within the system as well as those in the community.

If the renovation or construction of the health unit will be located near an existing facility, the resources of the neighboring facility should be reviewed. Does the neighboring facility have adequate space and staff to handle the additional health needs of the new or renovated facility? If a new institution is being planned near a community that does not already have a correctional facility, an assessment of its resources will be needed. Additionally, the planning committee must ascertain whether those resources will be available to the facility, because some community hospitals and clinics are unwilling to accept inmates as patients. If the new institution is based on an architectural prototype, the levels of care and staffing may already be set. Assessing community resources is still necessary, however, because they may differ at the new location.

In the case of a nonprototype facility, using the staffing pattern from an existing health facility is premature because the level of care has not been determined. When the levels of care have been set, the staffing pattern of other units may be used as a reference, with the caveat that other factors may not be similar. For example, the inmate health profile may differ, needed medical specialties may not be available at the proposed community hospital, other facilities' health units may be too distant to use economically, or there may be problems with staff recruitment because of competition with the private sector or a lack of health professionals of specific types in the community.

3. Comparing Costs

a. Elements to Consider

Several elements must be considered in comparing the costs of providing services in-house or in the community. Among them are staffing, equipment, and transportation needs as well as the cost of care in the community.

(1) Staffing Needs

The planning committee should have a list of all approved or planned health positions and their salary costs plus fringe benefits. The list should include custody staff who will provide security in the health unit as well as inmate escort services. One reason for compiling this list is to ensure that adequate space is provided for all staff (see section G of this chapter). This information also is necessary to make accurate comparisons with the cost of using community services or consultants versus the cost of providing these services in-house or hiring full-time personnel. A consultant may be hired for the time needed at a lower cost. A permanent position is a continuous expense in salary and fringe benefits. The cost of an external referral may seem high, but it may be less expensive than the equipment, supplies, and staffing for a permanent position.

Each full-time position should include a relief factor to allow for sick time, continuing education, vacations, and holidays. The factors often used are 1.2 for each 5-day-per-week full-time position and 1.7 for each 7-day-per-week full-time position (e.g., three 5-day-per-week positions = 3x1.2 = 3.6, or four persons to fill the three positions).[2]

(2) Equipment Needs

The planning committee should have an equipment list for reference (see sample provided in appendix J). Medical equipment catalogs include descriptions, costs, and dimensions. Catalogs are useful in determining costs and later can be used in defining spaces and space dimensions for equipment. It is recommended strongly that no major equipment purchases be considered without serious discussion relating the need for the equipment to the inmate population health needs and doing a cost comparison of purchasing the equipment and hiring trained staff to operate it versus purchasing the service in the community. For example, dialysis machines and radiological equipment both require large capital outlays as well as specially trained operators and can be expensive to maintain. Unless the volume

of patients requiring these special services is large, purchasing these services from a community provider rather than buying the equipment may be more cost effective. If planning addresses renovation, existing equipment should be surveyed and evaluated regarding its appropriateness and condition.

(3) Transportation Needs

Transporting inmates to external health resources for routine services incurs costs for both mileage and custody staff salaries. Both must be considered in any calculation comparing the cost of external versus internal services.

- ***Transportation.*** Will the facility purchase and maintain its own equipment (e.g., an ambulance or other specialized medical transportation)? What is the capital cost of such equipment and its annual maintenance expense? Is private transportation available and, if so, what is the cost based on the projected number of trips? Will other vehicles owned by the agency be used, and if so, what is the projected mileage cost at the agency rate?
- ***Staff.*** The salaries of custody staff used to transport prisoners to external health resources and guard them during their stay are chargeable to health care. Average hourly costs for security should be calculated from the time the inmate leaves the prison or jail until he or she returns. Also, if the sending facility will make extensive use of another facility's health program in the system, staffing increases must be considered at the receiving unit to assist in handling the increased workload.

(4) Community Care

In addition to transportation costs, the planning committee needs to determine staff costs for security during hospitalization, the cost of diagnostic procedures and any laboratory work not done onsite, the anticipated hospital days per year and the cost of hospitalization, and the cost of outpatient specialty services.

Costs associated with community care can be based on the experience of like populations and comparable facilities and can be computed based on the cost per 100 inmates, on an average cost per unit, or on an annual basis. The method chosen should be used consistently whether computing the number of trips, average mileage per trip, number of referrals by specialty, or average cost per referral. Annual figures should not be mixed with unit-cost figures.

(5) Other Costs

In any given system, there may be other costs that affect the planning process and decisionmaking regarding the proposed health unit. If so, these should be considered as well.

b. Construction Costs in Other Systems

Depending on the type of health unit being planned, it may be useful to determine whether another county or state of similar size has recently built a new health unit. The National Institute of Justice (NIJ) has a Construction Information Exchange that puts staff in a jurisdiction that is planning to build in touch with staff in another jurisdiction that has faced similar design issues. The intent of the information exchange is to share what has worked and what has not.[3] Additionally, NIJ publishes a series of Construction Bulletins that can be useful in the planning process[4] as well as periodic construction cost indexes. These latter figures "show the date and cost of construction at a particular location" and can be used "to estimate what it would cost to construct that facility in your geographic region."[5]

As part of a National Commission on Correctional Health Care/National Institute of Corrections (NCCHC/NIC) survey of prison and jail health care costs conducted in 1999, respondents were asked if they had constructed any new health units in the past 2 years.[6] Of the 17 large jail systems responding, only one (Cook County, Illinois) had done so. According to the systemwide health

services director, Leonard A. Bersky, the Cook County Department of Corrections constructed a new 166,000-square-foot health care facility in 1998. It included 151 infirmary beds (20 of which were restraint beds), an ambulatory clinic, an emergency room, ancillary services, offices, and a physical therapy area. The total cost of the construction was $42,750,100, or $258 per square foot.[7]

Of the 41 state and federal prison systems responding to the NCCHC/NIC cost survey, 13 states had constructed new health units in the past 2 years. As indicated in exhibit XI-1, seven states had constructed ambulatory clinics with infirmaries at an average cost of $206 per square foot (range = $73 per square foot in Kansas to $657 per square foot in New York). Two states had constructed infirmaries, but there was a big difference in the cost per square foot ($21 in Connecticut versus $194 in New Mexico). Three states had constructed ambulatory clinics at an average cost of $148 per square foot (range = $122 to $181). Finally, three states had constructed other types of health care units: a dialysis treatment center in South Carolina that cost $79 per square

EXHIBIT XI–1.
Comparison of 1998 Construction Costs, by State

Ambulatory Clinic and Infirmary (ACI)				
State	**Total Beds**	**Cost of Construction**	**Square Footage**	**Cost per Square Foot**
Arizona	13	$2,457,725	22,000	$112
California				
ACI 1	16	2,500,000	22,000	114
ACI 2	17	2,000,000	23,000	87
ACI 3	18	2,500,000	20,000	125
ACI 4	18	2,500,000	20,000	125
ACI 5	30	2,600,000	21,000	124
Kansas	4	800,000	11,000	73
Missouri				
ACI 1	10	1,427,280	8,000	178
ACI 2	10	2,155,629	13,520	159
ACI 3	20	1,889,786	14,490	130
New York				
ACI 1	98	30,000,000	115,384	260
ACI 2	50	46,000,000	70,000	657
ACI 3	18	9,000,000	24,000	375
ACI 4	12	2,000,000	5,100	392
Virginia				
ACI 1	330	6,330,894	66,392	95
ACI 2	6	2,240,000	8,000	280
ACI 3	6	2,240,000	8,000	280
ACI 4	6	2,295,600	12,200	188
ACI 5	6	2,295,600	12,200	188
Washington	24	5,500,000	30,567	180
Average	**36**	**$6,436,626**	**26,343**	**$206**

Continued on next page

foot, a sheltered living unit in Tennessee for $154 per square foot, and an assisted living unit in Washington at $139 per square foot.

No conclusions can be drawn about the differences in the cost per square foot for health unit construction among these states. Some of the variance may be due to differences in the cost of living in these areas. Most of it, however, undoubtedly is due to differences in the health program plan. These cost figures represent different inmate needs, different operational and management configurations, different services, and differences in where services are provided (e.g., whether in-house, at another facility in the system, or in the community). Those interested in knowing more about the construction of health units in particular sites are urged to contact the representatives from these states.[8]

E. Determining the Level of Care and Services

At this point, the planning committee should be in a position to define the level of care that will be provided at the new facility and determine the health program components. The following information will have been assembled:

- Health profile of the inmate population at the proposed facility.
- Expected volume of inmates for sick call, diagnostic referrals, chronic clinics, infirmary care, specialty services, and hospitalization.
- Health needs of the inmate population.

EXHIBIT XI–1 ***(Continued)***.
Comparison of 1998 Construction Costs, by State

State	Total Beds	Cost of Construction	Square Footage	Cost per Square Foot
Infirmary				
Connecticut	14	$347,873	16,700	$21
New Mexico	35	4,577,957	23,538	194
Average	**25**	**$2,462,915**	**20,119**	**$108**
Ambulatory Clinic				
Arizona	0	$764,000	6,282	$122
Nebraska	0	220,000	1,217	181
Wisconsin	2	925,120	6,600	140
Average	**1**	**$636,373**	**4,700**	**$148**
Other				
South Carolina Dialysis Treatment Center	N/A	$395,000	5,000	$79
Tennessee Sheltered Living Unit for the Aged and Infirm	188	4,877,000	31,709	154
Washington Assisted Living	120	6,485,521	46,700	139
Average	**154**	**$3,919,174**	**27,803**	**$124**

N/A = Not applicable.

- Health resources of the correctional system.
- Related health resources of other county or state agencies.
- Health resources in or near the community where the facility is to be located.
- Estimated costs of transportation for all external services.
- Cost of additional staff for the provider institution, if existing system resources are used.
- Cost of diagnostic services in the community.
- Hospital or clinic costs by specialty.
- Specialty consultant contract costs.
- Full-time medical and support positions, salaries, and fringe benefits.
- Other costs.

The decision about the level of care that will be provided at the facility's health unit is best reached by balancing inmate health needs with system and community resources. In most instances, the options will be limited to deciding between a clinic only or a clinic with the addition of an infirmary. In some instances, though, special-purpose units may be planned, such as psychiatric facilities, geriatric units, handicapped facilities, or hospice-type units for terminally ill patients.

If the new health unit is in a cluster of institutions, it can function as part of a regional medical system, with each facility providing specific services. One facility may already have sufficient infirmary beds, specialty clinics, and radiology and laboratory services to absorb the new population, and another may have sufficient inpatient mental health services. The new facility then could be limited to providing its own clinic care. On the other hand, if the planning process indicates that the infirmary at an existing institution is inadequate because of lack of space and lack of expansion potential, it may be prudent to build an infirmary in the new facility that can handle the overflow from existing institutions. In the latter case, the level of care will not be determined solely on the basis of the new facility's population but also on the assessment of the needs and resources of all the facilities in the cluster. All options must be considered carefully, including potential economies of scale.

To determine the unit's level of care, identify all of the services that will be available to the inmate population regardless of where they will be provided. Options for onsite versus external services then can be considered. The following list identifies many of the components of the medical program for a clinic or a clinic/infirmary. Each activity and service listed has implications for staffing, space, and/or equipment needs.

1. ***Initial reception.*** If the prison or jail is a receiving institution for new admissions to the system, it will need to provide all the intake health functions, including physical, mental, and dental examinations and evaluations (all of which may require diagnostic tests and procedures).
2. ***Intrasystem inmate transfers.*** Intake of transferred inmates at the receiving institution will require, at a minimum, chart reviews and followup of ordered care.
3. ***Sick call.*** The anticipated volume of sick call and the frequency with which it will be held should be specified as well as who will conduct it, where, and how.
4. ***Chronic care.*** The types, location, and scheduling of the chronic clinics should be described.
5. ***Convalescent care.*** If this care is to be provided by another facility with an infirmary, this should be stated. If such care will be provided in this health unit or in special housing outside the medical unit, this should be indicated.
6. ***Infirmary care.*** If the health unit will have an infirmary, the number of beds should be determined based on anticipated need. If the infirmary also will serve other facilities, the number of beds should reflect this. The national standards selected to guide health services operations should be reviewed for other requirements (e.g., 24-hour nursing coverage) that will affect the space and location of the infirmary.

7. ***Medical isolation.*** Data on the systemwide experience with infectious diseases may be useful here because they may show trends. Isolation for tuberculosis and other airborne diseases will require negative-pressure rooms to minimize transmission of infection.

8. ***Laboratory.*** Will the unit support a laboratory for basic procedures, send all work to an outside contractor, use the services of another facility in the correctional system, or do all three? The complexity of the lab work to be done in-house will determine equipment and space requirements.

9. ***Pharmacy.*** The anticipated volume of prescriptions, storage space, security, refrigeration, temperature control, and ventilation are considerations that need to be addressed.

10. ***Medication distribution.*** A keep-on-person program may reduce, but will not eliminate, the need for medication call. Will the pharmacy also serve as the place for distribution of medications? If medications are to be distributed to inmates through a window to the yard, will cover from the elements be needed? If the medication distribution is done in an area separate from the pharmacy, consideration of space, storage, ventilation, temperature, and security of medications is needed.

11. ***Mental health care.*** What is the anticipated patient volume? Will acutely ill inmates be transferred to other facilities for observation and care? If not, how many psychiatric inpatient beds will be needed? Also, "safety cells" for observation of dangerous psychotic or suicidal inmates will be required.

12. ***Dental care.*** What is the anticipated patient volume? How many operatories will be needed? What other types of equipment will be required (e.g., x-ray machine, developer, full mouth x-ray machine)? Will dental lab services be provided on site? Where will oral surgery needs be met?

13. ***Specialty consultants.*** Will inmates be referred to community facilities or will specialty consultants be used at the prison or jail? In the latter case, what is the anticipated volume and probable scheduling for specialty clinics? Will the space be multiuse? What are the anticipated equipment needs? Where will any special equipment be stored when not in use?

14. ***Emergency services.*** Equipment and space requirements for an emergency room should be provided. Will this be a multiuse room, serving as a treatment area unless needed for emergencies? Also, will the facility operate its own ambulance service? If so, any special space and equipment needs should be considered.

15. ***Medical records.*** Space requirements for storing both active and inactive records as well as offices for medical records personnel must be determined.

16. ***Administrative offices.*** Offices for various staff (e.g., physician, director of nursing, physician extender, psychiatrist, psychologist, health administrator) must be identified along with working space for support staff. Combination office/exam rooms for medical staff and office/treatment rooms for mental health staff should be considered to save space.

17. ***Storage.*** Space requirements for storage of medical supplies must be determined. Additionally, if an inpatient area will be provided, storage for both clean and dirty linens will be needed.

18. ***Radiology.*** The options are (a) all but the more sophisticated work is done on site, (b) a portable service is provided, or (c) all services are provided by another institution or community facility. Options (a) and (b) will require equipment and space on site, although the portable x-ray may require less space.

19. ***Segregation/confinement.*** How will inmates in segregation be given health care? Will sick call be held in the cell block in a dedicated examination/treatment room? Will inmates be brought to the health unit in all instances or only for treatment? What are the staff and space requirements for the different options?

20. ***Hazardous waste.*** How will this be managed? Will there be space and equipment requirements for this program?

21. ***Other.*** Decisions also are needed regarding staff and inmate toilets, inmate waiting areas, and whether a staff locker room/lounge and a conference/training/library room will be included.

Note that not all the possible services are addressed here; for example, special provisions for the physically handicapped have not been mentioned. Nonetheless, it should be clear that all the national standards and state licensing requirements that have space, equipment, and/or staff components must be addressed to identify all the health functions and space needs for a given correctional unit.

F. Developing the Architectural Program

Up to this point, organizing the planning process, determining the information needs, analyzing the data, and deciding the level of care and services that will be provided on site have been addressed. By now, the planning committee should have a thorough understanding of the system's health program needs and resources and should have identified the level of care of the new or renovated unit. The next step is to develop the architectural program.

The architectural program is a conceptual model that describes the health program to the designer. It includes the objectives to be achieved by the design, a brief description of the activities within the health unit, and the function of each space as well as its contents and dimensions. To generate a configuration of the spaces, the designer needs to know the volume and flow of traffic, high- and low-use areas, density, staffing patterns, and special considerations such as security, inmate supervision, emergency needs, equipment placement, storage requirements, and contaminated waste disposal procedures. This listing is not exhaustive but illustrates the various functional and program concerns that the planning committee must address if the architect is to produce a workable design.

The architectural program must be expressed in clear, understandable, unambiguous language. It must include concise descriptions of the functions and dimensions for each space. Terms such as "occasional," "usually," "adequate," "sufficient," and other adjectives indicate that the writer has no idea what is being described. Neither will the designer.

Primary components of the architectural program from the health and custody administrators' perspectives are addressed below.

1. Health Components

a. Objectives

The planning committee will have formulated the objectives of the health program and will have determined levels of care and identified the program components. A strategy for achieving health care objectives may be to meet the standards of NCCHC or those of the American Correctional Association, the American Public Health Association, or the Joint Commission on Accreditation of Healthcare Organizations. It is recommended that NCCHC standards or those of another national accrediting organization be used as the framework for the development of the health program description.

b. Health Program Description

The committee can now describe for the architect the types of spaces that will be needed. The list in section E of this chapter addressed the components of the medical program for a clinic or a clinic/infirmary. Decisions about onsite and offsite services will have been made and can be described in a written document. In all instances, the planning committee needs to review whatever standards have been selected and describe the program that will be implemented to meet them. The description should address anticipated volume of use (high and low), space needed

for the program component (if the space will have multiprogram use, this should be indicated), how many staff will use the space, and equipment and storage needs of the space.

2. Custody Components

The custody components involve locating the health unit so that it meets the institution's requirements. These requirements may affect the health program but should not distort it. Requirements include access, security, and emergency planning.

a. Access

The health unit should be located in an area that is secure yet easily accessible. The location selected may be a compromise because an optimally secure location may be difficult for inmates, staff, and emergency vehicles to access. Ideally the health unit should be placed in a site where it is separated from the normal inmate traffic flow and secured from entry by its own sally port. Placing the health unit on the perimeter of the institution provides easy entrance and exit for health professionals and emergency vehicles. Such an arrangement, however, may require additional custody staff. In any case, the health unit should be located on the ground floor to ensure ease of access for handicapped inmates and for patients exiting from the compound.

b. Security

The security component of the program should address the following:

- ***Control of inmate entry to the health unit.*** This includes security doors and hardware controlling entry, windows, and emergency exits; security staffing and control posts for the health unit; and emergency communication equipment.
- ***Location and capacity of inmate waiting area.*** The inmate waiting area can be inside or outside the health unit. However, it should be in a location that does not interfere with traffic in and out of the unit. Hallway benches are unacceptable. Such placement often leads to inmate interference with staff movement, harassment of staff and other inmates by waiting inmates, and other inmate control problems.
- ***Inmate supervision within the health unit.*** Security concerns include supervision of inmate/patients (and inmate janitors, if used); security of medications, drugs, sharps, and needles; lines of sight; and supervision of inmates in the infirmary. The location of the custody officer(s) within the health unit should be indicated.

c. Emergency Considerations

Specifications for emergency exits from the health unit should be developed. These specifications should include time and distance requirements and areas to which individuals can be evacuated. Other requirements to meet fire and safety codes must be addressed. Emergency vehicle access (including helicopter landing space if air evacuation is to be used) must be planned.

G. SUMMARIZING THE DESIGN NEEDS

1. Dimensions and Spaces

Up to this point, the planning process has concentrated on a program description, functions of spaces, volume of inmates for services, options on delivery of services, equipment and its dimensions, and staffing. Multiuse spaces were discussed for the delivery of different services (e.g., specialty clinics, chronic care clinics). Now it is necessary to identify the specific number of spaces and their dimensions and whether they will be single use or multiuse. A checklist such as the one shown as exhibit XI-2 may be a useful first step. A summary based on the checklist is the second step.

Each space category reflected in the summary should include detailed information that clearly indicates the activities that will take place, how many persons will be required for each activity, hours when the space will be in use and for how long a period, and the dimensions or square-foot requirements of equipment, staff, etc. Because the checklist does not provide enough space to include such detailed information, a different format is needed for the written description. The page layout for this summary might be as follows:

- Treatment/Examination Room 1
  - — Functions
  - — Use (schedule)
  - — Density (maximum)

EXHIBIT XI–2.
Design Needs Checklist

Space	Function	Density*	Dimension†
Treatment/examination rooms (list each)			
Emergency room			
Offices (list each)			
Infirmary rooms (list each and specify number of beds and use)			
Isolation			
Safety cell			
Handicapped equipped			
General			
Dental			
Operatories			
Lab area			
X-ray equipment space			
Laboratory			
Pharmacy			
Radiology			
Equipment area			
Developer area			
File space			

Continued on next page

— Equipment (types and dimensions of each)

— Total dimensions (gross square feet)

Treatment/Examination Room 2 (and so forth)

(Repeat same information as in a., above, for each room of this type.)

- Emergency Room 1

— Functions

— Use (intermittent and unscheduled)

— Density (maximum)

— Equipment (types and dimensions of each)

— Total dimensions (gross square feet)

The description continues until all program spaces have been defined for the designer.

This listing recapitulates the components described in section E. The major difference is that it clearly lists the number of spaces with their dimensions, which is useful as a quick reference for the designer and ensures that no space is left out.

EXHIBIT XI–2 *(Continued)*.
Design Needs Checklist

Space	Function	Density*	Dimension†
Medical records			
Storage (all types, list each)			
Waiting room(s) (and holding cells if required)			
Restrooms			
Staff			
Inmate			
Other spaces			
Physical therapy			
Locker room/lounge			
Conference room/library			

*Density refers to the number of people who will be using a space at any given time.
†Dimensions should be measured in gross square feet and should include space required by equipment and work areas.

2. Traffic Pattern

Determining the traffic pattern is probably the most difficult phase of the planning process. The traffic pattern is the heart of the design and the element that can make a program work well or cause continuous problems. The number of offices and special-purpose rooms can be determined with precision; the way they are arranged to expedite the flow of activity (i.e., their functional relationship) is not precise, but it is critical to the work activity:

> The term functional relationship here emphasizes relative physical proximity of one activity to another. Time spent transporting people, materials, and equipment from one functional area to another is often critical. The importance of physical proximity can be evaluated by analyzing traffic flow. The need for close functional relationships may result from volume of interactions between functions, or dependence of one function on another. (Hayward, 1985)

Although Hayward was referring to hospital planning, the concept of functional use and space planning is applicable to correctional health units. In correctional facilities, where space is at a premium, the need for careful planning for the use of space and the location of the various work areas is crucial. For example, placing the radiology service where it is easily accessible to the treatment rooms seems rational; however, if the only entrance to radiology is through a treatment room, the traffic pattern will make the treatment room useless at certain times. On the other hand, limiting traffic through the treatment room will reduce the value of the radiology room. Use and traffic patterns mandate access to radiology from both the treatment room and an outside corridor if proximity of these two functions is to be accomplished.

Three factors are important in determining traffic flow: functional relationship, pattern of use, and volume. Security and control underlie all three. *Functional relationship* refers to related functions and the need for them to be close to each other. *Pattern of use* is the times during which a functional area is being used. *Volume* refers to the number of persons who will be using that space at one time and during a specific period of time (e.g., the treatment room will be used by approximately 70 persons daily, but the maximum number occupying it will be no more than 3 at any given time: physician, patient, and nurse).

The placement of each program space will need to include the following:

- ***Functional relationship.*** What related activity or resource will be needed to support the activity? The functional relationship may be with radiology, health records, or laboratory services.
- ***Pattern of use.*** What are the peak hours during which this space will be used?
- ***Volume.*** What is the total number of persons using the room daily and the maximum number served at one time?

One method of roughly determining the traffic pattern is to list the major health program areas and enter the volume for each using an average daily figure. The format shown in exhibit XI-3 may be useful in developing a first cut of the traffic pattern.

The list in exhibit XI-3 is not exhaustive because some programs may include a hydrotherapy room, for example, or other areas with dedicated purposes (e.g., physical therapy, nutrition center for inpatients). Although surprises about where the volume of use is located are unlikely, this scheme will help clarify the areas of use and suggest a traffic pattern. The information will need to be correlated with the functional relationships of the various program elements.

One other consideration that needs to be addressed is the staff's traffic pattern. To a great extent, it will follow the volume of inmate use of services; however, there are some exceptions. For example, location of the medical records, the pharmacy, and the infirmary will not necessarily follow inmate use patterns. Inmates should not be allowed in the medical

records room or the pharmacy, and there will not be 100-percent turnover of infirmary patients daily. Furthermore, the location of the emergency room is dictated not by volume but by ease of staff accessibility and an unimpeded exit to emergency vehicles.

In determining the traffic pattern, the following criteria should be considered:

- Limiting inmates' access to the interior of the health unit.
- Locating services with the least volume toward the interior.
- Placing those support services used by the staff centrally to minimize distance and facilitate ease of use.
- Situating the inpatient and isolation areas out of the heavy traffic pattern to provide maximum supervision and eliminate outpatient contact.
- Locating the inmate waiting area within observation of custody staff but out of the normal traffic pattern to limit interference with health staff.

EXHIBIT XI–3.
Traffic Volume by Health Space

Health Space	Anticipated Number of Inmates Treated Daily
Medical screening	10
Treatment/ examination room	70
Laboratory	10
Radiology	10
Mental health	
Individual therapy	20
Group therapy	30 (3 groups of 10 inmates)
Dental	16
Specialty use (consultants)	10
Pharmacy (pill window)	175
Emergency room	4

3. Architectural Program Statement

The architectural program statement is a document that describes the health care program, its objectives and needs, and the decisions that have been made in selecting health care delivery service variables. It includes statistical information that supports the decisions and contains specific instructions to the designer on program needs, space needs, dimensions, functional relationships, volume, and density. The committee also may include instructions that represent policy considerations not addressed by the study.

Organization of the architectural program statement may vary. The following is a suggested outline.

- Introduction
  - — Objective of the health care program
  - — Population health care profile
  - — Health care resources
- Location of the Health Care Unit
  - — Needs of patients and health staff
  - — Administrative concerns
  - — Security concerns
  - — Emergency considerations
- Description of the Health Care Program
  - — Level of care
  - — Health care program components and options
  - — Staffing
  - — Equipment
  - — Costs
- Program and Space Specifications for Each Component
  - — *Space name*. Identify area (e.g., examination room).

  - — *Function.* Concise statement of how space is to be used.
  - — *Location requirements.* The description should include volume of use, how often used, functional relationship to other activities, and security needs.
  - — *Density.* Maximum number of persons accommodated.
  - — *Equipment.* Types and dimensions, including cabinets, sinks, file drawers, desks, examination tables, dental operatories, beds, storage equipment, computers and office equipment, specialty needs, and other equipment as appropriate to the function of the space.
  - — *Space dimensions.* Specify the size of the overall space as well as the working area required when equipment dimensions are taken into account.
  - — *Dimensions of openings.* Type and dimensions of doors (some should be wide enough to admit a stretcher, gurney, or hospital bed), windows (some rooms may need greater visibility or special glass), and other openings.
  - — *Privacy requirements.* For example, for treatment/examination rooms emergency rooms.
  - — *Sanitary facilities.* Ratio per employee and per inmate and location.
- Summary

In addition to the clinical spaces, the health unit should include space for a staff lounge/conference room/library that can double as a training room. Also, as discussed earlier, space must be provided for staff offices so paperwork can be completed.

By now, the job of the planning committee is nearly completed and the work of the architect begins.[9] He or she should have a thorough understanding of the health unit's functions and requirements and be able to translate the program statement into a workable design.

H. POSTDESIGN CONSIDERATIONS

1. Occupancy of the New Unit

If the health unit is part of a new institution, an occupancy schedule and training plan should be included in the overall occupancy plan. The planning committee members may not necessarily develop the training plan, but they are responsible for making the assignment and developing a schedule. Training should occur after completion of finish work and the placement of equipment. It should include orientation to the new facility as well as the health unit. A review of the architectural program statement with the proposed staff for the new unit is one method of beginning the orientation. Space should be identified and offices assigned. Policies, procedures, and security post orders should be reviewed and modified where necessary to meet the new unit's needs. Normally the system's policies will remain in force, although some procedures may change based on the local facility's needs.

Training should provide the staff with an opportunity to become familiar with the physical organization of the facility and the health unit, and include testing of new equipment. If staff members are new to the correctional system, a comprehensive training program is expected to be available.

2. Postoccupancy Evaluation

A postoccupancy evaluation of the health unit should be conducted approximately 6 months after it is opened to test the effectiveness of the design. The following criteria should be reviewed:

- Have inmate control and supervision been achieved?
- Is traffic flow according to predictions?
- Has organization of the spaces resulted in an efficient work flow?

- Does each room have sufficient work space?
- Is the equipment functioning as planned?
- Are there any other areas of design weakness?

A questionnaire should be developed and health and custody staff interviewed to conduct the evaluation. Questions should be based on the areas listed above. If they are to be useful, positive or negative responses should be supported with detailed information, and in the latter case, with suggested alternatives to the existing design components.

Results of the evaluation should be submitted to the administration and available for future planning. If another health unit is anticipated, this information should be reviewed to further reduce planning and design errors.[10]

NOTES

1. If the health unit is to be used by female patients, special plans and designs may need to be considered. See, e.g., Carp and Davis (1989) and Elias and Ricci (1997).

2. See chapter VI on staffing for more information on calculating personnel needs and developing staffing patterns.

3. See Dewitt (1987).

4. These materials are available from the National Criminal Justice Reference Service, P.O. Box 6000, Rockville, Maryland, 20849–6000, (800) 851-3420.

5. See National Institute of Justice (1993:2).

6. The National Commission on Correctional Health Care/National Institute of Corrections cost survey was conducted by B. Jaye Anno, Ph.D. For more information on the methodology and the respondents, see chapter XIV.

7. For additional information on construction of the Cook County health unit, contact Leonard A. Bersky at (773) 869-5641.

8. Arizona: Penny Collins, (602) 255-4222
California: Cheryl Stewart, (916) 327-1578
Connecticut: Thomas Macura, (860) 692-7648
Kansas: S. Dettman-Roudybush, (785) 296-2163
Missouri: Lenard Lenger, (573) 526-5038
Nevada: Phil Nowak, (775) 887-3279
New Mexico: John Robertson, (505) 827-8762
New York: Lester Wright, (518) 457-7073
South Carolina: Glen Franz, (803) 896-2160
Tennessee: Robert Bradford, (615) 741-2607
Virginia: Fred Schilling, (804) 674-3282
Washington: Beth Anderson, (360) 753-3252
Wisconsin: Sharon Zunker, (608) 267-1730

9. Specifying the exact time when the architect enters the process is difficult. As soon as the architect has been identified, though, he or she should work with the planning committee.

10. See also Preiser, Rabinowitz and White (1988).

REFERENCES

Carp, Scarlett V., and Joyce A. Davis
1989 Design Considerations in the Building of Women's Prisons. Longmont, CO: U.S. Department of Justice, National Institute of Corrections Information Center.

Dewitt, Charles B.
1987 Building on Experience. Washington, DC: U.S. Department of Justice: National Institute of Corrections.

Elias, Gail L., and Kenneth Ricci
1997 Women in Jail: Facility Planning Issues. Washington, DC: U.S. Department of Justice, National Institute of Corrections.

Hardy, Owen B., and Lawrence P. Lammers
1986 Hospitals: The Planning and Design Process (second edition). Rockville, MD: Aspen Publishers, Inc.

Hayward, Cynthia

1985 A Generic Process for Projecting Health Care Space Needs. Washington, DC: American Institute of Architects, Committee for Health.

Marti, Manual, Jr.

1981 Space Operational Analysis: A Systematic Approach to Spatial Analysis and Programming. West Lafayette, IN: PDA Publishers Corporation.

National Institute of Justice

1993 Construction Cost Indexes. Washington, DC: U.S. Department of Justice.

Preiser, Wolfgang F.E., Harvey Z. Rabinowitz and Edward T. White

1988 Post Occupancy Evaluation. New York: Van Nostrand Reinhold Company.

Data Management and Documentation

Chapter XII

Chapter XII

Data Management and Documentation

The importance of accurate data and information on which to assess current activities and plan future programs has been stressed throughout this book. This chapter identifies the key types of documentation required in any correctional health system. Section A addresses the development of a policy and procedures manual, and section B reviews the components of an adequate health record. Section C identifies the types of data needed for administrative purposes, and section D describes data collection and management techniques. The efficacy of using computers in data management and documentation activities also is discussed.

A. The Policy and Procedures Manual

Establishing a written policy and procedures manual to govern correctional health services is essential. If one does not exist, its development is the first step the systemwide health services director should take to improve the delivery of care. The primary purpose of a written policy manual is to define clearly the department of corrections' (DOC's) position regarding specific issues, including administrative matters, personnel requirements, care and treatment of patients, and services provided. It translates the health services division's basic goal (i.e., to provide quality health care to inmates on a timely basis in a cost-effective manner) into a series of statements that define how that goal is to be achieved. In effect, a written policy manual is the DOC's own set of standards against which it can measure the extent of compliance at individual institutions and, at times, the performance of specific staff members.

The health services policy and procedures manual serves both as an operational guide for current staff members and as a training guide for new employees. Although the development of a comprehensive manual is time consuming, its existence saves time in the long run because it eliminates the need to explain verbally (often repeatedly) the exact steps involved in, for example, holding sick call or completing a specific form. More important, written policy statements help to ensure standardization. The same information is communicated to each health services staff member in the same way, which helps to ensure uniform compliance with policies and accuracy in the completion of documentation requirements. Another advantage of a written policy manual is that it is available for ready reference. It can resolve disputes among staff members regarding procedural issues and assist in decisionmaking regarding whether an inmate's specific request for care is permitted. Finally, a written policy manual can be extremely useful in defending the system against a lawsuit and is a requirement for accreditation by national organizations.

In developing policies and procedures, a few basic rules should be kept in mind. First, the written statements should reflect the DOC's actual positions and practices. In other words, they should state what is in effect now and not what someone hopes will be

in effect a year from now. To do otherwise not only makes the policy manual meaningless as a management tool but also can invite litigation charging that the DOC failed to live up to its own standards.[1] When a change is made in the DOC's position or procedures, the policy manual can be updated so that it always reflects current practices.

Second, policies and procedures should be designed to cover the usual situation and not the unusual one. It is difficult, if not impossible, to address every eventuality in a policy statement on a specific topic. Exceptions and questions are sure to arise when policies and procedures are implemented. That is as it should be. A policy manual is not a static document. It should be reviewed regularly and input from users should be solicited to determine whether clarifications or changes are needed. Third, the manual should be as specific as possible. The more detail that is provided, the greater the chances are for uniform compliance. Fourth, the imperative mood should be used. If compliance is optional, the manual does not present a "policy" of the DOC, but only a recommendation.

One of the first steps in developing a policy and procedures manual is to list the topic areas that will be included. Reviewing the table of contents of American Public Health Association (APHA) and National Commission on Correctional Health Care (NCCHC) standards can provide topic ideas. Once a decision on topics has been made, the actual writing of the policies and procedures can be assigned to specific staff members with expertise in the content areas or delegated to a multidisciplinary policy and procedures committee. A consistent format that incorporates the following key elements should be used for each policy statement:

- The title and number of the policy and procedures.
- The date they go into effect.
- The page number and the total number of pages (e.g., page 1 of 4).
- The name of the department, division, or issuing agency promulgating the policy and procedures.
- The application (e.g., when there are institutional differences, this section indicates the institutions to which the particular policy and procedures apply).
- The policy statement itself.
- The procedures that specify how the policy will be carried out, including who does what when, how, and sometimes how often and for how long.
- Cross-references to other relevant policies, if any.
- References that support the policy, including national standards and state laws, rules and regulations, and agency directives.
- The signature(s) and title(s) of the authorities who approved the policy statement.

If the policy and procedures involve completion of a form, blank copies of the form and instructions for its use should be appended to the policy statement. Examples of policy statements that incorporate these key elements are provided in appendixes A and K.

When new policies and procedures are drafted, it is useful to send them out for review before implementation. Drafts should be circulated not only to relevant staff in the central office (including non-health staff) but also to selected custody staff and health professionals working in the institution. The latter, as potential users of the policy and procedure statements, often are in the best position to comment on the clarity and feasibility of the proposed statements. Lindenauer and Lichtenstein (1979:13) suggest that procedure statements be reviewed with the following questions in mind:

- Do the procedures address policy objectives?
- Are the procedures realistic?
- Are the procedures adequate?
- Are all relevant contractual arrangements/ requirements covered?

- Are other policies and procedures compatible with these?
- Are procedural steps in the best order?
- Is the sequence unnecessarily rigid?
- Can any steps be eliminated?
- Do the procedures avoid bottlenecks?
- Are the steps designed to operate at the lowest level of authority?
- What is the effect of proposed changes on other procedures?
- Will the procedures work on all shifts?

Once the policy and procedure statements have been reviewed and revised, the next step is to train relevant staff in their use before the actual implementation date(s). Depending on the number of statements, this can be accomplished at special inservice training sessions or as part of the regular shift change notification process. Regardless of the approach, potential users on all shifts need to be aware of the pending policies and the implementation date(s). It also is a good idea to notify custody staff of proposed changes (except for those totally internal to health services) so they are kept informed of general health services procedures. Obviously, if the proposed policy involves coordination with custody staff, they should be included in the development, review, and training processes.

Organization of the policy manual is another consideration. Some DOCs group their policies within specific program or service headings (e.g., medical, dental, mental health, pharmacy), while others elect to follow the organizational format headings of NCCHC standards or some other set. Whichever approach is used, each policy manual should include both a table of contents and an index. The table of contents simply lists the title of each policy statement in the order in which it appears in the manual, following whatever numbering scheme has been selected. The index is arranged alphabetically by keywords and lists all policy statements by number that pertain to the keyword. The larger and more complex the policy manual is, the more important it becomes to have a good indexing system. Because the policy manual serves as a training and reference book, ease of use is a primary consideration.

The distribution and placement of the health services policy manual are important as well. At the central office, copies should be provided at least to the heads of each department/section within health services, to the director of the agency, and to the heads of other relevant divisions within the DOC such as custody, classification, and food services. At the unit level, the facility administrator, the health services administrator, and the clinical director should have copies, and copies should be placed in each health services office area for ready reference by staff. A complete distribution list should be maintained by a health services staff member at the central office along with instructions about who is responsible for ensuring that the unit policy manuals are kept up to date. The manual should be reviewed at least annually and revised as necessary.[2]

There is one final caveat. Users of a policy manual always should keep in mind the intent of a policy statement. As noted above, policies are written to address the usual situation. Occasionally, unexpected circumstances may make it impossible to follow a policy and procedure exactly. When this occurs, the staff member must decide whether it is better to deviate somewhat from the specified procedure or not to comply at all. For example, suppose one of the procedures in the DOC's policy on medication distribution specified that "medications must be distributed only by an individual licensed at the LPN [licensed practical nurse] level or above." Suppose furthermore that on a given day on a given shift, the only health staff member available was an emergency medical technician (EMT). Would it be better for the EMT to deviate from standard procedure and pass out the medications or to adhere strictly to the procedure statement, resulting in inmates not receiving their medications? The answer should be obvious. If the EMT chooses the latter course of action, he or she would be guilty of what some have termed "malicious compliance" with policy.[3]

When faced with an unexpected situation where deviation from a procedure is necessary to comply with a policy, the health staff member should ask:

- What is the intent of the policy?
- What are the potential negative consequences if I deviate from the procedure?
- What are the potential negative consequences if I do not comply with the policy at all?
- Can I deviate from the procedure and not violate the scope of my own licensure, certification, or registration?

The answers to these questions should indicate to the staff member whether the better course of action is to deviate from the procedure or not comply with the policy. When in doubt, clarification always can be sought from the individual's supervisor or the health official on call. The bottom line is that when faced with a possible exception or deviation from a written policy statement, health services staff members are not expected to suspend their common sense.

B. THE HEALTH RECORD

The DOC's policy manual establishes a framework for the health delivery system that is generalized across all institutions in that system. The health record is specific. It summarizes all health encounters for a given inmate. Although the format and basic contents of the health record (i.e., the forms used) should be standardized across the DOC, the specific content reflects the assessment, care, and treatment provided to individual patients. Basic issues associated with the development and management of health records are discussed briefly in the following subsections. More detailed information can be found in the manual by Gannon (1988).

1. Format

The primary purpose of the health record is not only to document the care provided to a specific patient but also to facilitate communication among that patient's various providers. A unified health record system—that is, a single record for each patient in which all providers make their notations—is the best way to enhance continuity of care. Health staff sometimes resist moving to a unified record system. Undoubtedly, it is easier for each service (e.g., medical, dental, mental health) to have its own records and store them in their own treatment areas. The problem with this approach is that it is less efficient and less effective than a unified record system. Inefficiencies include the need for each service to duplicate basic health data on each patient (e.g., treatment history, allergies, medications) and to duplicate health record resources (e.g., folders, files, storage space, staff). Separate recordkeeping systems are also less effective than a unified system because the former require constant communication among the services about any current treatment being provided to a patient by another service and thus allow greater opportunity for error. With a unified record, any provider can see at a glance what medications and treatments have been prescribed by others for the same patient.

The organization of the forms within the unified record should be standardized. Gannon (1988), citing Huffman (1985:66), states that "there are three types of format: source-oriented, problem-oriented and integrated." In a *source-oriented format,* forms are organized into sections by the department that provided the care (e.g., dental, laboratory, radiology, mental health). In an *integrated format,* forms are filed in chronological order regardless of which department provided the care. The *problem-oriented medical record* (POMR) is separated into four sections: the database (i.e., assessment information about the patient's history, the physical exam, mental health evaluation, dental screening, and diagnostic studies); the problem list (i.e., a summary of the patient's primary problems along with notation regarding whether they are ongoing or resolved); the treatment plans (i.e., specification regarding how the identified problems will be resolved or managed); and the progress notes (i.e., notations at each health

encounter that indicate what followup has occurred in implementing the treatment plans). Both APHA standards and NCCHC standards recommend the POMR format.[4]

2. Basic Contents

The forms to be used in the health record should be standardized throughout the DOC. This is the only way to ensure that the same information is collected for each patient. Additionally, it is more efficient to reproduce copies of standardized forms than it is to permit each institution to create its own. Also, standardized forms are less confusing to health providers, which is an important consideration because most DOCs transfer inmates to other institutions rather frequently.

To further enhance continuity of care, a standardized chart order for the health record should be adopted. It is a list of all approved forms to be filed in the health record that specifies in which section and in what order they are to appear. This simple step guarantees consistency in filing forms and makes it much easier for health providers to use the record. It also saves time because each provider, regardless of institutional assignment, knows exactly where to look in the standardized chart for a specific piece of information. Finally, a standardized chart order that lists the approved forms prevents the health record from becoming cluttered with extraneous memos and other materials.

Although it is difficult to specify the exact forms needed in a health record, NCCHC jail (1996:75) and prison (1997:77) standards state:

> At a minimum, the health record file contains these documents:
>
> - Identifying information (e.g., inmate name, identification number, date of birth, sex);
> - problem list (including allergies);
> - receiving screening and health assessment forms;
> - all findings, diagnoses, treatments, and dispositions;
> - prescribed medications and their administration;
> - reports of laboratory, x-ray, and diagnostic studies;
> - progress notes;
> - consent and refusal forms;
> - release of information forms;
> - results of consultations (e.g., dental, mental health, other) and off-site referrals;
> - discharge summary of hospitalizations and other inpatient stays;
> - special needs treatment plan, if any;
> - immunization records;
> - place, date, and time of each clinical encounter; and
> - signature and title of each documenter.

Gannon provides more specific instructions on the design and control of forms[5] and offers several examples of health record forms used by DOCs.[6]

3. Charting Guidelines

Developing a standardized method of charting for narrative forms, such as progress notes, is also useful. The most widely used format is known as "SOAPing" or "SOAP notes." *SOAP* is an acronym that stands for the basic components that should be included in a progress note: subjective complaint, *o*bjective findings, *a*ssessment of the findings, and *p*lan for treatment.

Additionally, a list of approved abbreviations and symbols that can be used in charting is needed. This list helps to avoid idiosyncratic notations that other providers do not understand and to reduce the possibility of errors in carrying out medication orders or treatment plans. For the same reason, clinicians must be instructed to write legibly. Scribbling orders that others cannot read is both arrogant and foolish.

Providers who write in patient charts should be instructed to include clinical notations only. The

health record is not the place to make personal comments about one's patients or other providers. Furthermore, providers must maintain professionalism in chart notations. For example, recording the exact swear words an inmate called a provider is unnecessary. In fact, unless such exchanges have some bearing on the patient's treatment, they should not be recorded in the health record at all.

4. Confidentiality

Clearly the principle of confidentiality that is inherent in the provider-patient relationship extends to the health record and the information it contains. Distribution of health information must be restricted, and access to the record must be strictly controlled. This is accomplished by ensuring that privileged health information is not disseminated to nonproviders, by storing health records separately from custody records in lockable cabinets in secure areas, and by developing a list of the types of individuals who may view the health record. On the last point, state laws and regulations may differ as to who may have legal access and what information may be disclosed, so it is advisable to check the regulations in one's own state. Generally, though, access to health information and records should be restricted to health providers.

At times nonhealth staff members, such as the person legally responsible for the facility, are permitted access by law to certain health information about their charges. When a request to review a record is received from an authorized nonhealth staff member, it is best for a health services staff member to take the record to that individual and respond to questions as appropriate. This is preferable to sending the record by itself because the health staff member can ensure that only information pertinent to the matter at hand is released. Additionally, the health staff member can locate the information more readily and interpret it as necessary for the layperson.

Although inmates should be expressly prohibited from gaining access to other inmates' health records under any circumstances, the question sometimes arises regarding whether inmates should be permitted access to their own health records. In her 1987 survey, Gannon noted that of the 37 state DOCs responding, 26 (70%) allowed inmates access to their own health records.[7] The American Health Information Management Association (AHIMA), a professional membership organization for health record practitioners, supports the patient's right to access his or her own record (American Health Information Management Association, 1985:8, as cited in Gannon, 1988:56). It is advisable for each DOC to delineate a clear policy statement that addresses patients' access to their own health records.

5. Transfer of Health Records/Information

To enhance continuity of care, inmates' health records should accompany them when they are transferred to another DOC institution. Health staff at the sending institution should—

- Pull the health records of all inmates on the transfer list.
- Review them to ensure that none of the people on the transfer list are on medical "hold."
- Prepare a transfer summary that briefly lists current problems, medications, ongoing treatments, and any pending health care appointments.
- Secure the records in a locked box or by some other mechanism so they can be transferred *with* the inmates.

Health staff at the receiving institution should review all records of incoming inmates within a few hours of their arrival,[8] do what is necessary to reestablish the inmates on medications and treatment programs, and reschedule health care appointments as appropriate.

For intrasystem transfers of health records, it is not necessary to obtain a signed release of information from the inmates. If a request is received for copies of health records or information from an individual or agency outside the correctional

system, written authorization from the inmate to release such information generally is required. AHIMA has developed a model policy for the release of confidential health information that can be a model for health records staff at the DOC in writing their own policy statement.[9]

If an inmate is transferred temporarily to a community health facility for consultation or care, it is not advisable to send along the patient's DOC health record because of the possibility of loss or damage. Instead, a referral form should be used that summarizes pertinent information about the patient and provides space for the community provider to note treatment findings and followup recommendations. The completed referral form should be returned to the institution with the patient and filed in the patient's chart.

6. Retention of Records

Legal requirements for the length of time that inactive health records must be retained vary by jurisdiction. A written policy statement on record retention should be developed for each DOC that conforms to the legal requirements of that jurisdiction. It should specify where inactive records will be stored and for how long before they are destroyed. The policy also should indicate the procedures for reactivating the health record if an inmate returns to the DOC.[10]

C. Administrative Information Needs

In addition to the forms used in the health record, a series of other forms and recordkeeping systems should be generated. Much information is needed to determine current system needs, evaluate the effectiveness of existing programs and services, and adequately plan for the future. A partial listing of data and documentation requirements for effective administrative management, evaluation, and planning includes those areas noted in the following subsections.

1. Meeting Minutes

Providing minutes of regular meetings is one way of keeping administrators informed about the health services operations at specific facilities, including any problems that have developed and their resolution. Typical health services meetings that might be recorded include those between the facility administrator and the unit health services administrator, internal meetings of the health staff at both the unit and the central office levels, and meetings of various committees that address areas such as pharmacy and therapeutics, forms, policies and procedures, quality improvement, infection control, and mortality review.

2. Budget and Cost Data

A budget is used to seek funds, plan program expenditures, and monitor and control expenditures once funds are allocated (see chapter XIV). The types of data needed to prepare a budget include those associated with defining patient needs (e.g., size and characteristics of the population to be served); those associated with specifying services (e.g., type of services, number of personnel by type and level); and the identification of dollar resources needed to provide those services (e.g., number of full-time equivalent personnel by type and level and average annual salary of each, cost of equipment by number and type).

Once funds are allocated, actual expenditures in all line-item cost categories need to be tracked and reported periodically (e.g., monthly, quarterly, annually). For management purposes and cost comparisons from year to year, it is useful to break down expenditures not only by line item (e.g., salaries, fringe, consultants, travel, equipment, supplies) but also by program area (e.g., medical, dental, mental health); by service (e.g., hospitalization, specialty care, laboratory, radiology); and by characteristics of the patients served (e.g., age, gender, illness, condition). In more sophisticated systems, cost breakdowns by specific procedures may be available using standardized coding systems such as CPT (Current Procedural Terminology) or ICD-9-CM or DSM-IV-R or some combination of those.

3. Personnel

The complexity of developing adequate staffing patterns for specific institutions as described in chapter VI underscores the need for good data. Among the factors identified as influencing staffing patterns were characteristics of the institutions (e.g., average daily population, total annual intake, average length of stay, primary function); characteristics of the population (e.g., breakdowns by custody level, age groupings, gender, special health needs); characteristics of the health delivery system (e.g., number and types of services provided onsite, space allocations); and requirements of court orders or national standards. Additionally, administrators need to work out staff coverage factors and develop weekly or monthly schedules for employees.

Another recordkeeping system is needed to track orientation, inservice training, and continuing education requirements for each health service employee and to ensure that licensure or certification credentials are kept up to date. In some systems, health staff are responsible for providing health-related training (e.g., first aid, cardiopulmonary resuscitation, suicide prevention) to correctional staff. When this is the case, a recordkeeping system is needed to track compliance with training requirements for each individual correctional employee.

4. Inventories

Good management dictates maintaining a variety of inventories. For example, equipment lists are needed that specify the type, model number, serial number, date of purchase, and location by institution of every piece of health service equipment in the DOC. Such a listing is important for insurance purposes and to ensure accountability for agency property. It also can be useful in deciding what basic equipment should be purchased for a new health service unit and in determining when equipment has become obsolete and must be replaced.

Similarly, tracking health services publications is a good idea. An inventory list that provides the publication name, author and publisher information, publication date, and location of each publication helps to provide accountability for agency property and assists in reordering decisions.

Inventory lists are needed to track the deployment and utilization of bulk medical supplies. Such lists should be broken down by institution and include the type, volume, and expiration date, if applicable, of all supplies. Inventories should be checked periodically to determine utilization patterns. In the absence of a good inventory system, it is virtually impossible to control purchasing and avoid stockpiling by unit health personnel. It is particularly important to track supplies with expiration dates (e.g., intravenous fluid packs, lab reagents, certain sterilized materials) because if they are not used within the specified time, they are no longer effective.

The waste factor in many institutions is staggering, particularly regarding medications, because virtually all of them have expiration dates. A good inventory system for bulk pharmaceuticals that lists the type, volume, and expiration date of all preparations by institution is a key factor in reducing waste. Conducting periodic inventories can help to adjust ordering patterns to ones that more accurately reflect the volume of use. Additionally, pharmaceutical inventories can help in quality improvement activities that track overutilization of restricted medications or those subject to abuse.

5. Logs, Checklists, and Inspection Forms

Health administrators need to devise mechanisms to track compliance with specific policies and procedures. For example, if the DOC has a policy that requires monthly inspection of first aid kits, a checklist often is developed that lists the approved contents and provides space for the inspector to note his or her name, the date of inspection, and the findings. Such checklists may be designed to verify compliance with other policies as well, including safety checks of emergency equipment, the contents of the crash cart and/or emergency drug box, health environment inspections of the institution, and so forth.

Other policies may require that sharp instruments and needles be counted at least weekly, control drugs be counted per shift, or inmates in segregated status be visited daily by health personnel. Each of these policy requirements necessitates developing a log or some other mechanism for staff to document their compliance with specific procedures.

Furthermore, for administrative management purposes, other types of logs or information systems are needed to keep track of patients scheduled for sick call, chronic clinics, and specialty consultations, or those with appointments at outside health facilities.

6. Statistical Reports

For monitoring, budgeting, and planning purposes, health administrators need a wealth of statistical information on health care activities and utilization patterns. The health care activities report should reflect the number of patients served monthly at each institution by each of the primary programs (i.e., medical, dental, mental health) as well as data from ancillary services (e.g., pharmacy, laboratory), special therapies (e.g., respiratory, physical, occupational), and support services (e.g., transportation, patient education, staff training). Within each of these major headings, further breakdowns by level of provider and specific activity or procedure enhance utility of the statistical data.

Tracking the frequency of use of outside services also is necessary. For example, an administrator may want to know how many patients had diagnostic procedures or specialty consultations by outside providers each month, the number of times emergency transportation was used and the type (e.g., ground, air), and the frequency of hospitalization.

For inpatient care (whether provided in the DOC's infirmaries or by outside hospitals), more extensive utilization data are helpful. The basic bed utilization information that may be collected includes total number of beds, total monthly admissions, total monthly discharges, average daily census, total number of patient days, and average length of stay.

7. Patient-Based Data

Finally, good data are required to address adequately the health needs of the inmate population. Chapter VIII on programming for special health needs emphasized the importance of creating patient-based data systems to track the incidence and prevalence of specific diseases and the frequency of special conditions of inmates such as physical handicaps, advanced age, retardation, and terminal illness. The absence of epidemiological information, morbidity and mortality data, and data on the frequency of special conditions makes it difficult to ensure that the health needs of existing inmates are being addressed appropriately and impossible to plan for future populations.

D. Data Collection and Management[11]

From the listings in the above sections, it is easy to become overwhelmed by the data collection and documentation activities recommended to effectively manage a systemwide correctional health system. Popular literature continues to stress that this is the information age. In comparison to previous eras, this is a distinction of degree rather than of kind because all human activity has required information to make decisions. If this is the information age, it is only because information needs increasingly are recognized as critical for decisionmaking.

Fortunately, as the need for information has increased, so has the technology to process, manage, and retrieve data. The ability to gather, manipulate, and analyze data and to translate data into information has been enhanced greatly by the development of sophisticated machines. The adding machine has been mostly replaced by the calculator and then the computer, and the typewriter by the word processor. In the subsections that follow, some computer terms are defined, the advantages and disadvantages of using computers for data management are discussed, the structure of a management information system is described, and considerations in developing a database are presented.

This section does not detail the technical aspects of computers. Its focus is on the development of databases, their use, and the kinds of activities that a computerized system can support. To a lesser extent, reference is made to computer systems and their relevance to specific applications in a health program. The underlying assumption is that an administrator or health specialist need not be an expert on computers. However, it is assumed that the majority of individuals reading this chapter appreciate and are reasonably comfortable in using the new technology.

1. Definition of Terms

The design and use of computers has spawned new terminology—much of it jargon. Verbs have been created out of nouns (e.g., inputting, outputting), new acronyms devised (e.g., RAM, CRT), and, as Thomas notes, commonly used English words have been assigned subtle differences in meaning.[12] An example of the last point is the use of the terms *data* and *information*. In ordinary speech, these two terms are used interchangeably. In the language of computers, the term *data* refers to raw facts while the term *information* is reserved for the translation of data into knowledge by answering specific questions. Other terms used in this section are defined in the following paragraphs.

- ***Hardware.*** Hardware is the physical equipment itself. Bharucha (1986) states that hardware encompasses anything you can see or touch, including the electronics of the machine (e.g., central processing unit, memory chips) and all peripheral devices (e.g., monitor, disk drives, keyboard, printer, modem).
- ***Software.*** Software consists of the various programs that control a computer system. Each *program* can be thought of as a set of instructions that tells the computer's electronic system how data are to be processed and displayed. Many software packages are available for processing many different types of data (e.g., word processing, accounting, databases).
- ***Word processing.*** In essence, word processing is a software package that enables the computer to perform as a sophisticated typewriter. Documents can be entered into the computer in text form and stored for future reference. Word processing is most useful for documents that require periodic updating, such as job descriptions and policy and procedure manuals, because entire documents do not need to be retyped to reflect changes.
- ***Management information system (MIS).*** This term simply refers to an organized way of processing and analyzing data so they can be used to yield information for operational and management purposes. It is worth noting that creating a management information system does not depend on a computer. In the absence of computers, manual information systems should be developed.[13]
- ***Database.*** A database is part of an overall MIS. A wealth of database software packages are available for purchase. All the pieces of data about a single entity (e.g., a person, an institution) constitute the *record,* and all the records together in the database constitute a *file*. A DOC's health system might have several different databases (e.g., patient profiles, drug profiles, institutional delivery system profiles), which may or may not be linked to one another. When the databases are linked in some fashion, it is known as a *relational database* system.
- ***Spreadsheet.*** A spreadsheet is a type of software that also may be part of an overall MIS. These software packages display data in rows and columns and are most useful in finance, budgeting, scheduling, and forecasting activities because they allow the user to develop "what if" scenarios. They also are useful in performing basic statistical analyses. A special feature of spreadsheets is their ability to reflect changes in one data element in all other designated categories.

- ***Input.*** Input refers to all data entered into the computer, whether for word-processing or MIS purposes.
- ***Output.*** Output refers to all data flowing out of the computer, whether sent to the computer monitor for viewing or generated into hardcopy (paper) form via a printer.
- ***Screen.*** Bharucha (1986:5) defines a screen as "the basic output device for visual display of a reserved area of memory."
- ***Online.*** This term refers simply to data that are immediately available to the users of a given computer program, as distinguished from data that may be stored externally from the computer system (e.g., archived or stored on diskettes or magnetic tape).

2. The Pros and Cons of a Computerized MIS

In this day and age, the advantages of using computers to manage data are clear to nearly everyone. For one thing, computers can organize data in ways that allow for convenient retrieval as well as multiple uses. When data are online, they are immediately available to all who have access to that program. It is easier to edit, update, and append on computer disks than on hardcopy. Furthermore, computers can manipulate, calculate, and analyze vast quantities of data much faster than traditional machines, and store such data in relatively little space. In addition, assuming the input is accurate, computer output generally is more reliable than manually processed data. Finally, computerizing certain health information can result in cost savings to the department. As an example, Nadel (1995) reported that computerizing the test results of inmates at the Nassau County [New York] Correctional Facility (NCCF) helped to cut health care costs. Of the 12,000 admissions to NCCF in 1992, only 4,000 were new inmates. Because of the ability to reactivate earlier health records of the 8,000 inmates who had been there before, repeating certain costly medical testing could be avoided.

On the other hand, using computers to manage data has its own built-in concerns. Purchasing equipment (hardware) and designing programs to manage data (software) can be expensive. Although purchasing existing software packages is generally less costly than designing them de novo, the tradeoff may be that the DOC has to tailor its information needs to the data capabilities of the software package. As discussed later, this is a backward approach because information needs should dictate what data are collected and not vice versa.

Using computers can be very labor intensive during setup, user training, and data entry phases. Time involved in setup is of less concern because this is usually a one-time activity for any new computer system or program. Training, though, is a repetitive activity because each new staff member must be familiarized with the computer capabilities and operations, and all users must be updated periodically as software programs are added or changed. Data entry is the most time consuming phase. In many systems, using computers involves an extra step because data are collected manually, recorded on a form, and then entered into a computer. Even when the manual recording step is skipped and data are entered directly into the computer, little time is saved in data entry—especially when clinicians' time is used to perform what is essentially a clerical function. Rather, it is the frequency with which data are accessed and the ease of retrieval that determine whether computerizing data will be more efficient in the long run.

Another concern associated with computers is the assumption that the output is always reliable. Although it is true that computers do not make mistakes (unless they are malfunctioning), people do, and people are still responsible for computer programming, data collection, and data entry. The reliability and validity of computer output are totally

dependent on the reliability and validity of computer input. The phrase "garbage in, garbage out" has been coined to underscore this point.

A further problem with computerization that must be addressed is the danger in storing data in complex equipment that is subject to damage or breakdown. Good computer backup systems are needed in the event that data are destroyed or the primary system malfunctions. Some software programs that are online (e.g., medication administration recording) necessitate developing a manual recording system as backup, so that the activity does not stop even when the computer is down. In these situations, data are recorded manually on a form compatible with the computer screen and entered into the computer when its functioning has been fully restored.

Finally, one of the more important considerations in using a computerized information system is controlling access to data and information. This is particularly crucial for patient profile data because the rules and regulations governing confidentiality are strict. Although most computer programs provide for the use of passwords, codes, or identification cards to restrict access, it is usually much easier to obtain a password than it is to gain entry into a locked health records room or one guarded by the average health records practitioner.

In balancing the pros and cons of computerizing data, the decision usually comes down to which data should be computerized. Computers provide a clear advantage in word-processing activities and in managing certain types of statistical data. Given the cost of data entry and storage, however, there is little advantage to computerizing data that are not retrieved frequently and those that do not lend themselves readily to manipulation and analysis (e.g., narrative progress notes).

3. Structure of an MIS

Correctional health administrators do not need to be experts in computer systems. Such expertise in MIS development is readily available from consultants or often elsewhere in the DOC. However, correctional health administrators should have a basic understanding of the structure of an MIS and its capabilities so they can work with computer experts to design an MIS that meets their management information needs.

An automated data processing system (ADPS) consists of hardware, software, and data. The hardware can be organized in a number of ways:

- ***Centralized system.*** In this instance, the computer system includes a mainframe or central data storage and work stations at the local level. The ADPS can be integrated totally so that it shares a common database and a standardized processing system.
- ***Standalone system.*** Such a system consists of separate microcomputers at the local level only, with no links to a mainframe system in the central office. This arrangement may be workable for a small correctional system, but possibly counterproductive for a larger one where lots of data from all components of the DOC need to be stored.
- ***Combination system.*** This ADPS uses a central database and processor, with smaller processors at the local level. The latter can have their own database and also use the central processor. Microcomputers can be located at the local level, share the central common database, and, concomitantly, have a database that has local applications.[14]

Today's technology in hardware and software development points to increasing use of combination systems with some level of integration, for example, a common database and standardized transactional processing. In this setup, microcomputers at the local level would be linked with the central processor, with each other, and with other computers in facilities within the system. Software development allows a number of applications to be used in ways that limit activities to the local level or that send specific data to the central computer while preserving confidentiality.

Examples of data categories amenable to transactional processing within a combination system, using a standardized program, include:

- ***Prescriptions.*** An inmate prescription could be logged into the computer at a local prison or jail, entered into the database, and used for cost purposes, inventory control, and quality improvement monitoring. If the inmate were transferred, the prescription could be called up by the receiving facility in order to provide continuity of medication.
- ***Medical census data.*** Information on the inmate population could be used for the DOC's inmate health profiles. It could be stored centrally and be available to both the local facilities and the central office in a specific system.
- ***Financial data.*** Budget expenditures at the local level could be stored either locally or in the central office and shared by both.
- ***Personnel data.*** Vacancies and new hires could be part of the common data pool.
- ***Epidemiological data.*** Data on diseases at individual correctional facilities could be part of the common data pool.

Software with specific applications can be utilized in a combination system. Additionally, microcomputers with relatively large data storage capacities, which can be augmented with peripheral storage systems, provide flexibility that is not available in a centralized configuration.

It is not possible to review all the software applications developed in the past few years that are available to health programs. A great number of applications have been designed for hospital use, and some of these are being modified or can be modified for use by correctional health systems. Additionally, several DOCs have already computerized certain portions of their health services data collection activities and may be willing to share their knowledge and experience in software development and use.[15]

One software development that should be noted is the relational database system. It can be used to generate portions of the health record, including the physical examination, sick call visits, problem lists, diagnoses, prescriptions, diagnostic referrals, allergies, and other health-related data. Some of these programs allow specific data to be sent to a common database, and to be accessed by others, while restricting data entry to designated levels of health providers. For example, only the physician can enter diagnostic information, prescriptions, and diagnostic referrals. Nursing staff can access the file to record physicians' orders, medication administration data, and so forth. Any change in the record by physician or nursing staff is recorded with the name of the person making the new entry, but without erasing the prior entry. Selected data can be sent to the common data pool, but data cannot be entered into the record by anyone other than persons with authorization.

Through software, the relational database can be linked to an inmate tracking system so that inmate transfer data are available. This is useful in preparing inmate records for transfer and in developing summaries for inmates being transferred to other state or county systems.

Such software programs are often user-friendly in that they do not require learning complex key formulas. Instructions appear on the screen that specify which keys to press for specific entries. For example, patient allergies may be displayed automatically when the physician indicates that a prescription is to be entered. In other words, the program interacts with the user and the user's needs.

The simplicity and flexibility of the relational database system makes it useful. It can serve both the common data pool and local information needs. It provides data for management, monitoring, and quality improvement purposes and helps to protect confidentiality by limiting access and controlling data entry.

Connecting the system to a printer provides hard-copy for the health record as needed and allows individual pages to be printed when a physician's signature is necessary.

4. Developing a Database

Developing information capability begins with the development of a database, which can be either manual or automated. In either case, limits must be set on what data will be collected. All data collection and analysis activities have cost implications. The extent of time and labor needed varies with the method of collection (which is nearly always manual), the method of retrieval (manual versus machine), and the method of storage. Because these activities are all costly, careful thought needs to go into database planning.

Database development should begin by addressing specific questions. The most important of these is to determine what information is needed. A health program is a complex operation and the pool of potential data is large. It serves no purpose to collect data that require much effort to maintain if the data are not used to answer management questions. Gathering data to satisfy curiosity or on the basis that they might be needed "someday" is not good management practice. If data have no current identifiable use, they should not be included in the initial database. As more information needs are identified, existing databases can be amended, software programs can be added, or new databases can be created.

Generally, data are needed that provide information on costs, utilization patterns, quality improvement activities, disease trends, population characteristics, etc., because they will be used in forecasting, monitoring, planning, or daily decisionmaking. There may be other underlying rationales for data generation and, if so, they need to be identified clearly.

To determine information needs, some general categories should be identified and the availability of data within those categories examined. For planning purposes, the following categories are suggested:

- ***Transactional processing.*** This category includes daily activities such as inventory control, inmate transfers, billing or vouchering, and appointment scheduling. These categories are self-explanatory. They are the daily activities that are basically clerical and administrative.
- ***Operations management.*** This category includes those activities that support the ongoing operation of the health program and may include aspects of the health record, frequency of sick call utilization, "no shows," diagnostic reports, chronic clinic schedules, prescriptions, inservice training schedules and attendance records, and quality improvement data.
- ***Management and planning.*** Data need to be identified that will provide information for management decisionmaking, alert management to emerging problems, and assist management in planning for future needs. (Examples include information that provides monitoring of the health program such as cumulative pharmaceutical costs, hospitalization and diagnostic costs, timeliness of consultant referrals, staffing needs, epidemiological data, mortality data.)

Once information needs have been specified and data sources identified, some thought must be given to how the data will be analyzed and presented. It is customary to read annual reports of correctional agency activities that consist of page after page of categories and numbers representing activity levels by health units or the central office. The reports are replete with data but result in no information. Such reports are seldom enlightening other than to inform the reader that a great deal of work has been done in the past year. They suffer from a format that defies either comparative analysis or identification of trends.

The reader may glean some statistics about the health system, the kinds of care provided, and perhaps cost, but there is no information or format to indicate what all of this means. The identification of data to be included in the database, therefore, must include a parallel effort in formulating or, at a minimum, defining how the information will be presented.

Careful consideration should be given to the configuration of data so that they have maximum usefulness for all levels of management and operations.

Some examples of information that can be presented include the following:

- ***Population profiles.*** A profile of the population for the reporting year may be useful for facility planning purposes. If information about the previous year's profile is not available, it will not be possible to identify trends in illnesses or physical conditions.
- ***Epidemiology.*** Current data are of limited use without past figures for comparison, so showing, for example, changes in the number of tuberculosis cases or purified protein derivative conversions from the previous year is more helpful than showing only the number for the current year. Furthermore, percent values alone may not be informative because, for example, an increase from one case to five may reflect a large percentage increase that is misleading. Therefore, figures should be included to show both the rate and the number of cases.
- ***Prescriptions.*** Data presented may include categories of medications, number of prescriptions, and total cost by category; however, gross costs should be accompanied by costs per facility and the previous year's costs. Increases and decreases should be noted and an attempt made to indicate reasons for such changes.
- ***Quality improvement.*** Some quality improvement studies may use the database. For example, relating diagnostic categories to prescriptions is possible with a computerized database. Such a study might compare prescribing practices by facility, provider, or both. Such information provides management with an opportunity to monitor this activity.

With the framework of the database in place, attention should turn to identifying data collection techniques. Clear instructions must be provided to all individuals responsible for gathering data about what data are to be collected, who is to do it, when it is to be done, and how often. Additionally, each data element must be operationally defined to ensure standardization. If this is not done, any reports generated from such data may be flawed. Even something simple such as "date" requires definition. Does that mean today's date? The date the data were gathered? The date the data were entered? A data dictionary should be developed for each data collection activity.

Finally, in computerized systems, whoever is responsible for setting up the database should provide a code book that explains the abbreviations used for naming each data field and the responses within that field. Space requirements in many software packages restrict the number of characters that may be used to name a field or the number of characters permitted within that field for the range of responses. This forces the program setup person to devise abbreviations and alpha or numeric codes that may be unintelligible to the uninitiated. For example, in a report using the field for ethnicity, *OTHASN* might lead the reader to believe that this was a little-known minority group, not an abbreviation for *other Asian.* Failure to provide such a code book limits the value of the database. Future users may ignore it because they cannot understand the variable names and the codes. Similar documentation of other aspects of program setup is recommended.

The development of an information system is a conceptual effort. It does not require a great deal of technical expertise. What is important is to know what kinds of information are needed and the purpose for which data will be used. Usually, it is the software and not the hardware that is the primary consideration in the development of a computerized information system. The software can be problematic. Where possible, existing applications should be used because the development of tailor-made programs is expensive. Because numerous software packages have been developed or are in the process of development, the health staff should research them and determine which are appropriate for the DOC's needs. Generally name brands and standard software packages provide the greatest flexibility.

E. CONCLUSIONS

In health care, the need for good documentation practices and concomitant information for management, planning, and monitoring activities and services is (or should be) apparent. Prior to the widespread use of computers, documents were typed and statistics on activities and budgeting were calculated, and in some cases are still calculated, manually. Today, many if not most correctional agencies have some automated data processing capability. The extent to which computers are used in DOCs' health programs, though, is not known.

This chapter has examined some of the documentation and data needs of a correctional health system and suggested ways that computers might be helpful in word-processing and data management activities. The information age has provided easier access to information, especially in data retrieval and data manipulation, but identifying, organizing, collecting, and using data remain critical human efforts. The overall purpose of improved documentation and data management is simply to serve patients better.

NOTES

1. See Lindenauer and Lichtenstein (1979:8).

2. For more information on the development of policies and procedures, see National Commission on Correctional Health Care (1996:5-6, 89-94; 1997:6-7, 89-97).

3. In the example given, deviating from the department of correction's procedures generally would not violate the scope of permissible activities for an emergency medical technician.

4. See Dubler (1986:100) and National Commission on Correctional Health Care (1996:75; 1997:77). For more information about the problem-oriented medical record format, see Helbig and Ellis (1979).

5. See Gannon (1988:31-38).

6. Ibid., pp. 21-30, and appendix C.

7. Ibid., pp. 55-56.

8. National Commission on Correctional Health Care prison standards (1997:43-44) require that the records of transferred inmates be reviewed within 12 hours to ensure continuity of health care.

9. The model policy statement can be obtained from the American Health Information Management Association in Chicago, IL. Alternatively, it is quoted verbatim in Gannon (1988:59-61).

10. These recommendations are consistent with National Commission on Correctional Health Care requirements (see National Commission on Correctional Health Care, 1996:78; 1997:80).

11. I am indebted to Nick Pappas, who provided an earlier draft of this section from which I have borrowed liberally.

12. See Thomas (1979:5).

13. The manual by Thomas (1979) provides a good overview of management information systems (MIS) for the uninitiated. He discusses both manual and computer-based MIS structures.

14. See Davis (1974), chapter 9.

15. See exhibits VIII-1 and VIII-2 in chapter VIII. As of 1999, 11 of the 28 prison systems responding had computerized at least part of their health record systems.

REFERENCES

American Health Information Management Association

1985 Confidentiality of Patient Health Information: A Position Statement. Chicago.

Bharucha, Kerman D.

1986 dBase III Plus: A Comprehensive User's Manual for Nonprogrammers. Blue Ridge Summit, PA: Tab Books, Inc.

Davis, Gordon B.
1974 Management Information Systems: Conceptual Foundations, Structure, and Development. New York: McGraw-Hill.

Dubler, Nancy N. (Ed.)
1986 Standards for Health Services in Correctional Institutions (second edition). Washington, DC: American Public Health Association.

Gannon, Camille Caillouet
1988 Health Records in Correctional Health Care: A Reference Manual. Chicago: National Commission on Correctional Health Care.

Helbig, Susan, and Jack A.N. Ellis
1979 Problem Oriented Medical Records in Correctional Health Care. Lansing, MI: Department of Corrections. Distributed by National Commission on Correctional Health Care, Chicago.

Huffman, Edna K.
1985 Medical Record Management (eighth edition). Berwyn, IL: Physicians' Record Company.

Lindenauer, Marilyn R., and Richard R. Lichtenstein
1979 The Development of Policy and Procedure Manuals for Correctional Health Care Programs. Lansing, MI: Department of Corrections. Distributed by National Commission on Correctional Health Care, Chicago.

Nadel, Barbara
1995 "Cutting the costs of jailhouse health care." American City & County (June 1) 54.

National Commission on Correctional Health Care
1996 Standards for Health Services in Jails. Chicago.

1997 Standards for Health Services in Prisons. Chicago.

Thomas, J. William
1979 Information Systems for Correctional Health Care Programs. Lansing, MI: Department of Corrections. Distributed by National Commission on Correctional Health Care, Chicago.

Improving the Quality of Correctional Health Care

Chapter XIII

Chapter XIII

Improving the Quality of Correctional Health Care

It may seem odd to some that the emphasis on the quality of care comes at the end of this book and not at the beginning. Many critics of correctional health care believe it is the lack of quality care that has resulted in such extensive litigation against individual institutions and entire correctional systems. To a large extent, that is true, but it is also true that correctional health practitioners cannot deliver quality care in the absence of an infrastructure that supports the health delivery system.

A variety of factors affect the ability of correctional health practitioners to provide quality care. These factors include how health services are organized within the department of corrections (DOC), the staffing levels and staff qualifications, the types of care and services offered, the system for identifying and managing patients with special health needs, the emphasis on preventive health measures, the adequacy of the space devoted to health services, the existence of a policy and procedures manual, the development of a standardized unified health record, and the availability of good data for planning and decisionmaking. Problems in any of these areas can lead to poor outcomes in clinical matters. In fact, this chapter argues for a broader definition of improving the quality of correctional health care beyond traditional notions of quality assurance.

Section A defines some of the terms used in this chapter. Section B discusses the need for quality improvement programs and the purpose they serve. Section C looks at internal efforts to improve quality and distinguishes between traditional quality assurance programs and the more recent emphasis on continuous quality improvement. Section D provides some resources for quality improvement programs, methods, studies, and forms. Section E describes external quality improvement programs that are available and compares the health care accreditation processes offered by the American Correctional Association, the Joint Commission on Accreditation of Healthcare Organizations, and the National Commission on Correctional Health Care.

A. Definitions of Terms

- ***Quality assurance (QA).*** A process of ongoing monitoring and evaluation to assess the adequacy and appropriateness of the care provided and to institute corrective action as needed. In the past, QA focused solely on clinical performance, but has been expanded to include some organizationwide activities.
- ***Utilization review (UR).*** A component of organizationwide QA that focuses on controlling the use of resources in a cost-effective manner while maintaining quality. A UR program looks at areas such as inappropriate inpatient admissions, length-of-stay considerations, and use of ancillary services. Overutilization, underutilization, and inefficient scheduling of resources are examined in the review process (Fromberg, 1988:128-129).

- ***Risk management.*** A program or process designed to protect the financial assets of an organization by ensuring appropriate insurance coverage, reducing liability when an adverse event occurs, and preventing the occurrence of events that lead to increased liability (Fromberg, 1988:132). Robert Fromberg notes that "[i]t is in this third area that the overlapping responsibilities of risk management and quality assurance programs become most evident."
- ***Infection control.*** An organizationwide QA effort designed to "prevent, identify, and control" both nosocomial infections (i.e., those originating in a hospital or infirmary) and those brought into the organization from the outside (Fromberg, 1988:126).[1]
- ***Safety program.*** An organizationwide effort tied to both QA and risk management designed to provide a safe environment for staff, patients, and visitors by preventing accidents, injuries, and other safety hazards (Fromberg, 1988:129-131).[2]
- ***Credentialing.*** A review process whereby the qualifications of health professionals (e.g., licensure, experience, training, certification) required for employment are verified and the extent of clinical privileges determined. Credentialing is done most appropriately at the preemployment stage, but periodic reevaluation of health staff's credentials is necessary to ensure that qualifications are current and privileges extended to professionals are valid.
- ***Peer review.*** An organized evaluation of professional competence performed by individuals in the same profession or discipline (i.e., one's peers). In health care, nurses review nurses, physicians review physicians, and so on.
- ***Continuous quality improvement (CQI).*** CQI is a "system for continual improvement of processes through design and redesign. The aim of CQI is to eliminate all variations of defect, through elimination of causes to the variations. CQI is proactive in nature: it seeks to build product and service quality into the design of the process" (Cassidy, 1990:7).

B. THE PURPOSE OF QUALITY IMPROVEMENT

Why should DOCs be concerned about the quality of health care provided to inmates? If asked, many correctional administrators and health professionals would respond that the primary purpose of improving the quality of care is to reduce the potential for litigation and adverse judgments that can be extremely costly to the county or state. That may be one result of improving quality, but it is not the primary purpose. In fact, in systems where traditional quality assurance programs are driven by concerns for reducing the DOC's potential liability, the QA efforts can be only partially successful. Such programs breed fear and anxiety among health staff. Covering one's tracks becomes more important than the care provided and staff sometimes resort to lying in their documentation rather than admitting that an act of omission or commission was in error.

The primary objective of quality improvement efforts should not be to fix blame when things go wrong, but rather, to make systems work so that the "right things" are done right the first time. Improving the quality of care has its own intrinsic rewards, not the least of which is higher staff morale. An organization that emphasizes quality is able not only to attract but also to retain qualified health professionals. Reducing turnover and burnout among the staff results in cost savings to the system. Additionally, although it may seem platitudinous to say that a happy staff is a productive one, just because something is trite does not make it untrue. W. Edwards Deming, one of the "gurus" of quality improvement in the private business sector, noted that "[c]ontinual reduction in mistakes, continual improvement of quality, mean lower and lower costs. . . . As costs go down, through less rework, fewer mistakes, less waste, your productivity goes up."[3]

In systems where the quest for quality is driven by litigation concerns, one of the almost inevitable consequences is an increase in the cost of care—not only because a higher level of service is provided but also because unnecessary care is provided. Practicing defensive medicine is not unique to corrections, of course. Until recently, it was a way of life for many clinicians in the community. Their fear of malpractice lawsuits led them to order expensive diagnostic tests and procedures to rule out even the remote possibility of rare diseases and conditions. Such practices, coupled with the availability of advanced technology, contributed to the ever-spiraling costs of health care and are directly linked to today's trend of managing care and controlling costs.

The relationship between quality and cost is somewhat paradoxical. A lack of quality increases costs. Improving quality reduces some costs, but at the same time, increases others. Nackel and Collier (1989:2) explain it this way:

> Costs of improving quality include prevention and review. Costs of a lack of quality include failure. Prevention are those costs associated with actions taken to ensure that treatment failures do not occur. These include formal training costs, as well as on-the-job training and appropriate treatment planning. Review costs include such things as quality review and second opinion. Internal failure costs include rework required because of treatment failures, unnecessary work, review of work, and downtime associated with scheduling and staffing failures. External failure costs include such things as liability costs, rejected claims, PRO [peer review organization] denials and lower collection rate and increased marketing costs due to poor quality.
>
> To summarize the cost-quality relationship . . . improving quality reduces costs, improves productivity and improves service levels.

From the above discussion, the benefits of instituting quality improvement programs should be clear, but how they are conducted also is important. Identifying gaps in the quality of care to fix blame is self-defeating. The focus should be on identifying problems to take corrective action as well as on preventing problems in the first place. Fromberg (1988:65) states that corrective actions may address "deficiencies in staff knowledge, problems in behavior, or deficiencies in systems." He explains each of these areas more fully as follows:

> To improve staff knowledge, actions may include modifying orienting procedures, providing focused in-service education, providing focused continuing education, or circulating written policies and procedures or other informational material.
>
> Addressing problems of behavior identified through monitoring and evaluation can be difficult. Appropriate actions may include:
>
> - informal counseling;
> - formal counseling;
> - changes in assignments; and
> - disciplinary sanctions. . . .
>
> Actions to improve systems may involve any of the following:
>
> - Changes in communication channels;
> - Use of consultant services;
> - Changes in organizational structure;
> - Establishment of new positions;
> - Changes in inventory;
> - Adjustments in staffing;
> - Revisions in job descriptions;
> - Added or revised policies and procedures; and
> - Changes in equipment.

If a quality improvement program is designed with recognition that poor clinical outcomes may be the fault of something other than an individual clinician's performance, health staff are much more likely to participate willingly and even to endorse such efforts.

At times, of course, the responsibility for poor clinical outcomes rests with the provider. Even here, though, the system's response to such errors does not have to be punitive to the point of dismissal. Retraining a staff member in procedural matters, enrolling the individual in special continuing education offerings, or changing the person's job assignment may be other options, assuming the employee has a positive attitude. What is important is that whatever is done be constructive. Dismissal is the least constructive option because it does nothing to solve the problem of poor care by a provider; it simply shifts the problem to a different health setting.

The activation of the National Practitioner Data Bank (NPDB) makes it more difficult for health care entities to palm off poor practitioners on another employer. The establishment of the NPDB was mandated by Title IV of Public Law 99-660, the Health Care Quality Improvement Act of 1986, as amended by Public Law 100-177.4 The scope of the NPDB operation was expanded subsequently by Section 5 of Public Law 100-93, the Medicare and Medicaid Patient and Program Protection Act of 1987.[5]

NPDB reporting requirements may be summarized as follows:

- All malpractice payments on behalf of *any* licensed health practitioner must be reported to the data bank and to appropriate state licensing boards.
- State licensing boards for physicians and dentists only must report any disciplinary actions taken against the licenses of members of these two professional groups.
- Hospitals and some other health care entities (e.g., health maintenance organizations, certain medical and dental group practices) must report adverse actions based on issues of professional competence or conduct that are taken against a physician's or dentist's clinical privileges if the actions will last more than 30 days. Such actions must be based on formal peer review procedures.
- Medical and dental professional societies must report adverse actions taken against the membership of physicians or dentists when (1) that action was reached through a formal peer review process and (2) it was based on the practitioner's competence or conduct.[6]

Regulations specifically state that reporting requirements are not retroactive, but rather, start from the date the NPDB became operational, which was September 1, 1990.[7]

The purpose of the Health Care Quality Improvement Act of 1986, which mandated establishing the NPDB, has been described as follows:

> The Act itself is intended to further two important goals: (1) improving the quality of medical care by encouraging physicians and dentists to identify, for disciplinary purposes, other physicians and dentists who engage in unprofessional behavior; and (2) restricting the ability of incompetent physicians and dentists to move from state to state without disclosure or discovery of previous damaging or incompetent performance. The Data Bank is intended to facilitate the second goal by developing a central repository for information related to professional conduct or competence. (National Health Care Practice,1990:8)

The applicability of NPDB reporting requirements to corrections depends on the type of health care entity operated by the correctional system.[8] By law, all hospitals are required to report all malpractice payments made on behalf of any practitioner and any adverse or disciplinary actions taken against physicians or dentists with privileges at their facilities. Other health care entities *may* report similar actions taken against their staff to the NPDB, providing they are an "eligible entity." In addition to hospitals, eligible entities include state licensing boards, professional societies that engage in formal peer review, and "other health care entit[ies] that provide health care services and engage in formal peer review activity through a formal peer review process" (National Health Care Practice, 1999a:1). Eligibility appears to depend on the existence of a formal peer review process that provides "due process" (i.e., 14th amendment, U.S. Constitution) safeguards for the

health professionals being reviewed. The irony is that health care entities without formal peer review programs may be those with the highest number of practitioners with substandard performance or unprofessional conduct.

To some, it may seem that the way to avoid NPDB reporting requirements is not to establish formal peer review mechanisms, but this is a shortsighted approach. As stated previously, implementing quality improvement programs has substantial benefits for an organization. If the focus of quality improvement is broadened beyond traditional quality assurance and peer review programs, then such efforts may benefit individual practitioners. In other words, the recognition that poor clinical outcomes may be the result of factors other than poor performance on the part of practitioners may lead to a decrease in the number of adverse actions taken against individuals. Furthermore, organizational efforts to work with practitioners to help them improve their performance is a much more positive approach than dismissing individuals without reporting them. The latter serves only to shift the problem, not solve it.

In summary, the goals of a quality improvement program and the reporting requirements of the NPDB need not be incompatible. The latter can be viewed as a "last resort" measure in quality improvement efforts.

C. Internal Programs to Improve Quality

Every DOC should establish its own internal mechanisms to improve the quality of the care it offers. In the subsections below, traditional QA efforts are described and contrasted with the newer emphasis on continuous quality improvement.

1. Quality Assurance

QA activities generally consist of monitoring and evaluating the patient care provided as well as aspects of other programs such as UR, risk management, infection control, safety programs, peer review, and credentialing. The QA model used most often in community health care facilities is that of the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). The following discussion identifies the key components of the JCAHO QA model. Appendix K contains an example of a policy and procedure from the Illinois system that applies the JCAHO model to a correctional health care setting.

a. Developing the QA Plan

Initiation of a QA program should start with the development of a written plan that specifies "the program's objectives, organization and scope as well as the mechanisms used to oversee the effectiveness of individual quality assurance activities" (Fromberg, 1988:44). Within a DOC, each institution should have its own QA plan. Additionally, there should be a plan for the DOC as a whole that coordinates the institutional plans, specifies reporting requirements, and identifies systemwide QA activities.

b. Formulating QA Objectives

Objectives of the QA programs need to be formulated. DOC staff can generate their own objectives or adopt objectives from other QA programs. QA objectives have been defined elsewhere as follows:

- To ensure that all patients receive appropriate and timely services in a safe environment.
- To ensure systematic monitoring of the treatment environment.
- To assist in reduction of professional and general liability risks.
- To enhance efficient utilization of resources.
- To assist in credential review and privilege delineation.
- To enhance identification of continuing education needs.
- To facilitate identification of strengths, weaknesses, and opportunities for improvement.

- To facilitate coordination and integration of information systems.
- To ensure resolution of identified problems.[9]

c. Defining the Scope of QA Activities

Specifying the objectives of the QA program helps to define the scope of QA activities. From the objectives listed above, the scope of the QA program would encompass health staff monitoring and evaluation (including completeness of the medical record, timeliness of care, and appropriateness of care), and aspects of safety, infection control, risk management, UR, credentialing, peer review, and adequacy of data collection processes. Furthermore, the above objectives imply that all departments, disciplines, and services involved in health care delivery will be part of the QA process.

d. Specifying the QA Process

Under the JCAHO model, a 10-step monitoring and evaluation process has been designed for use in all QA activities. The same process is applicable for health staff QA activities (e.g., departmental review, drug usage evaluation, health record review, pharmacy and therapeutics function); for clinical services QA activities (e.g., nursing, laboratory, pharmacy, emergency); and for organizationwide QA activities (e.g., infection control, risk management, utilization review, safety). According to the JCAHO manual:

> The ten-step process for monitoring, evaluation, and problem solving is designed to help an organization effectively use its resources to manage the quality of care it provides. The process involves ongoing monitoring of care provided, periodic evaluation of care, identification of deficiencies in that care, and improvement, as necessary, of the quality of care. The individuals or groups responsible for various steps of monitoring and evaluation, the reporting processes, and the methods of integrating information will vary in different organizations. Of overriding importance is that—
>
> - monitoring and evaluation activities are ongoing, planned, systematic, and comprehensive;
> - data collection and evaluation are adequate to identify problems; and
> - actions taken to solve problems are effective. (Fromberg, 1988:49)

Each of the 10 steps is described briefly in the following paragraphs.[10]

1. Assign responsibility. Decisions must be made regarding who is responsible for specific QA activities. The systemwide QA plan should specify who is responsible for QA at the central office and at each facility in the system. Each of these individuals, in turn, must assign personnel to complete various QA activities.

2. Delineate the scope of care. Each department, discipline, and service involved in health delivery should list the activities it performs. For example, the transportation section might begin its list as follows:

> Responsible for tasks that include—
>
> - Maintaining all health services vehicles.
> - Inspecting and maintaining all supplies and equipment on health services vehicles.
> - Scheduling drivers.
> - Training drivers in procedures and safety measures.
> - Coordinating transportation with appointment scheduling department.
> - Transporting patients to their appointments in a safe and timely fashion.

This list should be as detailed as possible.

3. Identify important aspects of care. From the list created in step 2, each department, discipline, and service needs to identify those activities that are the most crucial in terms of potential problems, frequency, or risk. Typically, high-volume activities, those that have created problems in the past, or those

that have the greatest potential for serious negative outcomes are designated "important aspects of care." The important aspects of care in each area become the focus for monitoring and evaluating activities.

4. Identify indicators. For each of the important aspects of care identified in step 3, indicators of quality should be identified. JCAHO defines an indicator as "a defined, measurable variable relating to the structure, process or outcome of an important aspect of care for which data are collected in the monitoring process" (Fromberg, 1988:147). *Structure* relates to supplies, equipment, personnel, and other physical resources. For the transportation section, a structural indicator might be "All drivers have a current chauffeur's license." *Process* refers to the procedures used to carry out a specific activity. "Vehicle inspections are conducted monthly" is an example of a process indicator. *Outcome* relates to the results of particular activities. Accident rates and the rate of appointment rescheduling because of transportation problems are examples of outcome indicators.

Each indicator may have more than one *criterion* of measurement. For the process indicator above, specific criteria might be developed regarding who conducted the inspections, the scope of the inspections, the completeness of the documentation, etc., in addition to measuring whether the inspections were timely.

5. Establish thresholds for evaluation. JCAHO defines a threshold as "a level or point at which the results of data collection in monitoring and evaluation trigger intensive evaluation of a particular important aspect of care to determine whether an actual problem or opportunity for improvement exists" (Fromberg, 1988:148). Each indicator should have a threshold set that prompts a more indepth review when it is reached. A threshold can be thought of as a tolerance level for error or variability. Certain indicators may be so important that the threshold is set at 100-percent compliance, or zero tolerance for variability. For example, thresholds for indicators of staff licensure may be set at 100 percent. For other indicators, it may not be realistic to set thresholds at 100 percent (e.g., zero tolerance for wound infections) because perfection is not possible. For still other indicators, the importance of the activity does not justify an absolute standard. In the transportation example, the threshold for transporting patients to their appointments in a timely fashion might be set at 95 percent, recognizing that bad weather, unexpected traffic tieups, or occasional equipment failures could delay patients 5 percent of the time and still not indicate a systemic problem.

6. Collect and organize data.[11] Once the indicators have been defined and the thresholds set, staff need to collect data for each indicator. The source of the data will vary depending on the indicator. Licensure data may be found in personnel files or a computerized management information system. The primary source for clinical data is the health record. Transportation logs, inspection records, and appointment schedules may yield data for transportation indicators. For each QA study, it also is necessary to specify the sample size (e.g., the number or percentage of incidents, cases, or records to be reviewed), how the sample is to be selected (e.g., random, stratified), the time parameters that define the sample (e.g., cases occurring during the past year, incidents arising during the next 6 months), who is to do the data collection, and how the data will be collected. The format of the data collection instrument for a particular QA study should allow for periodic tabulation of results.

7. Evaluate care. When cumulative data reach the established threshold (or fail to reach it, depending on how the indicator and threshold are phrased), this signals the existence of a potential problem. Data should be analyzed to determine whether trends or patterns exist. Sometimes problems can be traced to specific days or shifts, to specific providers, to specific categories of patients (e.g., those in segregation), or even to individual patients. At other times, there is no discernible pattern, but a

problem still is apparent from the cases reviewed. When data analysis reveals that the problem might rest with particular providers, the information is given to the appropriate peer review committee, which investigates the matter further.

8. Take action to solve problems. Evaluating the data in step 7 should provide some indication of the potential source(s) of the problem, which leads to an action plan to resolve the problem or to increase the extent of compliance to an acceptable threshold. Common causes of problems often fall into three categories:

- Insufficient staff knowledge, which can be improved by clarifying policy and procedure statements, changing or instituting inservice training programs, or conducting continuing education programs.
- System defects, which can be corrected by improving processes, equipment, or materials; by altering organizational structures, job descriptions, or communication lines; or by changing staffing ratios and levels or operational procedures.
- Individual staff members' attitudes, performance, or behavior, which can be addressed by counseling, changing job assignments, restricting privileges, or dismissal.[12]

9. Assess actions and document improvement. The QA study does not stop with the implementation of an action plan. The monitoring and evaluation process continues to determine whether the corrective action resulted in any improvement. The action plan might specify that an ongoing QA activity continue for the next 6 months to determine the efficacy of the solution implemented. If no or little improvement is demonstrated, the problem is reassessed and a new action plan devised, implemented, and evaluated.

If the action plan successfully addresses the problem, a decision must be made regarding whether the problem is likely to stay solved for a period of time or is likely to recur with some frequency. In the former case, the decision might be that the QA study would be terminated and reinstituted at some later date. This may be the decision with respect to system defect problems, which should not continually repeat themselves once the system has been "fixed." For example, a QA study determined that the primary cause of delay in getting patients to their appointments in a timely fashion was an unacceptable level of vehicle breakdowns. The action plan resolved to improve the preventive maintenance of vehicles and/or purchase new ones, and the assessment of the action plan revealed it had been successful in resolving the problem. In this example, the decision might be to cease ongoing evaluation and monitoring of this aspect of care and to reinstitute a QA study only periodically.

On the other hand, certain aspects of care must be monitored continuously. Problems stemming from insufficient staff knowledge or an individual's performance or behavior may recur because of changes in staffing and in the staff themselves. Continuous QA studies often are conducted on high-volume, high-risk, or problem-prone issues to ensure that an appropriate level of quality is maintained.

10. Communicate information to the QA program. The last step in the JCAHO process is to determine who is to receive what information from which QA studies. The lines of communication should be specified in the DOC's systemwide QA plan and will vary with the organizational structure selected for the QA program. Possible organizational arrangements are described in the next subsection. In reporting the results of QA studies, care should be taken to ensure that the confidentiality of patients' medical information is not breached and that providers' identities are protected. This can be done by aggregating the data or using codes.

e. Determining the Organizational Arrangement

The responsibility for the QA program might rest with a single individual (e.g., the medical director or a QA coordinator), with a central QA department,

with a multidisciplinary QA committee, or with a series of separate QA committees organized along departmental lines. In a large DOC, the possible arrangements become more complex and are likely to involve several different combinations of individuals for specific QA activities. To a large extent, the way health services are organized and structured within the DOC[13] will dictate the organizational arrangement for the QA program. JCAHO offers several different organizational models that could be adapted to a correctional setting.[14]

In general, the DOC's central office should have a designated individual, department, or committee that is responsible for developing systemwide QA activities, training unit staff in the QA process, coordinating QA activities at both the unit and central office levels, conducting systemwide QA studies, overseeing organizationwide QA activities (e.g., safety, risk management, peer review), and summarizing reports from unit QA studies to be used in action planning for the system as a whole. To maintain the integrity of the QA process, central office QA staff should report directly to the systemwide health services director.

At the unit level, the simplest and most effective arrangement is usually to establish a multidisciplinary QA committee that meets regularly (at least quarterly) to decide what studies should be done, to establish indicators and thresholds, to review the results of ongoing studies, and to decide on action plans for correcting identified problems. The core committee should consist of representatives from major health programs and services (e.g., medical, dental, mental health, nursing, pharmacy, health records). Representatives from ancillary and support services should be added to the QA committee on an ad hoc basis depending on the nature of the study being conducted. Larger services (e.g., nursing) may have several ongoing QA studies, and some QA studies may cut across department organizational lines (e.g., the adequacy of sick-call services for segregated inmates).

Including a representative of the custody administration staff on the core QA committee is a good idea. Some of the identified problems in the quality of health care and services are likely to be related to system defects in custody matters. Much of what health services staff can accomplish depends on the attitudes and availability of their security colleagues. Alternatively, custody staff's observations and input may identify problems in health services that should be reviewed by the QA committee. This does not mean that the custody representative should gather data on clinical issues or participate in peer review activities. There is no breach of confidentiality, though, if he or she listens to results of QA studies that are reported in the aggregate or helps to decide which areas of health service activities should be studied.

f. Assessing the Effectiveness of the QA Program

Finally, JCAHO requires an annual appraisal of the QA program. Fromberg (1988:45) states that this should include:

- assessment of the monitoring and evaluation process to determine its effectiveness;
- comparison of the written plan with the quality assurance activities that were performed;
- determination of whether quality assurance information was communicated accurately and to the appropriate persons, committees, or other groups; and
- determination of whether identified problems were resolved and patient care improved.

Such an appraisal will help to determine whether any revisions are needed in the written QA plan. Annual appraisals of QA activities should be conducted by each institution's QA committee and by the individual or group responsible for the systemwide QA plan.

2. Continuous Quality Improvement

CQI is a more recent term applied to certain efforts to measure quality. CQI—also called quality control or total quality control, quality management or total quality management—has its roots in the concept of statistical control of variability. Its primary proponent, W. Edwards Deming, was an American, but the Japanese were the first to embrace CQI as a way to improve their productivity after World War II.[15]

Deming's philosophy of continuous quality improvement is quite simple. His observations of management practices in private industry led him to believe that traditional notions of quality control were misplaced. Many American businesses relied on inspections at the end of the assembly line to control the quality of their products. Workers were paid on the basis of piecework or the fulfillment of quotas. Everything was judged on the acceptability of the final product. Deming believed that inspection at the end of the line was inappropriate. In his words:

> Inspection with the aim of finding the bad ones and throwing them out is too late, ineffective, costly. . . . In the first place, you can't find the bad ones, not all of them. Second, it costs too much. . . . Quality comes not from inspection but from improvement of the process. The old way: Inspect bad quality out. The new way: Build good quality in.[16]

Deming recognized that a number of factors along the way could account for variability in the end product. For example, the raw materials themselves could be of poor quality, some of the equipment could be faulty, some of the workers could be poorly trained, or the procedures could be inefficient. If inspection is left until the end, it is too hard to determine where the defect occurred in the process. In Deming's view, the right way to approach quality is not to put out fires through after-the-fact inspections, but to prevent fires through CQI at every stage of production.[17]

Deming's management method has been distilled into what he called the Fourteen Points (CQI principles that should be implemented), the Seven Deadly Diseases (which should be avoided), and the Obstacles (which need to be overcome).[18] A few of them are particularly relevant to corrections. Two of Deming's points relate to the need for instituting a formal system of training and retraining. Traditionally corrections has relied more on on-the-job training (OJT) for its personnel than it has on formal training by skilled educators. Deming insisted that OJT is the wrong approach because it perpetuates the replication by new personnel of errors made by untrained trainers. Some of what staff learn through OJT may be right, but much of it may be wrong. In Deming's view, continuous formal training is required until the worker's performance in a particular job is in statistical control.[19]

Three more of Deming's points relate to staff relationships.[20] He believed that the role of a supervisor is to lead, not to order people around; that people must feel secure in their jobs because an atmosphere of fear is counterproductive; and that the barriers between staff areas must be broken down because competition between areas can result in conflicting goals that hamper efficiency and effectiveness. Implementation of such concepts in corrections would be revolutionary because traditionally, corrections has operated on the basis of power, hierarchy, and "turf building."

Deming's final point relates to taking action to accomplish the transformation from a system of quality through inspection to one of continuous quality improvement, which relies partially on each worker satisfying his or her customers.[21] In Deming's view, a *customer* is anyone who receives a worker's product and therefore, customers can include individuals internal to the organization as well as those external to it. Under this philosophy, a correctional health professional's customers would include supervisors, coworkers, custody staff, and inmates as well as the public at large.

The Deming management method was adopted readily by the Japanese, but largely ignored in America until the 1980s when some of the larger manufacturing concerns, such as the Ford Motor Company, American Telephone and Telegraph, and the Campbell Soup Company, began to utilize some of his techniques.[22] Application of CQI to the health field has been even more recent and is now stressed by JCAHO.

It is important to recognize that the emphasis on formal objective assessment of the quality of health care is only a few decades old.[23] Roberts and Schyve (1990:9) state that JCAHO's movement from QA to CQI "is not conversion to a new religion nor does our interest reflect adoption of the latest fad." Rather, they argue that CQI is the next step in the evolution of quality improvement in the health care field, which started with peer review and moved to retrospective medical audits and then to systematic QA programs.

In fact, the differences between quality assurance and quality improvement are more in degree than in kind. JCAHO's QA process described in the prior section already encompasses many of the CQI principles. The primary difference is in how QA has been carried out traditionally.

Roberts and Schyve (1990:10-11) note that the weaknesses of QA include the following:

- QA is largely driven by external requirements.
- QA is focused primarily on clinical care.
- QA activities follow organizational structure, not the flow of patient care.
- QA focuses on individuals, not processes.
- Quality "assurance" holds out unrealistic expectations of perfection.
- QA does not foster integrated analysis of efficiency and effectiveness.
- QA activities often do not support the professional instinct for self-assessment and constant improvement.

They argue further that the principles inherent in CQI will address the flaws in QA, but that remains to be seen. It also is not known how well management techniques borrowed from industry and applied to health care will fit into the alien environment of corrections. Corrections, after all, is not a business in the same sense as a manufacturing plant or even a hospital. The ultimate consumers (i.e., the inmates) of corrections' "products" are unwilling "buyers" who cannot go elsewhere if they are dissatisfied. On the other hand, corrections does have external customers such as legislators, the public, and the courts that it must satisfy, but unfortunately, they do not all agree on the quality of the "product" corrections should offer. Furthermore, CQI relies on notions of quality for quality's sake, which results in capturing a bigger share of the market, not on quality driven by external requirements where the industry itself has no control over its "market share."

Additionally, applying CQI techniques to the health services component of a DOC may not be easy. Some of the organizational barriers to implementing CQI in corrections were noted previously. It seems unlikely that a correctional health division would be able to implement a total CQI approach successfully unless the DOC as a whole adopted that philosophy. Like it or not, health services is just one component of a correctional system and cannot operate independently from the DOC as a whole. Budgeting practices, training requirements, personnel policies, certain operating procedures, and the organizational structure of correctional health services often are not under the direct control of health professionals.

When all is said and done, though, perhaps it is less important which quality improvement method a DOC adopts for its health services than it is that one be adopted. Staff in many correctional health systems just now are starting to grapple with internal quality

improvement mechanisms. They need to learn more about available techniques and see what works in their unique environment. Efforts to improve quality do have their own rewards in reduced costs, improved productivity, and higher staff morale. Deming is correct in writing that the search to define and maintain quality should be continuous.

D. Resources for Quality Improvement Efforts

Several authors have written about quality improvement efforts in correctional health care and have provided examples of programs, procedures, and forms that can be useful to other systems. Paris (1990) discusses quality management methods developed for outpatient health care review as well as some of the problems encountered in applying these methods to the correctional environment. Braslow (1990) emphasizes the need to include access to care as one of the measures of quality of care. Faiver (1998) provides a detailed example of the steps involved in a quality improvement study of an unacceptably high rate of refused clinic appointments. Elliott (1997) offers an approach to evaluating the quality of correctional mental health services. McGlynn (1995) discusses the use of outcome measures to improve mental health care. Moore (1999) includes several examples of forms that can be used to measure quality in correctional health care.

Greifinger and Horn (1998) look at the role of quality improvement activities in care management and offer several examples of clinical indicators that can be used to determine the appropriateness of the care provided for specific diseases such as human immunodeficiency virus, diabetes, hypertension, and asthma. Along the same lines, but in much greater detail, Spencer presents his method for standardizing the care of certain chronic diseases using practice guidelines. He argues that:

> [W]hen these guidelines are stated in simple, objective, measurable terms, they can be incorporated into flow sheets and also into quality improvement monitoring tools. The guidelines can be augmented easily to meet patients' special needs for individual treatment plans. (1999:41)

An example of a chronic illness guideline for hypertension, an individual treatment plan, and a CQI auditing tool for this disease are included in appendix K.

Schiff and Shansky (1998) provide a wealth of information in their article on improving quality in the correctional setting. They summarize JCAHO's eight performance measures for determining quality: accessibility, appropriateness, timeliness, continuity, effectiveness, efficiency, safety of the environment, and quality of the patient-provider relationship.[24] Schiff and Shansky also describe several examples of successful quality improvement efforts in prisons, including some in Illinois and Oregon.

Finally, health staff at a number of prisons and jails have developed policies and procedures as well as forms for use in quality improvement activities. Unless there is a proprietary interest involved, most are willing to share what they have used successfully with their correctional health care colleagues.

Such resources should not be overlooked. The time that it takes to locate and read these articles or to contact a colleague is insignificant compared to the time it takes to develop a quality improvement program from scratch. There is no longer any reason to "reinvent the wheel" regarding quality improvement activities when examples of procedures and tools are readily available.

E. External Programs to Improve Quality

In addition to internal quality improvement programs, it is useful to have the DOC's health services reviewed periodically by external groups. Internal assessments can determine the extent to which the DOC's health services staff are complying with its own policies and standards of care, but they often

do not reveal gaps or deficiencies in the DOC's policies and standards themselves. Operational standards, clinical practices, and definitions of quality are not absolute. Evaluation by an outside body can bring a fresh perspective on the adequacy of the DOC's health delivery system and the care provided. Periodic review by state medical societies, public health departments, state licensing boards, and consultant experts can be of great assistance in improving certain aspects of a health delivery system. The most comprehensive external evaluations, though, are those offered by national accrediting organizations.

Three national bodies accredit health services in corrections: the American Correctional Association (ACA), JCAHO, and the National Commission on Correctional Health Care (NCCHC). Differences in the standards used by these three organizations were summarized previously.[25] Differences in their accreditation processes are discussed in the following paragraphs.

The format of the steps leading to accreditation is virtually the same for all three accrediting bodies.[26] Accreditation is initiated when a facility representative completes an application that provides some basic data about the facility. Such information is used by the accrediting body to establish fee schedules, identify contact persons, and obtain an overview of the facility's size, services, and personnel.

Next, facility personnel are encouraged to complete a self-assessment tool. Both ACA and NCCHC require submission of the self-survey document to their respective organizations, but JCAHO does not. All three accrediting bodies offer presurvey consultation and technical assistance on request.

The next step in the process is the onsite survey. All three organizations send a team of surveyors to the facility to measure compliance with their standards. The composition of these teams and the activities they undertake onsite does differ, as discussed later.

At the conclusion of the onsite survey, team members review their findings with designated facility representatives. A written report is completed by the survey team and submitted to staff at the accrediting agency. The report is presented to an accreditation committee, which makes the final decision on the facility's accreditation status. Full accreditation is awarded for 3 years by all three organizations. Each has its own rules and requirements for facilities that receive decisions short of full accreditation, but all three provide for some process of appeal.

The primary differences in the accreditation offered by these three groups are associated with conducting the onsite survey and with the fees charged for accreditation. Because ACA accreditation is not focused on health services, its process provides the least comprehensive health review. ACA's intent is to assess all aspects of the operation and management of a correctional facility, of which the health services unit is just a part. As a consequence, its survey team (called a visiting committee) is composed of correctional experts but usually does not include a representative of the health professions. This means that ACA auditors can determine whether policies and procedures, health records forms, and other documentation exist in the health services section but generally are not qualified to determine the adequacy of the documentation or the care provided. Additionally, ACA's process is less formalized in that its "Visiting Committee reports its findings on the same Standards Compliance Checklist used by the agency in preparing its Self-evaluation Report" (American Correctional Association, 1990:xiii).

JCAHO onsite survey teams are composed entirely of health professionals, but usually not those with experience in correctional settings. JCAHO has a formal system of review that includes a complex standardized scoring system to determine the facility's extent of compliance.[27] JCAHO's approach provides an indepth assessment of certain aspects of health care delivery, but its standards ignore those areas unique to corrections.[28] The JCAHO onsite survey process is limited further in that it has relied

almost solely on documentation as the source for assessing the extent of compliance with its standards. Patients generally are not interviewed unless they formally request to meet with the survey team.

The NCCHC accreditation process offers a more balanced approach. It is more intense than the ACA accreditation process in several ways. First, the NCCHC process is devoted solely to health care issues (as is JCAHO's). Second, the onsite survey team is composed solely of correctional health professionals. Third, a formal set of survey instruments has been devised to measure compliance with standards that goes well beyond the checklist format used by ACA but is not as complex as the scoring system used by JCAHO. Furthermore, while the NCCHC onsite process does not review certain programs such as QA or environmental health as intensely as the JCAHO survey does, the scope of the NCCHC onsite survey is more comprehensive with respect to correctional health issues. Not only are all traditional health services activities included in the NCCHC assessment but so are those aspects unique to corrections, including custody/medical interface, training of correctional staff in health-related areas, and ethical matters affecting correctional health professionals.

Additionally, NCCHC surveyors rely not only on the existence of documentation to measure compliance with standards but also on structured observations and interviews. The latter are conducted with facility administrators (correctional and medical), custody staff (corrections officers, training coordinators, food service directors), health professionals (at least one from each service area or activity and in some cases, several of the same type), and inmates, who are the consumers of the health care delivered in corrections. The NCCHC onsite survey process looks at policies, processes, protocols, procedures, and people that can affect the quality of the care provided.

Finally, of the three, the NCCHC process is the least expensive.[29] The ACA accreditation process ranks next in cost because it charges for a review of the entire facility's operations. JCAHO charges additional fees for reviewing anything other than basic medical ambulatory care such as mental health services or infirmary care. Although it is difficult to draw exact cost comparisons, the JCAHO accreditation process is generally the most expensive of the three.

The decision about which accreditation a DOC's health system should seek depends on which one will serve the needs of the DOC better. The NCCHC and JCAHO accreditation processes provide a much more comprehensive review of health services than ACA, and, because they are conducted by health professionals, are better able to withstand challenge. This does not mean that ACA accreditation is not worthwhile. Where administrators of a DOC or an individual prison or jail are interested in a comprehensive review of their total operations, they would do well to seek ACA accreditation *and* accreditation of their health services by NCCHC or JCAHO. Where an assessment of health services alone is required, accreditation by NCCHC or JCAHO may be the better option.

Ultimately, however, which accreditation program is selected matters less than that a facility structures its health services in accordance with some set of national standards. Faiver (1998:207-209) points out that having a system's health services accredited by a national organization offers several benefits. These benefits include enhanced prestige for the facility, a learning experience for the staff, reassurance to the facility's funding source that the institution's health services are being operated appropriately, an enhanced ability to recruit and retain good health care professionals, and an increased likelihood of a favorable outcome in court if the facility is sued.

F. CONCLUSIONS

Since the 1970s, the focus of most efforts to improve correctional health care—whether by the courts, by national health organizations, or by DOCs them-

selves—has been on establishing an adequate delivery system. The time is more than ripe for the emphasis to shift to improving the quality of care provided by correctional facilities. Staff at each DOC should develop internal mechanisms to define and measure the quality of the services offered.

Additionally, periodic review by outside groups, especially national accrediting bodies with standardized assessment processes, can help determine whether the DOC's health system is keeping pace with the larger health care community. The standards that define "quality health care" are not static but continuously evolving. Similarly, providing quality care to inmates is not so much a goal to be attained as it is a process of continuous improvement of structure, procedures, policies, and people.

NOTES

1. See also the section on infection control in chapter X.

2. See also the section on environmental health and safety in chapter X.

3. As cited in Walton (1986:26).

4. Cited from the National Practitioner Data Bank (National Health Care Practice, 1999b) fact sheet for physicians, dentists, and other health care practitioners dated May 7, 1999.

5. Ibid.

6. Ibid.

7. Personal communication, March 22, 1991, with Mindy C. Reiser, Ph.D., Education Manager, National Practitioner Data Bank.

8. Individuals who wish to know more about the Data Bank and stay current on reporting requirements can call the Data Bank helpline at 1-800-767-6732 or write to:

National Practitioner Data Bank
P.O. Box 10832
Chantilly, VA 20153

Information on the NPDB also can be found at the following Web site: *http://www.npdb.com*.

9. From the National Association of Private Psychiatric Hospitals as cited in Cassidy (1990:6).

10. A more complete discussion of the Joint Commission on Accreditation of Healthcare Organizations 10-step process for monitoring and evaluation is found in Fromberg (1988:49-72).

11. For more information on data collection and management, see chapter XII.

12. See Fromberg (1988:65).

13. See chapter V on organizational models and appendix C for sample organizational charts.

14. See Fromberg (1988:39-44).

15. Walton's book (1986) provides a good overview of Deming's philosophy on quality improvement as well as biographical data. See also Deming (1986).

16. As cited in Walton (1986:60).

17. See Walton (1986) and Deming (1986).

18. Ibid.

19. See Walton (1986:68-69, 84-85).

20. Ibid., pp. 70-75.

21. Ibid., pp. 86-88.

22. In her books, Walton (1986; 1990) provides some case studies on the application of Deming's technique in various American enterprises.

23. See Roberts and Schyve (1990:12).

24. See also Joint Commission on Accreditation of Healthcare Organizations (1993).

25. See chapter VII and appendix E. The fourth organization with standards applicable to correctional health care (i.e., American Public Health Association) does not offer an accreditation program.

26. See American Correctional Association (1990), Joint Commission on Accreditation of Healthcare Organizations (1996), and National Commission on Correctional Health Care (1996; 1997).

27. See Joint Commission on Accreditation of Healthcare Organizations (1996).

28. See the standards comparison chart in appendix E.

29. Interested individuals should contact the respective accrediting organizations for current pricing schedules.

REFERENCES

Articles and Books

American Correctional Association
1990 Standards for Adult Correctional Institutions (third edition). Laurel, MD.

Braslow, Charles A.
1990 "Comment: Quality of care includes access to care." 9 Journal of Prison and Jail Health 2:155-157.

Cassidy, Bonnie
1990 "Quality assurance and quality improvement." 13 Briefing 1:6-7. Washington, DC: National Health Care Practice.

Deming, W. Edwards
1986 Out of the Crisis. Cambridge, MA: Massachusetts Institute of Technology.

Elliott, Richard L.
1997 "Evaluating the quality of correctional mental health services: An approach to surveying a correctional mental health system." 15 Behavioral Sciences and the Law 427-438.

Faiver, Kenneth L.
1998 "Quality is also important." Pp. 201-218 in Kenneth L. Faiver (Ed.), Health Care Management Issues in Corrections. Lanham, MD: American Correctional Association.

Fromberg, Robert
1988 The Joint Commission Guide to Quality Assurance. Oakbrook Terrace, IL: Joint Commission on Accreditation of Healthcare Organizations.

Greifinger, Robert B., and Martin Horn
1998 "Quality improvement through care management." Pp. 317-325 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Joint Commission on Accreditation of Healthcare Organizations
1993 The Measurement Mandate. Oakbrook Terrace, IL.

1996 Comprehensive Accreditation Manual for Ambulatory Care. Oakbrook Terrace, IL.

McGlynn, Elizabeth A.
1995 "Defining and using outcome measures in mental health: A process to improve quality of care." 7 Focus 2:1-3.

Moore, Jacqueline M. (Ed.)
1999 Correctional Health Care: Forms, Checklists & Guidelines. Frederick, MD: Aspen Publishers, Inc.

Nackel, John G., and Thomas A. Collier
1989 Implementing a Quality Improvement Program. Cleveland: Ernst & Young.

National Commission on Correctional Health Care
1996 Standards for Health Services in Jails. Chicago.

1997 Standards for Health Services in Prisons. Chicago.

National Health Care Practice
1990 "The National Practitioner Data Bank." 13 Briefing 1:8. Washington, DC.

1999a Fact sheet on entity eligibility. Chantilly, VA.

1999b Fact sheet for physicians, dentists, and other health practitioners. Chantilly, VA.

Paris, Joseph E.
1990 "The quest for quality management measurements in the correctional setting: Outpatient health care review." 9 Journal of Prison and Jail Health 2:135-154.

Roberts, James S., and Paul M. Schyve
1990 "From QA to QI: The views and role of the Joint Commission." The Quality Letter 9-12.

Schiff, Gordon, and Ronald Shansky
1998 "Challenges of improving quality in the correctional setting." Pp. 12-25 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Spencer, Steven S.
1999 "Standardizing chronic illness care behind bars." 6 Journal of Correctional Health Care 1:41-61.

Walton, Mary
1986 The Deming Management Method. New York: Putnam Publishing Group.

1990 Deming Management at Work. New York: G.P. Putnam's Sons.

Cost Considerations: Financing, Budgeting, and Fiscal Management

Chapter XIV

Chapter XIV

Cost Considerations: Financing, Budgeting, and Fiscal Management

No book on correctional health issues would be complete without addressing the cost of care provided, particularly at a time when escalating health care costs are coupled with unprecedented offender population growth. Financing, budgeting, and fiscal management of correctional health care require intelligent direction and careful attention. In moderate to large systems, the assistance and involvement of persons with professional qualifications in this area are highly recommended.

This chapter reviews various cost issues associated with correctional health care. The discussion is intended to alleviate some of the fear and trepidation that the fiscal arena can cause for the uninitiated. It also offers some advice on where to start, what to consider, how to request funding, how to improve efficiency, and how to control costs. Section A describes the financing options available to fund correctional health programs. Section B is devoted to budgeting issues and includes advice on developing a budget and what to do when funding is insufficient. Section C examines the cost of inmate health care in various prison and jail systems, and section D addresses cost control strategies.

A. Financing

Financing options for correctional health services are limited. Potential sources of funding for programs include federal government sources, private sources, payments from prisoners, and appropriations from the state legislature or city or county government. The viability of each option is discussed below.

1. Federal Government Sources

As far as can be determined, Medicare and Medicaid payments generally are not available to state prisoners.[1] Medicaid may be available for eligible recipients in some states during the month in which they become inmates of a public institution, but even so, these dollars would represent only a small portion of a system's overall cost of care.

Some federal grants may be available occasionally, but these are typically for demonstration or research projects, not for ongoing operating expenses. At the beginning of the millennium, the issues of drug abuse, acquired immune deficiency syndrome (AIDS), other sexually transmitted diseases, and communicable diseases such as tuberculosis and hepatitis B and C continue to be hot topics. Some systems have been able to obtain federal dollars from the National Institute on Drug Abuse, the Centers for Disease Control and Prevention, and other federal agencies to fund programs in these areas.

Furthermore, some dollars may be available from the National Institute of Corrections (NIC) to fund technical assistance requests on correctional health topics. Some training money also is available, especially to subsidize attendance of correctional health staff at NIC's National Academy of Corrections programs.[2]

This chapter was developed by B. Jaye Anno and Kenneth L. Faiver.

Eligible veterans can receive certain care at no cost in veterans' facilities. In some instances, this care is limited to treatment of service-related illness or disability. Rules and policies as well as their interpretation may vary widely, but it may be worth checking by making inquiries and perhaps carefully following a test case or two. The state Veterans' Administration representative can be a helpful resource. If that path opens up, it may be worth adding a question or two for all incoming prisoners about their veteran's status and eligibility and noting this information prominently on the face of the health record for use in the event of future major medical costs.

In the main, though, the federal government is not a likely source of funding for ongoing correctional health programs. The halcyon days of easy access to federal dollars for correctional programs are over and are not likely to come again.

2. Private Sources

Do not overlook the possibility of a grant from a foundation, a private beneficiary, a professional organization, a drug company, or another source for research and development or for continuing education. Again, however, the availability of private dollars to fund state and county correctional programs has decreased in recent years and never was widely available to fund operational programs.

Private insurance is another possible source of payment for some inmates' health services, but most health insurance contracts exclude coverage of prisoners. When they do not, this avenue should be considered, for example, for new arrivals who were covered through employment and may be covered to the end of the current month (although often the person has not worked for many months and thus, coverage would have lapsed); for those who are under the age limit of the parents' policy (e.g., 18 or 22); for those who are covered by the policy of an employed spouse; or for those who have coverage from a prior injury on the job or an automobile accident. These policies, if available, can be of great benefit when major medical expenses are incurred and should be utilized whenever possible.

3. Offenders Pay for Own Care

One of the more significant changes that have occurred in correctional medicine since the first edition of this book is the tremendous increase in the number of prison and jail systems that have begun to charge inmates a fee (also called a copayment) to receive certain health care services. In 1990, discussions regarding the legal and ethical implications of charging offenders for certain health services were just beginning. By 1995, two separate surveys found that charging inmates a fee for health care was a growing trend. Among its accredited jails responding to a survey, the National Commission on Correctional Health Care (NCCHC) learned that 34 percent already were charging inmates a fee for health services and that an additional 17 jurisdictions (15%) planned to charge a fee at some future date (Weiland, 1996). A separate survey of prison systems conducted that same year reported that 24 percent of state departments of corrections (DOCs) already had started charging inmates a fee for health care and an additional 34 percent had legislative approval to start an inmate user fee program during 1996 (Gibson and Pierce, 1996). By 1997, at least 33 state legislatures had passed laws authorizing the imposition of fees for health services for inmates (National Institute of Corrections, 1997:5). Of the 100 largest jails responding to an NIC survey, 56 percent indicated they were charging inmates for health care in 1996, with five more states scheduled to implement user fees in 1997 (National Institute of Corrections, 1997:7).

The primary legal question associated with charging inmates a user fee for health services is whether the fee serves to deny inmates access to needed care. Although the U.S. Supreme Court has not yet addressed this issue, a number of lower courts have held that charging inmates a fee for health care can be constitutional providing certain safeguards are included in the procedures.[3] According to Rold (1996:135):

> [A] constitutional system of charging inmates for medical care must, at a minimum: (1) deliver care to indigents without regard to ability to pay; (2) in all cases, provide care first with payment assessed thereafter; and (3) have sufficient exemptions from imposition of charges to comport with the requirements of *Estelle v. Gamble* (1976) that care for serious conditions not be denied through "deliberate indifference." Under the Due Process Clause, inmate patients also must be provided with a meaningful opportunity to contest the applications of these rules, since they affect their inmate accounts.

Ethical issues surrounding charging inmates a fee for health services are less settled. Those in favor of user fees often justify their imposition on the following grounds:

- Health care costs need to be controlled and resources used for the sickest prisoners.
- Fees will reduce the abuse of the sick-call process and eliminate frivolous requests for medical attention.
- Fees help inmates to become fiscally responsible by forcing them to make decisions on how to spend their money.
- Fees help to generate needed revenues for the health care program.[4]

Those against the imposition of user fees for health care make the following points:

- Research has not been done to show who stops coming to sick call once fees are imposed and, thus, inmates who need care may not be receiving it.
- Fee programs set up two classes of inmates—those who have enough money for both health care and commissary items and those who have to choose between the two and may not always make good decisions.
- Avoiding care for minor problems may lead to greater complications and increased costs in the future.
- The cost of administering such programs substantially reduces the net revenue.
- Other ways exist to handle inmates who abuse the sick-call process without reducing access to care for everyone.[5]

A special set of problems attends the charging of fees for mental health treatment. Typically, the key to successful treatment is regularity of followup and, especially, faithful compliance with prescribed medication. Although achieving good treatment compliance by mentally ill patients is a significant challenge, the work only increases when an additional burden—a copayment—is placed before the patient. Often even more than the patient himself or herself, correctional systems pay the price of untreated or undertreated mental illness through the resultant occurrence of unacceptable behavior patterns. Therefore, it is in the prison's or jail's own best interest to facilitate and encourage early intervention and regular treatment rather than place any unnecessary barriers in the way.

Requiring a copayment for any chronic illness, whether medical or psychiatric, is a policy of dubious logic. Followup and treatment for diabetes, asthma, epilepsy, mental illness, hypertension, and other conditions represent necessary care, not optional care. The treatment prescribed by the doctor also is necessary care and is not frivolous or abusive.

A reasonable copayment program places a small charge (typically $2 to $4) for each patient-initiated visit except for mental illness or an obvious emergency, and does not charge at all for provider-initiated visits such as followup care, periodic examinations, medication, or hospital care because these are, by definition, needed and not superfluous.[6]

In its position statement on charging inmates a fee for health care services, NCCHC states that it is "opposed to the establishment of a fee-for-service

or co-payment program that restricts patient access to care" (1996:182). Recognizing that an increasing number of prisons and jails have implemented or are planning to implement such programs, however, NCCHC has developed the following guidelines that specify how such programs should be implemented and managed:

- Before initiating a fee-for-service program, the institution should examine its management of sick call, use of emergency services, system of triage, and other aspects of the health care system for efficiency and efficacy.
- Facilities should track the incidence of disease and all other health problems prior to and following the implementation of the fee-for-service program. Statistics should be maintained and reviewed. Data that show an increase in infection levels or other adverse outcomes may indicate that the fee-for-service program is unintentionally blocking access to needed care.
- All inmates should be informed of the details of the fee-for-service program on admission, and it should be made clear that the program is not designed to deny access to care. . . .
- Only services initiated by the inmate should be subject to a fee or other charges.
- The assessment of a charge should be made after the fact. The health care provider should be removed from the operation of collecting the fee.
- Charges should be small and not compounded when a patient is seen by more than one provider for the same circumstance.
- No inmate should be denied care because of a record of nonpayment or current inability to pay for same.
- The system should allow for a minimum balance in the inmate's account, or provide another mechanism permitting the inmate to have access to necessary hygiene items (shampoo, shaving accessories, etc.) and over-the-counter medications.
- The facility should have a grievance system in place that accurately tracks complaints regarding the program. Grievances should be reviewed periodically, and a consistently high rate of grievances should draw attention to the need to work with staff to address specific problems that may have accompanied the fee-for-service program.
- The continuation of any fee-for-service health care program should be contingent on evidence that it does not impede access to care. Such evidence might consist of increased infection rates, delayed diagnosis and treatment of medical problems, or other adverse outcomes (National Commission on Correctional Health Care, 1996:182-184).

There is a better solution than copayment. It begins with ensuring full and unimpeded access to the primary level of the prison's or jail's health care delivery system. Here the prisoner typically encounters a nurse or other clinically trained person who serves as a "gatekeeper" by listening to the complaint and evaluating the extent of need. Once the prisoner has entered the delivery system, all referrals to more specialized and more costly levels of care should be the decision of professional staff based on an objective assessment. In this way, the relatively few persons who choose to abuse sick call regularly will not impose significant monetary costs on the system, while legitimate users will have ready access to all appropriate levels of care.

4. Legislative Appropriations

The vast majority (if not all) of operating funds for prisons and jails come from state and local legislative appropriations. Therefore, the systemwide health services director (HSD) must understand how this process works. Typically, at the state level, a funding request is initiated within the agency itself. After the director approves the request, it is passed to the appropriate office of management and budget (OMB), which reviews, and often modifies or even rejects, the request on behalf of the governor. From there, the budget request is sent to one of the houses of

the legislature, usually to a committee on appropriations or possibly to a subcommittee for corrections. The legislative committee may have the request analyzed by a fiscal agency. The house and the senate usually hold separate budget hearings. Differences between the two houses are reconciled by a conference committee. Finally, the appropriations bill is acted on by the entire legislature and is presented to the governor for signature. Along the way, numerous pitfalls and deviations may occur. An appropriations request may languish and die in committee. It may be rejected or it may be vetoed by the governor. (The process at the county level is similar.)

A recommendation is that the statewide HSD be permitted to meet directly with the staff from fiscal agencies (of the governor or OMB) and the legislature to explain needs and programs and to answer questions. Also, the HSD should be present at significant budget hearings in legislative appropriations committees to answer questions directly or to explain new programs. Rarely can this be done as effectively by nonmedically trained intermediaries. Such persons tend to misunderstand or only partially grasp important program details and priorities and only poorly represent them. They may, unfortunately, concede points that should not be conceded or "trade" without realizing or fully appreciating the value of what was traded during a negotiating session.

Careful preparation for budget presentations is essential, as is careful preparation of the budget itself.

B. BUDGETING

1. Definition and Uses

A *budget* is a plan for allocating resources. All resources are "scarce" in the sense that when more is spent for one purpose, less of that resource remains available for other uses. This is true whether an individual is dealing with his or her own personal financial resources or with an appropriation of tens of millions of dollars for correctional health care. In fact, preparing and managing the budget must be counted among the basic functions of a correctional health care administrator.

An HSD will find at least three important uses for a budget, including seeking funds for a program, planning program expenditures, and monitoring and controlling expenditures.

a. Seeking Funds

An agency describes its program to a funding source (e.g., the legislature or county board) and presents a list of funding needs and an accompanying rationale. If the request is sound, adequately defended, and accepted—possibly with some modifications—funds are made available to the user agency.

b. Planning Expenditures

The decision to spend resources should not be made haphazardly, but according to a plan that is designed carefully to achieve a desired objective and to do so efficiently.

c. Monitoring and Controlling Expenditures

Once a program is under way, ongoing efforts are needed to ensure that the resources are spent according to plan. Midcourse adjustments may be required; the budget then serves both as a guide and as a limiting factor.

2. Approaching the Budget Process

Before proceeding further with the budgeting process, some time and effort should be devoted to clarifying the agency's mission. Although at first this may seem obvious and unnecessary, careful preparation and discussion of a mission statement will help to refine and focus the understanding of exactly what the correctional health program aims to accomplish.

A conceptually sound approach to the budgeting process, once the mission has been made clear, includes these steps: first, define (determine) patient needs; second, specify the services required to meet

those needs; and third, identify the resources necessary to provide those services.[7]

All too often, the process is employed in reverse. Someone starts with the available resources and proceeds to determine what services those resources can produce or purchase, ultimately arriving at a definition of the patient needs that can be met with those resources. The problem is that unmet needs may not be recognized. Each step of the process requires some attention.

a. Defining Patient Needs

Patient need may be expressed quite generally. Is it a dental care program? Is it inpatient care? Prenatal care? Physical therapy and rehabilitation? Primary outpatient care? Geriatric and disabled care? A detoxification program? How large is the population of need? How does this population tend to differ from some other population whose needs are better known? How much illness is expected in the population? How else may one estimate the character and magnitude of need?

b. Specifying Services

Services must be defined more precisely. What particular bundle of services will be adequate to address these needs? For example, information to be provided includes hours per week of nurse-attended sick call, hours per week of physician-attended clinics, number of inpatient beds (at what levels), and hours of counseling (by what type of professional). To the extent that data are available or seem to be useful, these broad categories can be specified further into discrete meaningful categories.

c. Identifying Resources

The kind and amount of resources required flow logically from the bundle of services to be produced with the resources. Exhibit XIV-1 shows a greatly oversimplified example of what the operation of a certain clinic for 1 year might require.

In specifying the resources that will be employed, the program manager needs to define the appropriate production function—in other words, what method (what set of inputs) will be used to produce and deliver the service and what combination of resources will be required? The optimum choice will depend both on what the technology requires and on the price of each factor of production. For example, some services can be produced legally only by a licensed physician. Yet a physician plus a nurse may be able to see twice as many patients (assume in this case that they legally, and without diminished quality, produce twice as many equivalent services) as the single physician working alone. If the cost of a physician and a nurse is only 70 percent of the cost of two physicians (who, by definition, could perform the equivalent amount of services), the former combination is more efficient. What if one physician, two nurses, and one clerk could produce the same quantity (and quality) of work, but would cost only 60 percent as much as three physicians?

EXHIBIT XIV–1.
Sample Formula for Specifying Resources

P physicians at an average cost of *p* dollars per physician

N nurses at an average cost of *n* dollars per nurse

C clerical staff at an average cost of *c* dollars per employee

E units of equipment at an average cost of *e* dollars per unit

S units of supplies at an average cost of *s* dollars per unit

Then, $P(p) + N(n) + C(c) + E(e) + S(s)$ = Total Cost*

Example	
2 physicians @ $90,000	$180,000
4 nurses @ $35,000	140,000
2 clerical staff @ $18,000	36,000
3 pieces of equipment @ $2,000	6,000
1 piece of equipment @ $18,000	18,000
4,000 supplies @ $5 [average]	20,000
Total	**$400,000**

*See further discussion of this concept in chapter XI.

Then, the former would be an even more efficient combination of resources as long as this quantity of services was needed. Otherwise, there would be excessive and costly unused capacity. As another example, the purchase and use of a computer might permit the introduction of a technologically more efficient outpatient scheduling system.

A similar kind of decision compares the efficiency of "make" versus "buy," or "produce" versus "contract." For example, should the prison or jail have its own pharmacy or contract for pharmacy services? Should it operate its own ambulances or purchase ambulance services? These decisions depend on volume and a number of other factors.[8]

The goal here is to select *technically efficient* and *price-efficient* solutions. Technical efficiency means that the health services will be produced using the minimum number of inputs of any given proportion. Several different combinations of inputs, however, may be technically efficient. To minimize the cost of providing services, the decisionmaker must choose among these several technically efficient combinations to determine which combination also is economically efficient. This is done by considering the relative costs or prices of the different inputs as well as their productivities.[9]

The efficient solution may not be identical at all locations. At a large central prison, for example, a major pharmacy operation (open 16 hours per day and 7 days per week with several pharmacists and aides) may be quite appropriate. At a smaller rural facility, contract pharmacy services with a local drugstore could be the best approach. Similarly, a small facility located near the central prison might be served more efficiently through courier arrangements with the main pharmacy.

The cost per unit of service can be kept relatively low at institutions with larger populations. At smaller institutions, a disproportionately higher cost must be incurred because of the need to maintain a given level of administrative overhead. For example, one clinic administrator can run a large unit consisting of both inpatient and outpatient functions, while at a smaller facility, one administrator may have only an outpatient clinic.[10]

Keep in mind, however, a significant scale size factor unique to the correctional setting. The larger the facility, the more difficult and risky it becomes to maintain security. Higher population levels tend to be less manageable. Conversely, lower population levels may be more costly per unit in the health care function but less risky for security purposes.

One additional point should be emphasized in the identification of needed resources. A program may have "hidden costs" that, when explicitly identified and properly estimated, can alter the outcome of a cost-benefit analysis and result in a different management strategy. Examples include costs of custody, transportation, personnel office services, business office services, staff recruitment and training costs, and other administrative overhead. These components can be ignored safely only where they are minor.

These hidden costs sometimes are underestimated or ignored by states and counties when, in the haste to privatize, they justify the decision as cost-beneficial. In truth, if the costs of government monitoring and oversight of the contract were to be forecast accurately and included, little or no savings might be attributable to privatization. On the other hand, true savings through contracting can be greater than projected when hidden governmental costs, such as the cost of being represented by the Office of Attorney General, are ignored. When a decision threshold is established, such as a rule that permits contracting only if a savings of 5 percent or more can be demonstrated, it becomes important to include an accurate estimate of all costs.

3. Some Terms and Distinctions

Some clarification of frequently encountered terms may be helpful:

- ***Fixed versus variable costs.*** In any operation, some costs remain the same in the short run,[11]

no matter how much of the service is produced, while other costs vary according to the volume of services delivered. As an example, staff already on the payroll require salaries whether they are busy or not. This is a fixed cost, although in the long run it, too, is variable because the staffing complement may be increased or reduced. However, some other costs, such as contractual employees, medications, consumable supplies, offsite hospital days, or radiology fees, will vary according to usage.

The fact that costs are variable is an obvious concept, but variable with respect to what? And by how much? For example, numerous factors may affect the volume of medications dispensed, including the offender population level, variations in the case mix, provider prescription patterns, or the number and types of provider staff. An indepth analysis of the causal relationships among so many independent variables as they act on the dependent variable (in this case, medications dispensed) is no simple task; yet to defend his or her budget effectively, the clinic administrator must attain such an understanding. Multiple regression or other sophisticated analytical techniques may be useful.

- ***Capital outlay versus operating costs.*** This distinction is analogous to the distinction between *one-time* costs and *ongoing* costs. Often these costs are carefully distinguished in the budget. For the purpose of making projections to future periods, this is an important consideration. The cost of constructing a building or of purchasing an x-ray machine or a dental chair will not be repeated each year, but staff salaries, supplies, and utilities are operating costs that are ongoing or recurring.
- ***Encumbered versus expended.*** In calculating a year-end expenditure projection, the manager must take into account not only the amount of funds already spent (expenditures) but also the amount that has been committed to be spent (encumbrances) during the current fiscal period, even though the payment transaction may be incomplete. Sizable encumbrances can affect a budget projection significantly. For example, one may know that the hospital bills for several patients currently in offsite medical or surgical facilities will, on discharge, cost $150,000 to $200,000. If this is not taken into account, the year-end expenditures could be underestimated by this amount. In the private sector, this is known as *accrual* accounting, rather than accounting *on a cash basis*.
- ***Line-item budget.*** This type of plan identifies proposed spending without identifying the specific projects on which the money will be spent.[12] Instead, costs are summarized based on the character of the expenditure. For example, a total salary amount of $1,356,000 for the medical program does not distinguish the costs of physician coverage for the inpatient unit from the salaries of the clerical staff in the outpatient clinic or the nursing staff.

  This is the most commonly utilized form of budgeting within government agencies. Its advantage is its flexibility, but its drawback for the clinic administrator is the difficulty of accurately determining after the fact how much was charged to each subprogram within the overall heading "Medical Program." Unfortunately, the business offices of many correctional facilities tend to pattern the expenditure reports and cost projections that they provide to the program management staff after the line items in the budget. Consequently, costs tend to be rolled up into summarized reports, with little useful detail for the administrator to scrutinize and control.
- ***Personnel versus contractual services and supplies.*** These are the commonly employed aggregations of operating cost categories. *Personnel* is a combination of salaries and wages, holiday and overtime pay, and fringe benefits including retirement, insurance, social security, and longevity payments. The term *contractual*

services and supplies can be construed as covering "everything else," such as travel, supplies, contracts, utilities, fees, and sometimes equipment.

- ***Phase-in.*** This is a strategy in which the funding authority provides a portion of the funding during the first budget year. Subsequent cycles then include the balance of the program. This practice allows the funding authority to buy into a new program without having to commit the full level of approved resources immediately. For example, a full 50-percent phase-in of the zero-based budget example noted in exhibit XIV-1 would yield a funding level of $200,000 in year 1, although if only the personnel and consumable supplies were to be phased in, the result would be $212,000, as illustrated in exhibit XIV-2.

  The rationale for phase-in funding is, in part, a recognition that most new programs need time for the necessary staff to be hired, for policies and procedures to be written, for equipment to be obtained, and for the physical plant to be built before the program can be put into full operation. In this respect, the administrator needs to assess carefully his or her startup capabilities and requirements when submitting a request for funding.

Many of the terms noted are relative, such as fixed or variable over what term? Some personnel are salaried, but others are contractual and the status of the same individual may change over time. What is the fine distinction between supplies and equipment? Is it cost or consumability? Typically the funding agency will have adopted a set of administrative rules that provide operational definitions for these terms.

4. Specifying Line Items

The final budget will contain a number of *line items* or funding categories specified in greater or lesser detail. At one useful level of aggregation, it might look something like exhibit XIV-3. In most systems, staff will account for the majority of dollar costs in a budget, perhaps 65 to 85 percent. Therefore, this portion needs to be developed with special care.

Usually the funding source will determine a set of line items for the budget appropriation. However, this does not prevent disaggregation of the budget into additional discrete categories whenever useful to the manager.

In developing a budget—as in any form of planning—a cardinal rule is to make all assumptions explicit. Then, when modifications are made, the result is more understandable. Also, defending a budget is easier when the details are clear and well documented. Be sure either to include a record of these assumptions with the budget itself or file the information in a safe place to use when needed in defending, amending, or renewing the budget.

EXHIBIT XIV–2.
Full Versus Partial 50-Percent Phase-In

	Full-Year Cost	Full 50-Percent Phase-In	Partial 50-Percent Phase-In
2 physicians	$180,000	$90,000	$90,000
4 nurses	140,000	70,000	70,000
2 clerical staff	36,000	18,000	18,000
3 pieces of equipment	6,000	3,000	6,000
1 piece of equipment	18,000	9,000	18,000
4,000 supplies	20,000	10,000	10,000
Total	**$400,000**	**$200,000**	**$212,000**

5. Centralized Versus Decentralized Budget Preparation

Each institutional health authority, as well as each midlevel manager over a discrete program area, can propose (and justify) his or her own budget and submit it to the systemwide HSD for review and approval. Alternatively, the HSD may draft a generic budget and send it to the institutional health administrators or program managers who, in turn, justify departures in either direction from this base. Whether budgeting should be centralized or decentralized is not the important question. The process should occur at both levels. The initiative—the first round—can be either local or central, but there must be subsequent rounds, usually more than one.

EXHIBIT XIV–3.
Sample Line-Item Budget Format, by Program and Institution

Period from _____ **to** _____

Line Item	Institutions				
	Facility A	**Facility B**	**Facility C**	**Facility D**	**All Facilities**
Administration					
Staff					
Equipment					
Supplies					
Contracts					
Travel					
Other					
Subtotal					
Medical					
Staff					
Equipment					
Supplies					
Contracts					
Travel					
Other					
Subtotal					
Mental health					
Staff					
Equipment					
Supplies					
Contracts					
Travel					
Other					
Subtotal					
Dental					
Staff					
Equipment					
Supplies					
Contracts					
Travel					
Other					
Subtotal					

Continued on next page

Therefore, it is of paramount importance that the cycle begin far enough in advance of the new fiscal year to allow careful consideration of all relevant issues by all appropriate parties.

6. Options When Funding Is Insufficient

To assist in control of expenditures, the budget needs to be broken out into monthly or quarterly periods. These should reflect, insofar as can be predicted, actual spending patterns rather than simply a division of the whole by 12 months or by 4 quarters. Hiring of new staff, for example, often will be spread over some period of time, and funds for this purpose may be phased into the spending plan so that a closer match is obtained. Monitoring actual expenditures and matching them against the budget for the month (and year to date) enables timely midcourse adjustments when this becomes necessary. Several types of adjustments may be made, including reducing expenditures, shifting resources among line items, and requesting additional resources.

EXHIBIT XIV–3 *(Continued)*.
Sample Line-Item Budget Format, by Program and Institution

Period from _____ **to** _____

Line Item	**Institutions**				
	Facility A	**Facility B**	**Facility C**	**Facility D**	**All Facilities**
Inpatient Services					
Staff					
Equipment					
Supplies					
Contracts					
Travel					
Other					
Subtotal					
Ancillary Services (pharmacy, x-ray, lab, diet, physical therapy, etc.)					
Staff					
Equipment					
Supplies					
Contracts					
Travel					
Other					
Subtotal					
Offsite Services					
Staff					
Equipment					
Supplies					
Contracts					
Travel					
Other					
Subtotal					
Total					

a. Reducing Expenditures

A reduction in expenditures can be achieved in various ways, all of which should be considered:

- Eliminate waste or improve the method of production, and thus be more efficient technically.
- Use employee time more efficiently by creative scheduling of services.
- Find less costly substitutes; for example, employ some pharmacy technicians instead of all pharmacists or renegotiate contracts for better prices.
- Defer to the next fiscal period services that can be postponed.
- Reduce services by prioritizing need.
- Cut programs.

Note that "reduce quality" was not listed as an option because in most contexts, it would be unacceptable. In any case, this suggests the importance of mounting a good quality assurance and risk management program along with a budget/financial information/utilization data system. These can provide the manager with an early warning of quality deterioration occasioned by program contraction and reduced services as well as with solid data to use in arguing the case for increased appropriations.

A reduction in costs does not necessarily mean a reduction in quality. A health care program can be wasteful of resources and costlier than it needs to be when services are produced inefficiently. This situation occurs when physicians do the work of nurses or nurses do the work of aides,[13] or when poor scheduling practices result in idle hours for paid staff. When it is determined that reducing services beyond a certain point would mean sacrificing an acceptable level of quality, eliminating the service entirely should be considered. Sometimes necessary services can be eliminated at one or more locations as long as offenders who need the discontinued services are transferred to a location where the care is available. This decision will need to be made in consultation with custody administration. Often, however, the consolidation of certain services to fewer locations can result in significant economies without diminishing quality or access. Also, generally it is better not to claim to provide a service if it can be provided only poorly.

One way of consolidating certain services at select locations is to create a matrix, or "grid," showing the services available along one axis and the institutions/facilities in the system along the other axis. Then place a "yes" or "no" in each cell of the grid, indicating whether the specified service is available at that location. This grid must be updated each time a change in service distribution occurs. Such a grid can be of great use to clinicians in the intake screening area or to those conducting medical clearance for interfacility transfers. They are able to see, at a glance, whether a patient who requires outpatient mental health services, substance abuse treatment, detoxification services, infirmary care, AIDS management, hemodialysis, or oxygen therapy is eligible, from a health care classification standpoint, to be assigned to a particular facility.

b. Shifting Resources

Earlier it was recommended that budgeting proceed as follows:

NEEDS → SERVICES → RESOURCES

What if needs are found to exceed available resources? This can happen during initial budget planning if, for example, a target limit has been determined already by the chief executive of the county or state. Or it may be encountered when the funding agency rejects the budget proposal and assigns a lower level of funding. It also may occur at midyear, either because the original estimates were wrong or because conditions changed unexpectedly, for example, because of population increases, price increases, or a major hospital bill. The latter especially can be a problem in a small system or at the institutional level where a single extraordinary expense cannot be actuarially covered. Or it may be

encountered when the chief executive, the funding agency, or the director of the correctional agency assigns a budget cut—such as 5 percent across the board—after the fiscal year has begun.

When this happens, the recommended approach is still as described earlier but proceeds in an iterative fashion, making repeated adjustments and comparisons until equality is reached between projections of needed and available resources, as illustrated in exhibit XIV-4. Because available resources are less than the needed resources (line 3), the needs are scrutinized more closely and lower priority needs may be eliminated (line 4). Or the delivery system is reviewed to identify areas in which services may be produced more efficiently (line 5). In either case, the process continues until the newly defined "needed" resources equal what is available (line 6).

c. Requesting Additional Dollars

An alternative solution may be reached by renegotiating the funding level based on clearly demonstrated need. Or a conscious decision may be made, with the knowledge and concurrence of the agency head, to "go into the red," requiring some process of year-end funding transfer to cover the deficit, whether from within the agency or from outside with approval of the funding agency.

The HSD needs to know how much flexibility he or she has been given to modify the approved budget (spending plan) for a given institution or across program categories. This flexibility depends on a number of factors, including who controls the budget and what legislative (or regulatory or policy) restrictions exist.

Systems differ, and the principles or approaches described here may not be allowed in some areas or under some circumstances. The HSD should find out what is acceptable, get sound and competent advice, stay within accepted policy, and if not sure, consult the agency head.

One practical suggestion is to request that the funding agency set up a contingency account. By appropriating some of the dollars to such an account, the HSD can be allowed to authorize limited movement of funds across line items, permitting an overexpenditure at Institution A, but knowing it will be compensated by unexpended funding at Institution B. This approach is most useful for payment of major medical costs such as very large hospital bills. It allows sharing of unpredictable incidents of extraordinary costs across a larger actuarial base—that is, across the systemwide health care budget. Budgeting is not an exact science. It is an estimate whose actualization generally is subject to some factors beyond the manager's control. Therefore, some kind of limited flexibility is desirable.

A well-known perverse incentive is at work in the budgeting process of most government agencies. Operating funds rarely can be carried over to the next fiscal period. Procedures to obtain transfers and supplemental appropriations are lengthy and uncertain. Although underspending usually leads to a reduction in subsequent appropriations, overspending can lead to funding increases. When this is a reflection of true differences in need, these actions are appropriate; but if the agency that ended the fiscal period with a surplus was highly efficient and the other agency that overspent its allocation

EXHIBIT XIV–4.
Needs Versus Resources

(1) Needs
↓
(2) Services
↓
(3) Resources > available resources
↓
(4) Needs (higher priority)
↓
(5) Services (more efficient or fewer)
↓
(6) New "needed" resources = available resources

was wasteful, the net result is to reward inefficiency and the old adage is verified: "No good deed shall go unpunished."

Therefore, a manager should carefully scrutinize overspending to look for signs of inefficiency and use excess funds to improve service capacity, when possible, within the unit or program area that demonstrated efficient management—for example, to buy a computer, to replace obsolete or inadequate equipment, or to enhance a quality assurance program.

All of this reinforces the need for good management information and financial information systems.[14] The more that is known about expenditure and utilization patterns and about the rationale for cross-institutional differences, and the sooner it is known, the better it can be addressed effectively, either by directly controlling it or by persuading the funding source to grant additional resources.

7. Updating a Budget

Note that budgeting need not be a traumatic or major all-out effort (although it may seem so the first time or two). Once a good system is up and running, the process should be maintained through periodic (at least quarterly, if not monthly) review of progress during the current fiscal year as well as at the time of any significant program revision. Each year (or biennially in some areas), marginal revisions to the budget are in order, taking into account the program revision plans that have been developed. These include program changes, technical adjustments, economic adjustments, and population adjustments, as noted here:

- ***Program changes.*** For example, add physical therapy program (staff, equipment, supplies) or add computerized patient scheduling system (equipment, software, staff, training, etc.).
- ***Technical adjustments.*** For example, change registered nurse position to licensed practical nurse position, change pharmacist position to pharmacy technician position, or move program and staff from one unit to another.
- ***Economic adjustments.*** For example, make adjustments to reflect changes in annual salaries, promotions and step increases, prices of medications, or hospital contracts.
- ***Population adjustments.*** In some places, population adjustments may be relevant; for example, some funding may be allocated on a per capita basis.

8. Beyond Budgeting

A cost-effective manager requires more than a budget. Cost reporting is necessary for an understanding of how budgeted dollars are being spent. The same general format shown in exhibit XIV-3 can be used to track costs. Note that the columns labeled with individual facility names for interinstitutional comparisons could just as well be labeled with months or calendar quarters to display changes in expenditure patterns over time. Three related tools that furnish essential management information are—

- ***Financial management information system (FMIS).*** A means of promptly retrieving a summation of expenditures and encumbrances by relevant category, month to month, and year to date.
- ***Utilization data system (UDS).*** A means of promptly retrieving a summation of services provided by relevant category, month to month, and year to date.
- ***Unit-cost report system (UCRS).*** A marriage of the FMIS with the UDS, whereby the manager promptly receives a month-by-month and year-to-date report of expenditures per unit of service in all relevant categories.

Note the repetition and importance of the words "promptly" and "relevant categories." The manager needs recent information rather than information from the distant past. Likewise, careful forethought and planning must go into the definition of meaningful categories for aggregation and reporting of data. Some compromises may be necessary because the program will serve multiple users, each with particular needs.

A fourth tool is a *quality assurance/risk management system (QA/RM),* which is defined as follows:

> An ongoing, institution-based review of care delivery by professional peers, comparing findings with predetermined standards of care and identifying factors that increase risk and liability. There is a central office role to ensure adequate performance of the QA/RM mechanism and to provide periodic central (and external) review.[15]

Conceiving of these four systems, along with the budget process, as a package is useful because they are interrelated and each depends on and supports the others. They do not need to mesh perfectly. As will be seen, some cost items are more sensitive than others and more amenable to control by the manager.

Often past experience can serve as a guide and starting point. Cross-institutional comparisons of resources, services, and costs also can be useful. These need to be adjusted for the size of the population served and for special considerations; for example, a central facility where more sophisticated levels of inpatient and specialty care are offered will have a higher per capita cost than a correctional camp where only healthy and "work-ready" inmates are assigned. Cross-comparisons among similar facilities should be very enlightening; hence the need exists to develop unit cost data by program element for each location in the system. This entails a blending of institution-specific service utilization data and cost data, such as total cost per prisoner, cost per prescription, and cost of x ray per procedure.[16]

Anecdotal, impressionistic, or impassioned pleas for increased funds usually are not the most successful approaches—certainly not on a consistent basis for the long run. Political alliances sometimes are suggested as the best way to get a budget approved. However, a sound, rational, cogent presentation, based on careful, documented analysis of data and trends, is the most effective approach in this area and the one most likely to succeed even when political support is lacking.

Sometimes court orders mandate improvements in the health care delivery system. Especially when these are quite specific, they can be very helpful in providing needed leverage. Even here, though, legislators and fiscal analysts rightfully demand a cost-effective means for producing the required improvements.

How much justification should be attached to a budget request depends on how well the program is understood and appreciated by the funding source, whether it is a new program or major improvement, and how tight the fiscal constraints are. "More" is not necessarily "better." What is presented should be clear and succinct. "Budgeting by adjectives" usually does not work very well.

C. THE COST OF CARE

The cost of health services in the United States has escalated dramatically over the past two decades. At a congressional hearing in December 1989, a health policy expert testified that:

> U.S. health care spending exceeds $600 billion/year and is rising faster than the Consumer Price Index (CPI). The reasons include: increases in physician and other professional services; increased service intensity; new technologies; inflation; and population growth and aging.[17]

By 1998, health care spending in the United States had reached $1.1 trillion or $4,094 per person (USA Today, 2000).

One would expect that the cost of providing health care to the nation's prison and jail inmates also would have escalated for all of the reasons cited here as well as the added factor of litigation, which has forced a number of state and local correctional systems to increase their health care spending. But how much have these costs increased over time? A partial answer can be found by comparing the

results of surveys undertaken by the NCCHC/NIC Project[18] in 1999 with results from similar published surveys from different years. The cost of health care in prisons and in jails is discussed separately.

1. Prison Health Care Costs

In spring 1999, as part of the NIC book revision project, NCCHC undertook a survey of the 50 state correctional systems, the District of Columbia prison system, and the federal Bureau of Prisons (BOP) to determine how much each was spending on health services for prisoners. After extensive telephone followup, usable responses were obtained from 40 states and the BOP.

The NCCHC cost survey included questions regarding the fiscal period reported on, the total expenditure for the DOC during that period, the total expenditure for health services operations excluding new construction costs, a list of the program areas included in the health services cost totals, the average daily number of inmates in the system for the year in question, and the total number of inmate days for that same year.

Every attempt was made to ensure that the data reported were comparable across systems. Responses to the mailout questionnaire were supplemented with telephone inquiries whenever questions arose about the inclusion or exclusion of specific cost items. In virtually all instances, the figures reported include mental health services as well as medical and dental care. Where mental health services were provided by a different section of the DOC or by an outside agency with a separate budget, adjustments were made to the appropriate cost figure (e.g., the total health expenditure or both the total health expenditure and the total DOC expenditure). Similarly, adjustments were made for nonagency hospitalization costs if these were not included in the totals reported.

Despite these efforts, care should be taken in the interpretation of the cost survey results. Without conducting a detailed comparison of the line items included in both the DOCs' total expenditure and their total health services expenditure, it is impossible to determine the extent to which the cost data are comparable. For example, it is not known what the jurisdictions may have included in their total DOC expenditure. This figure is assumed to represent all operating costs for each DOC for the period reported, but if new construction costs were included in some states but not others, or if the extent of new construction differed dramatically among the states, that could account for at least a portion of the difference in the amount expended per inmate on an annual basis.

The total expended for health services should be a better figure, because here at least, the informants were asked specifically to exclude new construction costs and to include mental health costs even if the latter service was provided by a different section of the DOC or by an outside agency. Furthermore, an attempt was made to identify the types of costs included in the health figures reported. As shown in exhibit XIV-5, health care staffing was included in all of the figures reported, as were other "big ticket" items such as specialty care, hospitalization, and pharmaceuticals. Equipment/supplies and emergency transportation were included in all state health expenditures except in New Hampshire. The only areas of substantive variability were in the renovation/repair and overhead columns, neither of which is likely to account for much variance in the averages. However, no attempt was made to control for differences in the cost of living among the states, so some of the variation in health care expenditures may be attributable simply to differences in local market prices for goods and services.

The timeframe for which cost data were reported also differed to some extent (see exhibit L-1, appendix L). Although most of the states[19] (*n*=32) reported cost data for the same fiscal period 7/1/97–6/30/98, Texas reported for fiscal year (FY) 9/1/97–8/31/98, three states reported for the fiscal period 10/1/97–9/30/98, Vermont for FY 1/1/98–12/31/98, New York for FY 4/1/98–3/31/99, and three states reported for their fiscal year 7/1/98–6/30/99. Thus, the timeframe varied by as much as a year.

EXHIBIT XIV–5.
Comparison of Line Items Included in 1998 Health Care Cost Data, by State (*N* = 41)

State	Health Care Staffing	Specialty Care	Hospitalization	Pharmaceuticals	Equipment/ Supplies	Emergency Transport	Renovation/ Repairs	Overhead Items	Other	Comments
AZ	●	●	●	●	● (Supplies only)	●		●		
BOP	●	●	●	●	●	●		●		"Overhead" includes public health services salaries (HQ only).
CA	●	●	●	●	●	● (Ambulance only)		●		
CO	●	●	●	●	●	●	●	●		
CT	●	●	●	●	●	●	● (Repairs only)	●		
DE	●	●	●	●	●	●		●	●	"Other" includes contracted medical services profit and overhead.
FL	●	●	●	●	●	●	●	●		
GA	●	●	●	●	●	●		●		
HI	●	●	●	●	●	●				
IA	●	●	●	●	●	●		●		Includes $4 million to the university for hospital and specialty care.
ID	●	●	●	●	●	●	●	●	●	"Other" includes catastrophic costs.
IL	●	●	●	●	●	●		●		
KS	●	●	●	●	●	●				
MA	●	●	●	●	●	●	●			
MD	●	●	●	●	●	●				
MI	●	●	●	●	●	●	●	●		
MN	●	●	●	●	●	●				Excludes psychologists' salaries.
MO	●	●	●	●	●	●	●	●		
MT	●	●	●	●	●	●	●	●		
NE	●	●	●	●	●	●	●	●		
NV	●	●	●	●	●	●	●	●		
NH	●	●	●	●						
NM	●	●	●	●	●	●				
NY	●	●	●	●	●	●		●		"Overhead" includes administrative costs but not utilities.

Continued on next page

EXHIBIT XIV–5 *(Continued)*.
Comparison of Line Items Included in 1998 Health Care Cost Data, by State (*N* = 41)

State	Health Care Staffing	Specialty Care	Hospitali-zation	Pharma-ceuticals	Equipment/ Supplies	Emergency Transport	Renovation/ Repairs	Overhead Items	Other	Comments
NC	●	●	●	●	●	●		●		
ND	●	●	●	●	●	●		●		
OH	●	●	●	●	●	●	● (Repairs only)			
OK	●	●	●	●	●	●				
OR	●	●	●	●	●	●	●	●		
RI	●	●	●	●	●	●		●		
SC	●	●	●	●	●	●	●	●		
SD	●	●	●	●	●	●	●	●		
TN	●	●	●	●	●	●	●	●	●	"Hospitalization" includes expenditures for inmates in county jails under state contract.
TX	●	●	●	●	●	●	●	●	●	Includes all costs related to health services at facilities operated by the Texas Department of Criminal Justice, except those related to security or substance abuse treatment; excludes health care at private prisons.
UT	●	●	●	●	●	●				
VA	●	●	●	●	●	●		●		
VT	●	●	●	●	●	●		●		
WA	●	●	●	●	●	●	●			Excludes chemical dependency treatment and sexual offender treatment program.
WV	●	●	●	●	●	●	●	●		
WI	●	●	●	●	●	●	●	●		Excludes mental health services, except psychiatric care.
WY	●	●	●	●	●	●				
Total	**41**	**41**	**41**	**41**	**40**	**40**	**19**	**29**	**4**	

Notes: Includes the federal Bureau of Prisons (BOP). No data for Alabama, Alaska, Arkansas, District of Columbia, Indiana, Kentucky, Louisiana, Maine, Mississippi, New Jersey, and Pennsylvania.

Although the data within states are less problematic because the base and the time period are the same, the data among states are subject to all the caveats noted above. With this in mind, the survey results are presented in the following text. Exhibit XIV-6 summarizes the results alphabetically by state; tables presenting the results on specific variables in rank order (highest to lowest) by state can be found in appendix L.

Total DOC expenditures for the 41 jurisdictions reporting ranged from a low of $18.5 million in North Dakota to a high of nearly $3.8 billion in California, with the mean DOC expenditure totaling nearly $595 million. The median expenditure for the 41 jurisdictions was $339 million (see exhibit L-2, appendix L). However, comparing per capita figures for these two extreme cases does not show a great difference, namely that California's DOC was spending an average of about $24,000 per inmate per year whereas North Dakota was spending nearly as much (at $22,530).

The total expenditures for health care ranged from a low of less than $1 million in North Dakota to nearly $500 million in California, with a mean total expenditure of about $70 million per state (see exhibit XIV-6) and a median of a little more than $32 million (see exhibit L-3, appendix L).

The percentage of the total DOCs' expenditures devoted to health ranged from a low of 3.6 percent in Oregon to a high of 18.4 percent in Nevada. The mean percentage expended on health was 11.7 percent (see exhibit XIV-6); the median was 10.6 percent (see exhibit L-4, appendix L).

The annual health cost per inmate varied significantly. North Dakota spent an average of only $1,007 per inmate per year on health services, whereas Massachusetts and Michigan each spent more than four times that much ($4,258 and $4,205, respectively) annually per inmate on their health services (see exhibit XIV-6). The average expenditure per inmate per year across the 41 jurisdictions reporting was $2,734, and the median expenditure was $2,540 (see exhibit L-5, appendix L).

In hopes of refining the cost comparisons even more, the 1999 NCCHC/NIC survey included a question on the total number of inmate days for the year reported. As shown in exhibit XIV-6, however, only a handful of states keep these data. Most systems estimated this figure by multiplying the average daily population by 365. The average health cost per inmate per day was $7.49, ranging from a high of $11.67 in Massachusetts to a low of $2.76 in North Dakota. The median daily expenditure on health care per inmate was $6.96 (see exhibit L-6, appendix L).

In presenting these gross cost data, the danger that the results will be misinterpreted is recognized. To conclude that Massachusetts' DOC had the "best" correctional health care system in 1998 and North Dakota's had the "worst," based on the amount expended, would be in error. It would be equally rash to conclude, absent further evidence, that Massachusetts was less efficient that North Dakota in producing care. The potential disparities in the way these data were collected as well as the lack of control for intervening variables such as differences in the cost of living and cost of health care among the states render such interpretations specious.

Additionally, more is not always better. Some of the systems that spend less actually may be more efficient in monitoring and controlling their health care costs. A much more detailed cost study is needed before any reliable conclusions can be drawn about the relationship between quality of care and cost.

The primary value of these data is in comparing the cost expended on health services annually within the same state over time. Three published studies can be used for comparative purposes. The Contact Center, Inc., conducted cost surveys in 1983 and again in 1986 that covered essentially the same variables as those in the NCCHC 1990 survey[20] and the NCCHC/NIC survey reported here. The data from both Contact Center surveys were reformatted to conform to NCCHC data for 1989 and 1998 for comparative purposes. Although all the limitations of the Contact Center cost surveys are not known, based on the information provided, it is

reasonable to assume that the same caveats apply as those discussed in conjunction with the NCCHC cost surveys.

Exhibit L-7, appendix L, summarizes the Contact Center 1983 survey and exhibit L-8, appendix L, summarizes its 1986 survey. In 1982, the 36 DOC jurisdictions reporting were spending an average of 7.2 percent of their total expenditures on health services at an average annual cost of $883 per inmate (see exhibit L-7, appendix L). By 1985, the 46 DOC jurisdictions reporting were spending an average of only 6.8 percent on health services, but at an average annual cost of $1,230 per inmate (see exhibit L-8, appendix L). By 1989, these figures had

EXHIBIT XIV–6.
Comparison of 1998 Correctional Health Care Costs, by State (*N* = 41)

State	Fiscal Year	Total DOC Expenditure	Total Health Care Expenditure	DOC Expenditure Devoted to Health Care	Health Care Cost per Inmate		Average Daily Population of DOC	Total Inmate Days
					Per Year	Per Day		
AZ	A	$475,081,082	$54,081,082	11.4%	$2,394	$6.56	22,593	8,246,445*
BOP	C	2,769,478,690	354,707,105	12.8	3,032	8.31	116,979	42,697,442
CA	A	3,744,267,000	483,410,000	12.9	3,089	8.46	156,515	57,127,975*
CO	A	292,931,731	32,108,039	11.0	2,425	6.64	13,242	4,833,330*
CT	A	392,136,175	49,344,093	12.6	3,131	8.58	15,758	5,751,649
DE	A	109,107,000	10,664,000	9.8	1,984	5.44	5,374	1,961,829
FL	A	1,322,414,310	230,451,478	17.4	3,389	9.28	68,000	24,820,000*
GA	A	738,115,028	93,644,676	12.7	2,540	6.96	36,870	13,457,550*
HI	F	122,949,845	10,675,452	8.7	2,613	7.16	4,086	1,491,390*
IA	A	196,992,907	14,166,128	7.2	2,037	5.58	6,953	2,537,845*
ID	C	87,879,500	7,492,670	8.5	1,959	5.37	3,825	1,396,125*
IL	A	679,410,100	68,100,000	10.0	1,752	4.80	38,862	14,184,630*
KS	A	203,876,261	20,654,285	10.1	2,614	7.16	7,902	2,884,230*
MA	A	333,131,044	46,438,767	13.9	4,258	11.67	10,905	3,980,325*
MD	A	697,019,021	47,225,539	6.8	2,099	5.75	22,500	8,212,500*
MI	C	1,300,000,000	188,836,558	14.5	4,205	11.52	44,907	16,391,055*
MN	A	347,300,000	21,500,000	6.2	3,884	10.64	5,536	2,020,640*
MO	A	496,000,000	39,737,653	8.0	1,681	4.61	23,640	8,628,600*
MT	A	80,000,000	6,983,050	8.7	2,581	7.07	2,706	987,690*
NC	A	868,239,240	103,000,000	11.9	3,219	8.82	32,000	11,680,000*
ND	A	18,497,121	826,405	4.5	1,007	2.76	821	299,665*
NE	A	76,935,492	8,861,083	11.5	2,647	7.25	3,347	1,221,655*
NH	A	49,887,043	4,517,106	9.1	2,104	5.76	2,147	783,655*

Continued on next page

climbed to an average of 9.5 percent and $1,906 per inmate per year, respectively, for the 47 jurisdictions reporting (see exhibit L-9, appendix L). By 1998, the state systems reporting were spending an average of 11.7 percent of their operating budgets on health care at an average annual cost of $2,734 per inmate ($7.49 per inmate per day) (see exhibit XIV-6).

To compare these more accurately, exhibit XIV-7 shows the changes in annual health cost per inmate from 1982 to 1998, 1985 to 1998, and 1989 to 1998, using data only from those states that reported in both years in each time period. This exhibit shows that the average annual expenditure per inmate for health care increased from $901 in 1982 to $2,640

EXHIBIT XIV–6 *(Continued)*.
Comparison of 1998 Correctional Health Care Costs, by State (*N* = 41)

State	Fiscal Year	Total DOC Expenditure	Total Health Care Expenditure	DOC Expenditure Devoted to Health Care	Health Care Cost per Inmate		Average Daily Population of DOC	Total Inmate Days
					Per Year	Per Day		
NM	F	$163,711,000	$19,572,000	12.0%	$3,827	$10.49	5,114	1,866,610*
NV	A	156,588,151	28,769,405	18.4	3,324	9.11	8,654	3,158,710*
NY	E	1,533,929,965	170,363,271	11.1	2,429	6.65	70,147	25,603,655*
OH	A	1,233,336,437	145,445,752	11.8	3,023	8.28	48,108	17,559,420*
OK	F	338,891,460	18,836,110	5.6	1,157	3.17	20,318	5,941,919
OR	A	567,745,230	20,704,656	3.6	2,624	7.19	7,890	2,879,850*
RI	A	128,833,380	12,196,323	9.5	3,593	9.85	3,394	1,238,810*
SC	A	330,857,437	46,822,601	14.2	2,267	6.21	20,656	7,539,440*
SD	A	44,685,905	4,223,899	9.5	1,889	5.18	2,266	816,140
TN	A	400,337,800	44,037,714	11.0	2,100	5.75	20,971	7,654,415*
TX	B	2,120,299,040	288,077,674	13.6	2,222	6.09	129,620	47,311,300*
UT	A	155,366,148	13,654,080	8.8	2,695	7.38	5,067	1,849,455*
VA	A	546,990,257	57,791,759	10.6	2,257	6.18	25,605	9,345,825*
VT	D	50,000,000	4,550,000	9.1	3,640	9.97	1,250	456,250*
WA	A	434,163,790	43,465,327	10.0	3,411	9.35	12,742	4,650,830*
WI	A	680,980,395	34,354,944	5.0	2,383	6.53	14,414	5,261,110*
WV	A	57,084,400	6,500,000	11.4	2,281	6.25	2,850	1,040,250*
WY	A	24,093,140	3,255,048	13.5	2,356	6.46	1,382	504,237
Average		**$594,379,086**	**$69,757,213**	**11.7%**	**$2,734**	**$7.49**	**25,510**	**9,274,987**

Notes: Includes the federal Bureau of Prisons (BOP). No data available for Alabama, Alaska, Arkansas, District of Columbia, Indiana, Kentucky, Louisiana, Maine, Mississippi, New Jersey, and Pennsylvania.

A = 7/1/97–6/30/98 B = 9/1/97–8/31/98 C = 10/1/97–9/30/98
D = 1/1/98–12/31/98 E =4/1/98–3/31/99 F = 7/1/98–6/30/99
*Estimated.

in 1998, which represents a difference of $1,739, or an average increase of 193 percent over the 16-year period for the states reporting. For the 13-year period of 1985-1998, average annual health expenditures per inmate increased from $1,318 to $2,693 or 104.3 percent ($1,375). For the 9-year period of 1989-1998, average health care costs per inmate per year increased from $1,973 to $2,736 or 38.7 percent ($763). In all instances, the rate of increase was well above the annual inflation rate and, hence, undoubtedly represents real expansion in the extent of staff, services, and other health program costs.[21]

The best comparison of health care costs, though, is seen in those jurisdictions that reported expenditures for all four time periods (see exhibit XIV-8). There were 24 such states. As would be expected, all 24 jurisdictions showed an increase in the amount spent annually per inmate for health services between 1982 and 1998, although in three states (Arizona, New Hampshire, and Oklahoma) the increase over this 16-year period was relatively small (11.8%, 27.7%, and 23.7%, respectively).

In the remaining 21 states, the per-inmate annual health cost increased substantially over time and, except for Colorado, at rates well above the rates of inflation. In fact, in 11 of these cases, the increase was more than 200 percent. Texas had the most dramatic increase in its annual health expenditure per inmate—a whopping 462.5-percent rise in the 16-year period from 1982 to 1998. Note, however, that Texas had the lowest base amount expended for health care per inmate in 1982. This state had one of the longest running class action suits (*Ruiz V. Estelle* case) involving unconstitutional conditions of confinement, including health care. Unquestionably, much of the increase in Texas' health expenditure is attributable to real expansion in the extent and type of services offered. Fourfold increases in health care costs can be seen in Connecticut and Wyoming as well, although the reasons for this are unknown. Two other states (Minnesota and Washington) had threefold increases in the cost of health care per inmate over this 16-year period.

On an average basis, these 24 states increased their per-inmate annual health expenditure by 167 percent in 16 years. They spent $984 per inmate for health care in 1982, $1,276 in 1985, $1,786 in 1989, and $2,623 in 1998. For most of the states, it is fair to assume that the increase in expenditures reflects some increase in services, but the question is "How much?" Unfortunately, this question cannot be answered by the current study. It is hoped that future studies will examine correctional health care spending in greater detail and control for intervening variables such as the cost of living in different states, the rate of inflation, and variations in the method of accounting. Additionally, it would be useful to have cost data broken down by program area (e.g., medical, dental, and mental health care), by service (e.g., hospitalization, specialty care, laboratory, radiology), and by inmate age and illness categories.

2. *Jail Health Care Costs*

The 1999 NCCHC/NIC survey on the cost of health care also was sent to the 30 largest jail systems in the United States. Again, after extensive telephone followup, usable responses were obtained from 17 (57%) of the large jail systems. The same types of questions were asked of jail systems as of prisons—namely, the fiscal period reported on, the total DOC expenditure for that time period, the total health care expenditure excluding new construction costs, a list of the program areas included in the health expenditures, the average daily number of inmates in the system for the year in question, and the total number of inmate days for that same year.

Although attempts were made to ensure that the data were comparable across the jail systems, the figures reported showed considerable variability. As indicated in exhibit XIV-9, the health cost figures reported for Los Angeles, Philadelphia, and San Bernardino do not include mental health costs. Additionally, several counties indicated that specialty care and hospitalization costs were not included. The only items that all 17 jail systems said were included in their health cost figures were health

EXHIBIT XIV–7.
Comparison of Changes in Annual Health Care Costs per Inmate, by State and Year: 1982, 1985, and 1989 vs. 1998

1982 vs. 1998 (*N* = 27)				
State	**1998**	**1982**	**Change**	**Change**
AZ	$2,394	$2,141	$253	11.8%
BOP	3,032	1,214	1,818	149.8
CA	3,089	1,171	1,918	163.8
CO	2,425	1,249	1,176	94.2
CT	3,131	591	2,540	429.8
DE	1,984	857	1,127	131.5
GA	2,540	919	1,621	176.4
ID	1,959	984	975	99.1
KS	2,614	706	1,908	270.3
MD	2,099	683	1,416	207.3
MN	3,884	947	2,937	310.1
MO	1,681	473	1,208	255.4
MT	2,581	710	1,871	263.5
NC	3,219	886	2,333	263.3
NE	2,647	1,216	1,431	117.7
NH	2,104	1,648	456	27.7
NM	3,827	1,247	2,580	206.9
OK	1,157	935	222	23.7
OR	2,624	1,017	1,607	158.0
RI	3,593	1,682	1,911	113.6
SC	2,267	593	1,674	282.3
SD	1,889	532	1,357	255.1
TN	2,100	737	1,363	184.9
TX	2,222	395	1,827	462.5
WA	3,411	845	2,566	303.7
WI	2,383	919	1,464	159.3
WY	2,356	479	1,877	391.9
Average	**$2,640**	**$901**	**$1,739**	**193.0%**

1985 vs. 1998 (*N* = 32)				
State	**1998**	**1985**	**Change**	**Change**
AZ	$2,394	$1,269	$1,125	88.7%
BOP	3,032	1,456	1,576	108.2
CA	3,089	1,893	1,196	63.2
CO	2,425	1,317	1,108	84.1
CT	3,131	757	2,374	313.6
DE	1,984	1,150	834	72.5
FL	3,389	1,004	2,385	237.5
GA	2,540	1,259	1,281	101.7
IA	2,037	576	1,461	253.6
IL	1,752	1,257	495	39.4
MA	4,258	1,725	2,533	146.8
MD	2,099	1,019	1,080	106.0
MN	3,884	2,039	1,845	90.5
MT	2,581	772	1,809	234.3
NC	3,219	1,398	1,821	130.3
NE	2,647	1,300	1,347	103.6
NH	2,104	1,449	655	45.2
NM	3,827	2,600	1,227	47.2
NV	3,324	1,040	2,284	219.6
NY	2,429	901	1,528	169.6
OK	1,157	968	189	19.5
OR	2,624	1,173	1,451	123.7
RI	3,593	1,761	1,832	104.0
SC	2,267	717	1,550	216.2
SD	1,889	1,039	850	81.8
TN	2,100	1,300	800	61.5
TX	2,222	1,700	522	30.7
VT	3,640	1,010	2,630	260.4
WA	3,411	461	2,950	639.9
WI	2,383	1,019	1,364	133.9
WV	2,281	1,014	1,267	125.0
WY	2,356	800	1,556	194.5
Average	**$2,693**	**$1,318**	**$1,375**	**104.3%**

1989 vs. 1998 (*N* = 39)				
State	**1998**	**1989**	**Change**	**Change**
AZ	$2,394	$1,913	$481	25.1%
BOP	3,032	2,392	640	26.8
CA	3,089	1,953	1,136	58.2
CO	2,425	1,154	1,271	110.1
CT	3,131	2,108	1,023	48.5
DE	1,984	1,524	460	30.2
FL	3,389	2,706	683	25.2
GA	2,540	1,648	892	54.1
IA	2,037	1,618	419	25.9
ID	1,959	1,560	399	25.6
IL	1,752	1,570	182	11.6
KS	2,614	1,640	974	59.4
MA	4,258	2,379	1,879	79.0
MD	2,099	1,226	873	71.2
MI	4,205	2,636	1,569	59.5
MN	3,884	2,157	1,727	80.1
MO	1,681	907	774	85.3
MT	2,581	1,665	916	55.0
NC	3,219	1,973	1,246	63.2
NE	2,647	1,795	852	47.5
NH	2,104	1,941	163	8.4
NM	3,827	2,900	927	32.0
NV	3,324	1,764	1,560	88.4
NY	2,429	2,249	180	8.0
OH	3,023	1,366	1,657	121.3
OK	1,157	909	248	27.3
OR	2,624	1,868	756	40.5
RI	3,593	1,711	1,882	110.0
SC	2,267	1,387	880	63.4
SD	1,889	787	1,102	140.0
TN	2,100	1,962	138	7.0
TX	2,222	2,262	(40)	-1.8
UT	2,695	1,174	1,521	129.6
VA	2,257	1,500	757	50.5
VT	3,640	1,558	2,082	133.6
WA	3,411	2,664	747	28.0
WI	2,383	1,695	688	40.6
WV	2,281	1,035	1,246	120.4
WY	2,356	1,264	1,092	86.4
Average	**$2,736**	**$1,973**	**$763**	**38.7%**

Note: Includes the federal Bureau of Prisons (BOP).

EXHIBIT XIV–8.
Comparison of Changes in Per-Inmate Annual Health Care Costs, by State, for Four Time Periods: 1982, 1985, 1989, and 1998 (*N* = 24)

State	1998	1989	Change (1989–98)	Change (1989–98)	1985	Change (1985–98)	Change (1985–98)	1982	Change (1982–98)	Change (1982–98)
AZ	$2,394	$1,913	$481	25.1%	$1,269	$1,125	88.7%	$2,141	$253	11.8%
BOP	3,032	2,392	640	26.8	1,456	1,576	108.2	1,214	1,818	149.8
CA	3,089	1,953	1,136	58.2	1,893	1,196	63.2	1,171	1,918	163.8
CO	2,425	1,154	1,271	110.1	1,317	1,108	84.1	1,249	1,176	94.2
CT	3,131	2,108	1,023	48.5	757	2,374	313.6	591	2,540	429.8
DE	1,984	1,524	460	30.2	1,150	834	72.5	857	1,127	131.5
GA	2,540	1,648	892	54.1	1,259	1,281	101.7	919	1,621	176.4
MD	2,099	1,226	873	71.2	1,019	1,080	106.0	683	1,416	207.3
MN	3,884	2,157	1,727	80.1	2,039	1,845	90.5	947	2,937	310.1
MT	2,581	1,665	916	55.0	772	1,809	234.3	710	1,871	263.5
NE	2,647	1,795	852	47.5	1,300	1,347	103.6	1,216	1,431	117.7
NH	2,104	1,941	163	8.4	1,449	655	45.2	1,648	456	27.7
NM	3,827	2,900	927	32.0	2,600	1,227	47.2	1,247	2,580	206.9
NC	3,219	1,973	1,246	63.2	1,398	1,821	130.3	886	2,333	263.3
OK	1,157	909	248	27.3	968	189	19.5	935	222	23.7
OR	2,624	1,868	756	40.5	1,173	1,451	123.7	1,017	1,607	158.0
RI	3,593	1,711	1,882	110.0	1,761	1,832	104.0	1,682	1,911	113.6
SC	2,267	1,387	880	63.4	717	1,550	216.2	593	1,674	282.3
SD	1,889	787	1,102	140.0	1,039	850	81.8	532	1,357	255.1
TN	2,100	1,962	138	7.0	1,300	800	61.5	737	1,363	184.9
TX	2,222	2,262	(40)	-1.8	1,700	522	30.7	395	1,827	462.5
WA	3,411	2,664	747	28.0	461	2,950	639.9	845	2,566	303.7
WI	2,383	1,695	688	40.6	1,019	1,364	133.9	919	1,464	159.3
WY	2,356	1,264	1,091	86.3	800	1,555	194.4	479	1,876	391.6
Average	**$2,623***	**$1,786†**	**$837**	**52.2%**	**$1,276‡**	**$1,347**	**133.1%**	**$984§**	**$1,639**	**203.7%**

Note: Includes the federal Bureau of Prisons.

*Adjusted weighted average with 17 states omitted (i.e., those without either 1982, 1985, or 1989 data).

†Adjusted weighted average with 15 states omitted (i.e., those without either 1982, 1985, or 1998 data).

‡Adjusted weighted average with 8 states omitted (i.e., those without either 1982, 1989, or 1998 data).

§Adjusted weighted average with 3 states omitted (i.e., those without either 1985, 1989, or 1998 data).

care staffing (excluding mental health staff in the three areas noted above), pharmaceuticals, and equipment/supplies.

The timeframe for which cost data were reported also varied. Six counties reported cost data for FY 7/1/97–6/30/98, two for FY 10/1/97–9/30/98, one for the 10-month period of 12/1/97–9/30/98, one for FY 12/1/97–11/30/98, six for FY 1/1/98–12/31/98, and one for FY 3/1/98–2/28/99 (see exhibit L-10, appendix L).

Considering the known variability in the figures reported as indicated here as well as the unknown variability, extreme caution should be used in making comparisons of the cost of care among the different jail systems. Because no other jail health cost studies are known to exist, comparisons of the cost of care over time are not possible either. With these caveats in mind, the results of the NCCHC/NIC jail health survey are presented for whatever interest they may have. It is hoped that a more refined study of the cost of health care in jails will be conducted in the future.

Exhibit XIV-10 summarizes the results of the cost survey alphabetically by county. Additional tables that present the results on specific variables in rank order are provided in appendix L.

Total jail expenditures for the 17 jurisdictions reporting ranged from a low of $27 million in Hamilton County, OH, to a high of $361 million in Los Angeles, with a mean expenditure of nearly $100 million. The median total jail expenditure was nearly $79 million (see exhibit L-11, appendix L). When the annual cost per inmate is calculated, though, the difference is not that great—$14,044 per inmate per year in Hamilton County compared with $17,076 in Los Angeles.

The total expenditure for health care in the 17 jurisdictions reporting ranged from a low of $2.1 million in Hamilton County to a high of $52.3 million in Los Angeles, with a mean health expenditure of $15.2 million per year. The median expenditure was in Maricopa County, AZ, at $13 million per year (see exhibit L-12, appendix L).

On an average basis, these counties spent 15.3 percent of their total budgets on health care. This figure ranged from a low of 7.8 percent in Hamilton County to a high of 34.6 percent in Wayne County, MI, with a median percentage of 14.9 (see exhibit L-13, appendix L).

The annual cost of health care per inmate varied significantly. Hamilton County spent $1,097 on health care per inmate in 1998, whereas the District of Columbia spent more than six times that much. The average annual health cost per inmate was $2,765, whereas the median was in Broward County, FL, at $2,660 (see exhibit L-14, appendix L).

Finally, the daily health care cost per inmate ranged from a low of $3 in Hamilton County to a high of $18.69 in the District of Columbia. The average daily health care cost for these 17 jail systems in 1998 was $7.89 with a median cost of $7.29 in Broward County (see exhibit L-15, appendix L). This figure is likely to be distorted, however, because only seven of the jail systems track their actual number of inmate days. In the remaining 10 jurisdictions, this figure was estimated by multiplying the average daily population figure by 365.

D. CONTROLLING HEALTH CARE COSTS

One of the most pressing societal challenges today is controlling health care costs. Improvements in medical technology have increased the lifespan of Americans, and both of these factors have increased the costs of care. Health care costs have risen in recent years at a rate far exceeding inflation. In 1998, total health care spending was up 5.8 percent over the prior year. This was the biggest increase since 1993, when health care spending increased by 8.7 percent, and indicates a continuing upward trend (USA Today, 2000). In 1999, health insurance premiums increased by 4.8 percent. Although far less than the double-digit increases common in the 1980s, this was the biggest increase in a 5-year period.[22] These factors and others have led a number of

EXHIBIT XIV–9.
Comparison of Line Items Included in 1998 Jail Health Care Cost Data, by County (*N* = 17)

County	Health Care Staffing	Specialty Care	Hospitali-zation	Pharma-ceuticals	Equipment/ Supplies	Emergency Transport	Renovation/ Repairs	Overhead Items	Other	Comments
Bexar County, TX	•			•	•	•				
Broward County, FL	•	•	•	•	•	•				
Cook County, IL	•	•		•	•	•	•	•		
Hamilton County, OH	•	•	•	•	•	•				
Harris County, TX	•	•		•	•	•				
Hudson County, NJ	•	•	•	•	•	•	•			
King County, WA	•			•	•		•	•		
Los Angeles County, CA	•	•	•	•	•	•		•		Does not include mental health staffing costs.
Maricopa County, AZ	•	•	•	•	•	•	•	•		
Metro-Dade County, FL	•			•	•					
Milwaukee County, WI	•	•	•	•	•	•		•		
Orange County, CA	•	•	•	•	•	•	•	•		
Philadelphia Prison System, PA	•	•	•	•	•	•		•		Does not include mental health services.
Sacramento County, CA	•			•	•	•	•			
San Bernardino County, CA	•			•	•			•		Does not include mental health services.
Washington, DC	•	•		•	•		•	•		
Wayne County, MI	•	•	•	•	•	•	•		•	Includes inpatient hospitalization of all persons in police custody even when custody has not been transferred to sheriff's department.
Total	**17**	**12**	**9**	**17**	**17**	**13**	**8**	**9**	**1**	

Note: Includes Washington, DC.

EXHIBIT XIV–10.
Comparison of 1998 Jail Health Care Costs, by County (*N* = 17)

County	Fiscal Year	Total Jail Expenditure	Total Health Care Expenditure	Jail Expenditure Devoted to Health Care	Health Care Cost per Inmate		Average Daily Population of Jail	Total Inmate Days	Comments
					Per Year	Per Day			
Bexar County, TX	E	$32,254,909	$4,902,148	15.2%	$1,445	$3.96	3,392	1,268,926	
Broward County, FL	E	93,340,357	11,154,079	11.9	2,660	7.29	4,193	1,530,445	
Cook County, IL	D	151,222,509	30,868,090	20.4	3,333	9.13	9,260	4,299,396	
Hamilton County, OH	E	27,400,510	2,139,547	7.8	1,097	3.00	1,951	712,116*	
Harris County, TX	F	104,000,000	19,500,000	18.8	2,499	6.85	7,802	2,847,730*	
Hudson County, NJ	E	45,000,001	6,000,000	13.3	3,000	8.22	2,000	730,000*	
King County, WA	E	80,319,542	12,250,000	15.3	4,446	12.18	2,755	1,005,303	
Los Angeles County, CA	A	360,922,000	52,325,000	14.5	2,476	6.78	21,136	7,719,924	Does not include mental health staffing costs.
Maricopa County, AZ	A	104,206,589	13,182,658	12.7	1,937	5.31	6,804	2,603,709	
Metro-Dade County, FL	B	197,468,006	17,057,112	8.6	2,357	6.46	7,237	219,330	
Milwaukee County, WI	E	27,724,137	6,504,630	23.5	2,242	6.14	2,901	1,058,865*	
Orange County, CA	A	77,408,752	20,646,355	26.7	3,875	10.62	5,328	1,944,720*	
Philadelphia Prison System, PA	A	157,448,000	17,254,538	11.0	2,999	8.22	5,753	2,099,845*	Does not include mental health services.
Sacramento County, CA	A	N/A	14,136,528	N/A	3,734	10.23	3,786	1,381,890*	
San Bernardino County, CA	A	51,492,169	5,678,836	11.0	1,159	3.18	4,900	1,788,500*	Does not include mental health services, specialty care, or hospitalization.
Washington, DC	B	45,000,000	11,221,000	24.9	6,821	18.69	1,645	600,425*	Total health expenditure includes accounting, procurement, and utility costs.
Wayne County, MI	C	40,432,740	13,983,215	34.6	5,077	13.91	2,754	1,005,210*	Includes inpatient hospitalization of all persons in police custody even when custody has not been transferred to sheriff's department.
Average		**$99,727,514‡**	**$15,223,749**	**15.3%‡**	**$2,765§**	**$7.89§**	**5,506%**	**1,930,373**	

Note: Includes Washington, DC.
A = 7/1/97–6/30/98 B = 10/1/97–9/30/98 C = 12/1/97–9/30/98
D = 12/1/97–11/30/98 E = 1/1/98–12/31/98 F = 3/1/98–2/28/99
N/A = Not available *Estimated ‡Based on 16 counties with data §Weighted average

experts to consider rationing health care,[23] which gives rise to a host of legal and ethical issues about "who lives? who dies? and who pays?"[24]

As seen in the preceding section, correctional health care costs in all states also have escalated. Health administrators are being pressured by their funding agencies and by their own correctional administrations to control or even reduce expenditures. Thus, some discussion of controlling correctional health care costs is warranted.

There is a danger, though, that must be acknowledged. The status of prison and jail health care even 20 years ago was abysmally low in many states. Substantial increases in expenditures were necessary to bring the level of care up to an acceptable minimum. It is impossible to tell from the expenditures alone which of the states and counties may have achieved this level, which have not, and which may have gone beyond the minimum. To talk about controlling correctional health care costs—at a point when there is no assurance that what is being spent is sufficient to address patients' needs—may be a disservice. As stated elsewhere in this book, the primary goal of correctional health systems should be to provide quality care on a timely basis and in a cost-efficient manner. All three elements in the equation are important. If a state DOC or county jail does not have an effective health delivery system in place (i.e., one that is constitutional and meets contemporary standards of care), then reducing services to cut costs is not a viable option.

Assuming that a quality health care system is in place, costs can be contained in two basic ways. The first is to make the system more efficient (i.e., eliminate waste) and the second is to ration care (i.e., eliminate fat). Each of these is discussed below.

1. Improving Efficiency

Improving efficiency usually means adopting one or more of the managed care techniques used in the community to contain costs. One example is to review inmate utilization patterns to determine whether certain services can be provided more effectively in-house or in the community. One cost containment specialist defines utilization management as follows:

> Utilization management is a process to eliminate unnecessary medical care and direct care to the most cost effective setting appropriate for the condition of the patient. Utilization management is composed of: preauthorization of services to assure medical necessity and the appropriate setting; concurrent review of inpatient care to expedite discharge when an inpatient setting is no longer required; discharge planning to facilitate placement in the most appropriate setting; retrospective review of bills for accuracy; and case management, which manages costly or complex cases. (Brace, 1990:9)

As another example, examining inmates' utilization patterns coupled with a time-and-motion study may identify areas where existing staff can be used more effectively or reductions in staff can be made without affecting the quality of care or the extent of service. As stated in section B of this chapter, expenditures for staff represent the biggest portion of most health care budgets. Staffing patterns often are generated based solely on the size of the inmate population, but if the inmate utilization in a particular prison or jail is low, the staffing ratio may be too rich. Another suggestion offered earlier is to look for more efficient combinations of staff. A physician, a physician assistant/nurse practitioner, a clerk, and a computer may be less costly than two physicians in the long run.

Other "big ticket" items involve hospitalization and specialty care costs. If inmate utilization patterns are developed for these services by diagnosis, it should be possible (with the help of a computer) to compare charges by other hospitals and specialists for the same services and procedures. Contracts more favorable to the correctional system may be the result. If there is more than one hospital in a given area to choose from, the hospital administration may be interested in providing a volume discount in

exchange for a guaranteed patient base. This managed care technique has worked for some correctional facilities.[25]

A number of other managed care techniques used in the community for nonemergencies may be applicable to corrections. These include prior approval of specific treatments and services, preauthorization of inpatient hospital care, second surgical opinions for elective procedures, requiring that surgery for certain procedures be performed only on an outpatient basis, and retrospective review of all hospitalizations and surgical procedures by a committee established for that purpose to ensure that the care provided was within the specified guidelines.

Additionally there are other areas of health delivery where cost containment strategies can be employed. Inefficiencies often exist in the purchase of supplies, pharmaceuticals, and equipment. Stockpiling of supplies and medications, and ordering equipment, supplies, and medications that are not needed for the level of care provided at a particular facility are all too common. Computerized information systems that track the utilization of supplies and pharmaceuticals as well as provide inventory lists and expiration dates (where applicable) can reduce waste. Inventory lists for equipment can provide the administrator with information about what already exists on a unit, what is obsolete, and what simply is not required for the level of care.[26]

As shown in exhibits XIV-11 and XIV-12, the application of a number of these techniques to correctional settings has already begun. More than half the states reporting indicated they require prior authorization for elective hospitalizations and diagnostic procedures, have utilization review systems in place, have negotiated rates with hospitals for inpatient care, practice formulary management, and purchase pharmaceuticals in bulk (see exhibit XIV-11). Nearly half of the counties reported using similar cost containment measures (see exhibit XIV-12).[27]

2. Rationing Care

Most correctional health experts undoubtedly would agree with many of the above suggestions to improve efficiency. Eliminating waste is important to all of us as taxpayers. The subject of rationing care is more controversial, however. Nonetheless, it is a topic that began to be discussed in correctional health care forums in the late 1980s. In 1988, a paper was presented at the Third World Congress on Prison Health Care that provided a preliminary model for decisionmakers in determining how much health care for inmates is enough.[28] In 1989, the BOP conducted a special seminar on medical issues in corrections. At that seminar, reference was made to the potential for using the criteria established by Medicaid and Medicare programs for guidance on providing health care for inmates.[29]

A 1990 article in *CorrectCare* suggested the development of a limited "benefit package" for inmates based on guidelines developed by the managed care industry, such as health maintenance organizations (HMOs) and preferred provider organizations (PPOs).[30] In the early 1990s, the North Carolina DOC initiated a program whereby its correctional health delivery system was tied into the North Carolina Medicaid system's guidelines and review process.[31]

What these discussions had in common was a suggestion for rationing inmate health care by developing a benefit package that specifies what is covered and what is not. They differ only regarding which set of guidelines should be used: those of the managed care industry (Brace, 1990), those of Medicaid/Medicare programs (Federal Bureau of Prisons,1990; North Carolina Department of Corrections, 1990), or ones developed specifically for correctional health services (Anno et al., 1996).

Clearly the courts have stated that inmates are entitled to "reasonable" or "adequate" care; they have not said inmates are entitled to the "best" care, only to the care that is "needed." In confirming that inmates have a right to "reasonable medical care,"

EXHIBIT XIV–11.
Comparison of 1998 Cost Containment Measures, by State (*N* = 41)

State	Prior Authorization	Claims Review	Utilization Review	Negotiated per Diem Rates With Hospitals	Capitation Fees for Hospitals	Formulary Management	Group Purchasing Agreement	Bulk Purchasing of Pharmaceuticals	Other Measures
AZ	•		•	•		•			Onsite specialty clinics, telemedicine, concurrent care management.
BOP	•			•		•	•		Telemedicine, consolidated budgets, staff restructuring.
CA	•	•	•	•		•		•	Use of hospital custody units when feasible, preferred providers, telemedicine, telepsychiatry, contract monitoring improvement project, population management, bid contract for lab and registry services, automated patient records.
CO	•	•	•						HMO-like health delivery system with medical network management.
CT			•			•			Copay for inmate-initiated health care visit, inpatient acute hospital care reduces cost of transportation and security.
DE									Contracted medical services.
FL	•	•	•	•		•		•	Managed care and consolidation.
GA	•		•	•	•	•	•	•	Regional infirmaries and pharmacies, circuit dentistry, telemedicine, staffing study with set standards, copay system, capitated contract for mental health services, managed care contract, revised clinical protocols, provider contracts at negotiated rates, assisted living unit, site audits to identify waste.
HI			•		•	•		•	Copay system, contracted pharmaceuticals and diagnostics, Medicaid/Medicare billing to cap costs, telemedicine, capitation rates for specialty clinics.
IA			•			•		•	Copay system, hospitalization and most outpatient specialty services (except psychiatry and optometry) are received under state's indigent care program.
ID									Privatization without catastrophic capitation.
IL	•	•	•	•		•	•		
KS			•	•				•	Infirmary housing instead of long-term hospitalization, nonformulary medication process, teleconferences, quality improvement, chronic care program, leased equipment, nursing protocols, managed care training for physicians, prenegotiated provider network rates.

Continued on next page

EXHIBIT XIV–11 *(Continued)*.
Comparison of 1998 Cost Containment Measures, by State (*N* = 41)

State	Prior Authorization	Claims Review	Utilization Review	Negotiated per Diem Rates With Hospitals	Capitation Fees for Hospitals	Formulary Management	Group Purchasing Agreement	Bulk Purchasing of Pharmaceuticals	Other Measures
MA									Contracts with single vendor for HMO-like health delivery system for all correctional facilities and assesses penalties for nonperformance and substandard performance.
MD			•						Carveout where department purchases protease inhibitors.
MI	•	•	•	•		•		•	Contracts for managed health care services not provided at the DOC's onsite ambulatory units or acute care hospitals.
MN	•		•	•	•	•			Contracts for managed care services, centralized transportation for offsite appointments.
MO			•	•	•	•		•	Contracted comprehensive noncapitated medical services include all infirmary supplies, equipment maintenance, and negotiated rates with locum tenens doctors.
MT	•	•	•	•		•	•	•	Contracts services with Blue Cross/Blue Shield.
NE	•	•	•	•		•		•	
NV	•		•			•	•	•	Contracts services for onsite care delivery, participates in preferred provider network.
NH		•	•	•				•	Copay system for sick call.
NM			•	•		•		•	HIV services subcontracted with health department, onsite inpatient infirmary, tracking of community hospitalizations, medical and mental health restrictions at certain remote sites.
NY	•	•	•			•	•	•	Coordinated specialty care contracts with negotiated reimbursement rates for secondary and tertiary care.
NC	•	•	•	•		•		•	Operates managed care system.
ND	•		•	•		•	•	•	
OH					•	•			Specialty care is capitated.
OK		•				•	•	•	Substitute generic pharmaceuticals whenever possible.
OR	•	•	•		•	•		•	

Continued on next page

EXHIBIT XIV–11 *(Continued)*.
Comparison of 1998 Cost Containment Measures, by State (*N* = 41)

State	Prior Authorization	Claims Review	Utilization Review	Negotiated per Diem Rates With Hospitals	Capitation Fees for Hospitals	Formulary Management	Group Purchasing Agreement	Bulk Purchasing of Pharmaceuticals	Other Measures
RI	●	●	●			●			
SC									No elective procedures allowed, combination of internal operation and privatization of medical services.
SD									Contracts for all medical care.
TN			●	●			●	●	Centralization of specialty care and hospital services in Nashville to reduce security costs and obtain volume discounts, discounts from specialty physicians.
TX		●	●	●		●	●	●	Preferred provider network, negotiated reduced physician rates, operating full-service correctional hospital, aggressively recruited own medical staff, analysis of cost-effective staffing, streamlined operational procedures, unit administrative clustering, practice protocols, telemedicine, designated "medically underserved areas."
UT	●	●	●	●				●	
VA	●	●	●	●		●		●	
VT			●						Privatized health care, quality assurance.
WA		●	●				●		Copay system, statewide health care data collection system, treatment guidelines for selected conditions, uniform package of covered services (offender health plan).
WI	●		●	●		●		●	Negotiated contracts for specialty care, lab, radiology, etc.; monitoring of health care delivery by contractual providers; utilization of state and federal programs for supplies and services (immunizations, communicable disease monitoring, and lab testing).
WV	●	●							Cost analysis, privatized medical operations at large institutions.
WY	●	●	●	●		●		●	Privatized health services.
Total	**22**	**19**	**32**	**22**	**6**	**27**	**11**	**24**	

Note: Includes the federal Bureau of Prisons (BOP).

EXHIBIT XIV–12.
Comparison of 1998 Cost Containment Measures, by County (*N* = 17)

County	Prior Authorization	Claims Review	Utilization Review	Negotiated per Diem Rates With Hospitals	Cap Fees for Hospitals	Formulary Management	Group Purchasing Agreement	Bulk Purchasing of Pharmaceuticals	Other Measures
Bexar County, TX			●			●		●	
Broward County, FL	●	●	●	●		●		●	Quality assurance risk management, community outreach via department of health for continuity of care, negotiated rates for specialty care.
Cook County, IL		●	●			●		●	Review of offsite referrals for subspecialty care.
Hamilton County, OH	●		●	●		●			Availability of indigent care fund, onsite dialysis.
Harris County, TX							●		Inmate charge system, quarterly review of expenditures.
Hudson County, NJ	●	●	●	●		●		●	Continuous quality improvement program, laboratory management, grants for infectious disease testing, compassionate release.
King County, WA						●		●	Specialty care from county hospital at no cost.
Los Angeles County, CA		●						●	Contract with state and federal governments for provision of beds to state and Immigration and Naturalization Service, provision for all acute care from county hospital for established annual fee.
Maricopa County, AZ	●	●	●	●	●	●	●	●	All ambulance fees reviewed, agreement with county hospital to provide specialty health care.
Metro-Dade County, FL						●	●		Copay for fee-for-service, case manager for hospital referrals.
Milwaukee County, WI	●	●				●			Copay to reduce multiple requests for same service.
Orange County, CA	●	●	●	●		●	●	●	Inpatient specialty clinic contract.
Philadelphia Prison System, PA	●		●	●		●		●	
Sacramento County, CA	●			●		●		●	Case management for inpatients, telemedicine, in-house x-ray, ultrasound, and colposcopy.
San Bernardino County, CA									County medical center provides inpatient and specialty care.
Washington, DC						●		●	
Wayne County, MI	●	●	●	●		●			Michigan peer review organization is the authorizing body for psychiatric hospitalizations.
Total	**9**	**8**	**9**	**8**	**1**	**14**	**4**	**11**	

Note: Includes Washington, DC.

a U.S. district court in *Mills v. Oliver* set forth this qualification:

> This does not mean that every prisoner complaint requires immediate diagnosis and care, but that, under the totality of the circumstances, adequate medical treatment be administered when and where there is reason to believe it is needed. From the onset, it should be noted that the courts tend to treat "reasonable" and "adequate" as equivalent terms. Attempts at further qualifying the extent of care required do not set positive standards to be followed by prison physicians and officials, but rather take a negative approach, defining what is considered to be inadequate or unreasonable medical care. The courts have asserted that the deprivation or inadequacy of "essential" medical care is unreasonable.

Because the courts have not developed "positive standards" for correctional physicians and officials to follow (and are not likely to do so in the future), it is left to the field of correctional medicine to develop its own. Although the standards published by professional associations (e.g., the American Public Health Association, NCCHC) "are extremely useful as guidelines in establishing a system of care, they do not provide much assistance in determining in individual cases what care must be provided and how much is enough" (Anno et al., 1996:68). The development of "reasonable" criteria for rationing inmate health care is likely to be one of the most discussed issues of the 21st century.

How the courts may react to a "benefit package" for inmates that clearly states which services are provided and which are excluded is unknown. Caution should be exercised in the development of such a package, and careful review by correctional health professionals and lawyers is needed prior to implementation. Still, the concept has merit and in these days of rapidly escalating health care costs, it is one that correctional health administrators can ill afford to reject out of hand.

The use of community guidelines established by federally funded programs or the managed care industry has particular appeal because it seems reasonable to argue that if the care provided by these programs is "good enough" for the general population, it should be "good enough" for the inmate population.[32]

On the other hand, corrections has some unique aspects that may limit the wholesale application of existing care packages to the inmate population—for example, the expected duration of confinement. A DOC administrator might decide not to provide a specific elective procedure to an individual inmate even if it were covered under the Medicaid benefit package because the inmate was due to be released a short time later. Similarly, the opposite decision might be reached for an inmate with a lengthy sentence even if the elective procedure were not covered in the community care plan. Another example of this kind of decision might be a case in which the correctional system approves a costly procedure that would not have been covered by Medicaid, on the grounds that this long-term prisoner would have required care which, projected over a lifetime, would be significantly more expensive than the one-time definitive treatment. Some organ transplant procedures come to mind.

As a way of initiating further dialog on the topic of rationing care, it may be useful to discuss the preliminary conceptual model for correctional health systems developed by Anno and colleagues in 1988 and updated in 1998. They suggest a conceptual framework that defines a spectrum of services ranging from those that should always be provided to those that appropriately may be denied. Examples of the former include all emergency care, medications for chronic conditions, and dental treatment to relieve pain. Examples of the latter include "purely cosmetic or luxury treatments, initiation of transsexual surgery, or expensive alternatives to conventional treatment—such as gold crowns" (p. 73). "In between these extremes are diagnostic and therapeutic procedures that arguably should be provided to prisoners or whose acceptability depends on one or more relevant circumstances" (p. 72). Obviously

this middle area causes correctional health administrators the most concern.

In presenting their preliminary guidelines for this middle range of services, the authors assert that certain factors should not influence the decision to intervene, including "gender, race, ethnic origin, nature of the crime, behavior in prison, contributory behavior, and celebrity status" (p. 75). Factors that should be considered by decisionmakers in determining whether services and procedures in the middle range should be provided include—

- Urgency of procedure (because of pain or risk of further deterioration).
- Expected remaining duration of incarceration.
- Necessity of procedure.
- Probability of successful outcome of treatment.
- Patient's desire (expressed or implicit) for the intervention.
- Expected functional improvement as a result of intervention.
- Whether the intervention is for a preexisting condition.
- Whether the intervention is a continuation of previous treatment for a chronic condition or is the initiation of a new course of long-term treatment.
- Cost (Anno et al., 1998:77-80).

All the factors need not apply in every case. The decisionmaker must determine how much weight or value to assign to each one.

After discussing each of these factors in some detail, the authors concluded that:

> Ultimately, it may be possible to assign numerical values to the salient factors to further improve the usefulness of the model. The input of correctional health colleagues and others is needed to refine the model and improve its utility. In the same way that national standards for correctional health care evolved through a deliberative and inclusive process, so, too, is consensus needed in deciding how much health care is enough. (Anno et al. 1998:80)

The conceptual model summarized above is a preliminary one and has not been pursued. Still, it may serve as a departure point for correctional health administrators interested in exploring legitimate ways to ration care.

E. CONCLUSIONS

This chapter presented some of the cost considerations that affect the provision of correctional health care. Because of the technical expertise that is required to develop a budget and justify it to the financing source, as well as the need to increase efficiency and control costs, a systemwide HSD ideally should have some background in management, including managerial accounting. Furthermore, a system of any appreciable size also should employ a fiscal officer (or staff) devoted to health services to advise and alert the HSD to important budgetary and fiscal considerations.

Additionally, if the expertise does not exist in-house, it may be beneficial to hire a cost containment specialist on a consultant basis to review the delivery system for inefficiencies, set up a utilization database, and suggest cost containment strategies. In regard to the latter—especially as it relates to rationing of care—every assurance is needed that the existing delivery system meets contemporary standards of care before deciding that certain procedures or treatments will not be available to the incarcerated. Although the figures may not be strictly comparable, it is worth noting that of those responding to the NCCHC/NIC survey, only two state prison systems (Massachusetts and Michigan) and three county jail systems (District of Columbia, Wayne County, MI, and King County, WA) expended as much or more per inmate on health care in 1998 as the U.S. average of $4,094 per person in the community.[33]

NOTES

1. Numerous sources, including the National Institute of Corrections Information Center, Contact Center, Inc., and the National Criminal Justice Reference Service, were checked, but none had information indicating the availability of these dollars to fund health services for state prisoners.

2. Interested individuals should contact the National Institute of Corrections (NIC) Information Center and request a copy of NIC's current program plan, which outlines available funding and services for training and technical assistance. Contact information is as follows:

NIC Information Center
1860 Industrial Circle, Suite A
Longmont, CO 80501
(800) 877-1461
E-mail address: *asknicic@nicic.org*

3. See, e.g., Correctional Law Reporter (1996), Pollack (1996), and Rold (1996).

4. See the "pro" arguments noted in Harrison (1996).

5. See, e.g., Anno (1997), Harrison (1996), Lopez and Chayriques (1994), and Rold (1996).

6. See Faiver (1998:118).

7. See Donabedian (1973).

8. See Feldstein (1983:8).

9. Economists refer to this phenomenon as *economy of scale* because it enables the organization to perform its function at a lower cost per unit of output as the organization size increases.

10. The *short run* is a timeframe during which some costs can be varied and some cannot (see Welch and Welch, 1986). In the example given, a shortrun budget decision might be the addition of a nurse's aide during the next fiscal year. No change can be made regarding the clinic building itself over the shorter timeframe of this one fiscal year.

11. Budget practitioners often refer to this type of budget as a "zero-based budget" (ZBB) because the calculation is based on a discrete justification of program expenditures each budget cycle. The program administrator, under ZBB, justifies his or her program expenditures anew for each fiscal period. This process enables budget managers to evaluate competing programs on their relative merits and to select those judged higher in priority.

12. See Mendosa (1969).

13. See Donabedian (1980:7).

14. See chapter XII for more information on management information systems.

15. See chapter XIII for more information on quality assurance/risk management programs.

16. The cost of an x ray per procedure is calculated by adding the cost an of x ray technician and repairs on equipment plus the cost of x-ray supplies and the cost of radiologist fees, divided by the number of x rays in the period. A better way would include a cost of depreciating the equipment in the numerator, though few government agencies do this.

17. The testimony is from Kenneth Thorpe, as cited in Select Committee on Children, Youth and Families (1989).

18. These surveys were designed and conducted by B. Jaye Anno, PhD, CCHP-A, principal investigator for the NCCHC/NIC project.

19. Technically the Federal Bureau of Prisons is not a state; however, to avoid repetition, the terms "state" and "jurisdiction" are used interchangeably and "state" is intended to include the BOP where appropriate.

20. See Anno and Faiver (1991).

21. According to Kuemmerling and Howell (1990), the Consumer Price Index (CPI) for both 1982 and 1985 was 3.8 percent, whereas for 1989, the CPI was 4.6 percent. In 1998, the CPI was 1.6 percent, according to the Bureau of Labor Statistics.

22. See "Lower profits trigger hikes in health insurance" (Santa Fe New Mexican,1999).

23. See Kosterlitz (1989).

24. See the article by DePaul University (1989).

25. See Detore and Jenkins (1989).

26. See chapter XII for more information on data management.

27. For additional information on managing correctional health costs, see McDonald (1995).

28. See Faiver et al. (1988).

29. See Federal Bureau of Prisons (1990).

30. See Brace (1990).

31. See North Carolina Department of Corrections (1990).

32. An interesting legal question is raised by the adoption of a "community standard" such as the Medicaid system benefit package for prisoners. It does seem to provide a floor below which correctional administrators should not go in approving health services for prisoners. It is conceivable, though, that in a given jurisdiction, the community standard represented by the Medicaid guidelines may be lower than that required for prisoners by the Constitution. Similarly, in many states, abortion is not provided at public expense, yet at least one federal court has said that abortion must be available to inmates (see *Monmouth County Correctional Institution Inmates v. Lanzaro*).

33. See USA Today (2000).

REFERENCES

Articles and Books

Anno, B. Jaye

1997 "Correctional health care: What's past is prologue." 11 CorrectCare 3:6-11.

Anno, B. Jaye, and Kenneth L. Faiver

1991 "Cost considerations: Financing, budgeting and fiscal management." Chapter XIII in B. Jaye Anno, Prison Health Care: Guidelines for the Management of an Adequate Delivery System. Chicago: National Commission on Correctional Health Care.

Anno, B. Jaye, Kenneth L. Faiver and Jay K. Harness

1996 "A preliminary model for determining limits for health care services." 3 Journal of Correctional Health Care 1:67-84.

1998 "Defining appropriate and necessary health care." Chapter 4 in Kenneth L. Faiver, Health Care Management Issues in Corrections. Lanham, MD: American Correctional Association.

Brace, Nancy E.

1990 "Correctional health care cost containment." 4 CorrectCare 3:9-10.

Contact Center, Inc.

1983 "Prison health care costs." VIII Corrections Compendium 2:5-11.

1986 "Prison health care." XI Corrections Compendium 1:7, 13-14.

Correctional Law Reporter

1996 "Requiring inmates to pay for medical care if they have resources does not violate Eighth Amendment." February/March 70.

DePaul University

1989 "Who lives? Who dies? Who pays? The medical legal ethics of health care in America." 9 DePaul News 3:3-6.

Detore, Robert, and Reginald Jenkins

1989 "Managed care and cost containment in a correctional health system." Paper presented at the National Commission on Correctional Health Care's 13th National Conference on Correctional Health Care in Chicago (November).

Donabedian, Avedis
1973 Aspects of Medical Care Administration: Specifying Requirements for Health Care. Cambridge, MA: Harvard University Press.

1980 Explorations in Quality Assessment and Monitoring. Ann Arbor, MI: Health Administration Press.

Faiver, Kenneth L.
1998 Health Care Management Issues in Corrections. Lanham, MD: American Correctional Association.

Faiver, Kenneth L., B. Jaye Anno and Jay K. Harness
1988 "Setting the standard for correctional health care services." Paper presented at the Third World Congress on Prison Health Care in Bristol, England (August).

Federal Bureau of Prisons
1990 Proceedings of Medical Issues Forum in Springfield, MO (December 1, 1989). Washington, DC.

Feldstein, Paul J.
1983 Health Care Economics. New York: John Wiley & Sons.

Gibson, Frances T., and Elizabeth A. Pierce
1996 "Current trends in state inmate user programs for health services." 3 Journal of Correctional Health Care 2:159-178.

Harrison, Bernard P.
1996 "In the matter of correctional facilities charging prisoners for health services." 3 Journal of Correctional Health Care 2:109-127.

Kosterlitz, Julie
1989 "Health focus: Random rationing." National Journal (April 22) 1020.

Kuemmerling, Robert A., and Craig Howell
1990 "1990 rise in prices: Largest increase in eight years." 113 Monthly Labor Review 5:11-20.

Lopez, Mark, and Kara Chayriques
1994 "Billing prisoners for medical care blocks access." 9 National Prison Project Journal 2:1-2, 17.

McDonald, Douglas C.
1995 Managing Prison Health Care and Costs. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Mendosa, Arthur A.
1969 "Budgeting." Reprinted from Simplified Financial Management in Local Government. Athens: University of Georgia Institute of Government.

National Commission on Correctional Health Care
1996 "Official position statement: Charging inmates a fee for health care services." 3 Journal of Correctional Health Care 2:179-184.

National Institute of Corrections
1997 "Fees paid by jail inmates: Findings from the nation's largest jails." Longmont, CO: U.S. Department of Justice, National Institute of Corrections Information Center.

North Carolina Department of Corrections
1990 "Draft inmate health care plan." Raleigh: Division of Prisons.

Pollack, Daniel
1996 "Legal briefs." 58 Corrections Today 2:194.

Rold, William J.
1996 "Charging inmates for medical care: A legal, practical, and ethical critique." 3 Journal of Correctional Health Care 2:129-144.

Santa Fe New Mexican
1999 "Lower profits trigger hikes in health insurance." (October 30:A-3).

Select Committee on Children, Youth and Families
1989 "Hearing summary—The changing face of health care: The movement towards universal access." Washington, DC: U.S. House of Representatives (December).

USA Today
2000 "Medical spending up." (January 10:6D.)

Weiland, Carolyn
1996 "Fee-for-service programs: A literature review and results of a national survey." 3 Journal of Correctional Health Care 2:145-158.

Welch, Patrick J., and Gerry F. Welch
1986 Economic Theory and Practice (second edition). CBS College Publishing.

Court Cases

Estelle v. Gamble, 429 U.S. 97 (1976).

Mills v. Oliver, 366 F. Supp. 77 (E.D. Va. 1973).

Monmouth County Correctional Institution Inmates v. Lanzaro, 834 F.2d 326 (3d Cir. 1987).

Ruiz v. Estelle, 503 F. Supp. 1265 (S.D. Tex. 1980), *aff'd in part and rev'd in part,* 679 F.2d 1115 (5th Cir. 1982), *am. in part, vac. in part,* 688 F.2d 266 (5th Cir. 1982), *cert. denied,* 460 U.S. 1042 (1983).

Conclusions and Future Issues

Chapter XV

Chapter XV

Conclusions and Future Issues

The focus on the adequacy of care provided to prisoners is relatively new. Systematic efforts to improve correctional health care were initiated only in the 1970s. Two parallel but separate forces were behind this reform movement: the courts and the health professions themselves. Together they are responsible for leading the field of correctional medicine into the 20th century and beyond.

Both litigation and the voluntary programs of various health professional associations have resulted in dramatic changes in the extent and type of care received by prisoners. However, much remains to be accomplished. In some areas, correctional health care is still 20 to 30 years behind its community counterparts, and while it is trying to catch up, external forces are at work that threaten the progress made.

The most serious crisis affecting corrections today is how to contend with the ever-increasing numbers of inmates. The war on crime, the war on drugs, fixed sentences, mandatory sentences, reduced use of alternatives to incarceration, and the abandonment of early release programs in some areas all have resulted in the current population explosion in correctional facilities. Not only has this meant more inmates housed in facilities where services and resources already may be stretched, it also has meant that the inmates are older, sicker, and staying longer.

Traditionally, inmates incarcerated in the United States have come from the lower socioeconomic strata. As a group, they have not had the benefits of adequate health care on the outside, and they tend to engage in behaviors (e.g., substance abuse, tobacco use, poor nutritional habits, multiple sex partners, sedentary lifestyles) that place them at high risk for diseases such as acquired immune deficiency syndrome, tuberculosis, sexually transmitted diseases, heart disease, hypertension, hepatitis, and renal failure, among others. A substantial number of inmates are mentally ill or retarded as well. The correctional health profession just now is beginning to confront the issues surrounding inmates' special health needs and to examine options for providing specialty care, long-term care, palliative care, and services for the terminally ill.

As we move into the 21st century, it is appropriate for those of us in the field of correctional medicine to embrace the challenge and goals of *Healthy People 2000*.[1] We need to advocate for the inclusion of "the least of us" in the nation's broad health care mission to—

- Increase the span of healthy life for Americans.
- Reduce health disparities among Americans.
- Achieve access to preventive services for all Americans.

Other groups may be more deserving of adequate health care than inmates, but few are more needy.

The challenge for correctional medicine during the next decade will be not only to "hold on to what we've got" but also to improve what we do. The latter can be accomplished by gathering adequate

data, sharing information with colleagues, emphasizing preventive health issues, increasing the knowledge and skills of correctional health professionals, reducing unnecessary costs, and improving the quality of the care and services provided. Each of these areas is discussed briefly below.

A. Data Collection

Few activities are less inspiring, but more necessary, than collecting data. In the absence of good data, it is difficult to determine whether inmates' current health needs are being addressed adequately and impossible to plan for the future. The necessity of data for decisionmaking has been stressed throughout this book. Decisions regarding the numbers and types of health staff needed, what services should be provided and where, the design of health facilities, the choice of equipment, cost control measures, and quality improvement mechanisms all depend on the availability of reliable data that define the population to be served.

National data about the field of correctional health care should be gathered and updated regularly. The National Commission on Correctional Health Care (NCCHC) has made a start in this direction by conducting national surveys on organizational structures, staffing, and costs of health care in prisons and jails, but a much broader and more systematic approach is required for such efforts to be useful. Prevalence data regarding chronic diseases and mental disorders among both males and females in most jails and prisons are virtually nonexistent.[2] How can we plan adequately for the health needs of our patients if we have not even identified how many of them require specific services?

National data collection strategies should be implemented that emphasize annual reporting, so that trends can be identified and projections made. The voluntary cooperation of correctional health staff in all departments of corrections (DOCs) is vital to this effort.

B. Information Sharing

It is important for correctional health professionals to share what they have learned with each other. The health programs and services of only a few DOCs are reflected in this book, because it was not possible to survey every DOC on every issue. The authors relied on their personal knowledge of a few DOCs and on published information. Correctional health staff in other DOCs are likely to be doing good things but have not taken the time to write up their research or programs.

A number of professional journals, including the Journal of Correctional Health Care, would welcome articles about correctional health topics such as legal issues, ethical dilemmas, public health matters, morbidity and mortality data, special health problems of the incarcerated, cost control strategies, model treatment programs, the use of computers, the effectiveness of telemedicine, comparison studies of male and female health status and utilization of services, and so forth. Additionally, national clearinghouses such as the National Criminal Justice Reference Service and the National Institute of Corrections Information Center are always looking for reports, studies, policy manuals, planning documents, and forms to add to their collections. Shorter articles or news items may be appropriate for periodicals such as *CorrectCare* or *CorHealth*. Conducting a workshop at NCCHC's biannual conferences or the American Correctional Health Services Association's (ACHSA's) multidisciplinary conference is another way to share relevant information with colleagues as is participating in national surveys.

C. Emphasizing Prevention

A much greater emphasis should be placed on preventive health measures in corrections. Instituting environmental health activities, safety efforts, infection control programs, immunization programs, and

health education initiatives for both inmates and staff is one of the most effective long-term strategies for reducing disease and controlling health care costs.

Additionally, it is time to return to the inmates some responsibility for their own health. Only by teaching inmates how to care for themselves will correctional health professionals be able to get out from under their largely self-imposed burden of providing total care. A number of activities, including medication administration, wound care, diabetes control, hypertension monitoring, dietary constraints, and so forth, are the primary responsibility of patients themselves on the outside. Teaching inmates to participate in the management of their own diseases and conditions, along with general health education offerings geared toward disease prevention and wellness, benefits the inmates by improving their health status, the staff by reducing their workload, and the DOC by reducing its costs.

D. INCREASING PROFESSIONALISM

Because corrections has had a history of offering second-rate health care, it often was assumed that the people who chose to work in this environment were second rate as well. To the extent that that may have been true in the past, it no longer characterizes the professionals who work in corrections. The involvement of mainstream health care organizations and the development of national standards have done much to elevate the qualifications of the practitioners who work in this field. Continued improvement of the knowledge and skills of correctional health practitioners should become a priority during the next decade. Attending inservice training programs, enrolling in formal continuing education offerings, and participating in national conferences of various groups such as the American Correctional Association, ACHSA, NCCHC, and the Society of Correctional Physicians can do much to enhance the level of professionalism of practitioners. Other promising efforts to elevate the field of correctional health care include the emergence of academic programs targeted to this group of professionals and the initiation of a certification program for correctional health professionals by NCCHC in 1990.[3]

The Certified Correctional Health Professional (CCHP) Program of NCCHC is two tiered: correctional health professionals start with a self-assessment exam to earn basic certification, and after 3 years, they are eligible to sit for a proctored examination to achieve advanced status. In addition, NCCHC recently initiated an Academy of Correctional Health Professionals for individuals who are new to the profession.[4]

It is hoped that the efforts of NCCHC and other professional organizations will help to establish correctional health care as a recognized specialty. The more correctional health care mirrors the elements of professionalism of the general health care field, the easier it will be to recruit and retain qualified staff.

E. REDUCING COSTS

According to the World Health Organization, the United States spends more per person on health care than any other nation in the world (*Santa Fe New Mexican*, 2000). In 1990, U.S. health care expenditures exceeded $600 billion (Brandt, 1990). By 2000, the United States was spending $3,724 per person annually on health care for a total expenditure of more than $1 trillion (*Santa Fe New Mexican*, 2000). Health costs continue to rise at rates exceeding those of inflation. The United States also has the dubious distinction of leading the world in the rate of incarceration.

Neither the cost of health care nor the rate of incarceration is within the control of corrections, but both of these factors, coupled with the fact that inmates are among those with the most substantial health needs, have created the current crisis in correctional health. Even though corrections cannot control such external influences, there are internal mechanisms that can be employed to reduce costs

by eliminating waste and trimming fat from current expenditures.

A number of managed care techniques used in the community can be applied to correctional health. Implementing second opinion and preauthorization requirements, instituting utilization review practices, and negotiating per diem contracts with hospitals help to keep health expenditures down. Emphasizing continuing training and education for health providers helps to improve their skills and performance and reduce the potential for liability. Developing computerized management information systems to track inventories of equipment, medications, and supplies is another cost control strategy. Strengthening preventive health measures and instituting environmental health and safety efforts can help reduce costs in the long run. Finally, some DOCs are toying with the concept of defining health benefit packages for inmates that will delineate the range of services to be provided. DOCs should give careful consideration to implementing these and other cost control strategies.

F. IMPROVING QUALITY

It is dangerous to focus on reducing costs without a concomitant concern for improving quality. Every DOC needs to ensure that it is providing an adequate level of health care to inmates at the same time that staff look for ways to cut costs. Cost control is not the same as reducing expenditures by eliminating needed personnel or services. The former focuses on making the system more efficient, the latter on making it less effective. Improving the efficiency and the effectiveness of the health care delivery system should be the primary goal of jail and prison health professionals.

Each jail and prison system needs to institute programs to continuously improve the services it offers. Internal quality improvement efforts can raise staff morale, enhance their performance, and eliminate inefficiencies in the delivery system, all of which help to reduce costs. Periodic reviews by external groups such as national accrediting bodies help to ensure that the DOC's internal efforts to improve quality keep pace with national standards.

In sum, the focus of correctional health care during the next decade should be on doing what we do better. Gathering data to define our patients' needs and to increase our decisionmaking capacity, sharing what we learn with our colleagues, emphasizing preventive health measures, increasing the level of professionalism of providers, reducing unnecessary costs, and implementing quality improvement programs will bring correctional medicine into the mainstream. Continuous review of policies, procedures, practices, matériel, and people will result in continual improvement of the field of correctional health care. The search for quality is a never-ending process, but like so much of life, the journey is as important as the destination.

NOTES

1. See U.S. Public Health Service (1991).

2. See chapter VIII, Programming for Special Health Needs, and chapter IX, Women's Health Needs and Services.

3. Bernard P. Harrison, JD, who is recognized as the primary founder of the National Commission on Correctional Health Care, also initiated the Certified Correctional Health Professional activity.

4. Those who want to learn more about the Certified Correctional Health Professional (CCHP) program or the newly established Academy of Correctional Health Professionals within the National Commission on Correctional Health Care may contact:

NCCHC
1300 West Belmont Avenue, First Floor
Chicago, IL 60657-3200
Phone: (773) 880-1460
Fax: (773) 880-2424
E-mail: *ncchc@ncchc.org* or
academy@correctionalhealth.org

REFERENCES

Brandt, Lawrence E.

1990 "The future of health care in the United States." America, (October 20) 272-286.

Santa Fe New Mexican

2000 "Report ranks United States 37th in health care." (June 21:A-6).

U.S. Public Health Service

1991 Healthy People 2000: National Health Promotion and Disease Prevention Objectives. Washington, DC: U.S. Department of Health and Human Services.

Bibliography

Bibliography

1. Articles and Books

Abeles, Hans, Henry Feibes, Elaine Mandel and Josephine A. Girard

1970 "The large city prison—A reservoir of tuberculosis." 101 American Review of Respiratory Disease 706-709.

Adams, Stuart

1974 "Measurement of effectiveness and efficiency in corrections." Pp. 1021-1049 in Daniel Glaser (Ed.), Handbook of Criminology. Chicago: Rand McNally.

Alarid, Leanne Fiftal, and James W. Marquart

1999 "HIV/AIDS knowledge and risk perception of adult women in an urban area jail." 6 Journal of Correctional Health Care 1:97-127.

Aldridge, D., and J. Rossiter

1984 "A strategic assessment of deliberate self-harm." 6 Journal of Family Therapy 113-129.

Alexander, Elizabeth

1990 "Can contract care cure prison health ailments?" Journal of the National Prison Project 22:5-7.

Alexander, Susan

1972 "The captive patient: The treatment of health problems in American prisons." 6 Clearinghouse Review 1:16-27.

American Bar Association

1974a Medical and Health Care in Jails, Prisons and Other Correctional Facilities—A Compilation of Standards and Materials (third edition). Washington, DC: Commission on Correctional Facilities and Services.

1974b Survey and Handbook on State Standards and Inspection Legislation for Jails and Juvenile Detention Facilities (third edition). Washington, DC.

1990 "Guidelines concerning privatization of prisons and jails." Washington, DC: Prison and Jail Problems Committee, Criminal Justice Section.

American Civil Liberties Union

1995 "Status report." Washington, DC.

American Correctional Association

1966 Manual of Correctional Standards (third edition). College Park, MD.

1977 Manual of Standards for Adult Correctional Institutions. Washington, DC: Commission on Accreditation for Corrections.

1981 Manual of Standards for Adult Correctional Institutions (second edition). Washington, DC: Commission on Accreditation for Corrections.

1990a Standards for Adult Correctional Institutions (third edition). Lanham, MD.

1990b Standards for Adult Local Detention Facilities (third edition). Laurel, MD.

1996 Public Policy on Correctional Health Care. Lanham, MD.

1998 Standards Supplement. Lanham, MD.

1999 1999 Directory. Lanham, MD.

American Correctional Health Services Association

1995 "Code of ethics." Lanham, MD.

American Dental Association

1981 Dental Care in Correctional Facilities. Chicago.

American Health Information Management Association

1985 Confidentiality of Patient Health Information: A Position Statement. Chicago.

American Medical Association

1848 The Transactions of the American Medical Association. Chicago (May).

1930 Minutes, House of Delegates. Chicago (June).

1940 Minutes, House of Delegates. Chicago (June).

1952 Minutes, House of Delegates. Chicago (December).

1973 Medical Care in U.S. Jails—A 1972 American Medical Association Survey. Chicago.

1974 "Proposal for a pilot program to improve medical care and health services in correctional institutions." Chicago. Unpublished.

1977 Survey Questionnaire for the Accreditation of Medical Care and Health Services in Jails. Chicago.

1978 Standards for the Accreditation of Medical Care and Health Services in Jails (revised edition). Chicago.

1979a Standards for Health Services in Jails. Chicago.

1979b Standards for Health Services in Juvenile Correctional Facilities. Chicago.

1979c Standards for Health Services in Prisons. Chicago.

1979d Out of Sight—Out of Mind. Chicago.

1980 "Searches of body orifices." Report EE of the Board of Trustees. Chicago.

1981 Standards for Health Services in Jails (revised edition). Chicago.

American Medical Association and American Public Health Association

1981 Amicus curiae brief before the U.S. Supreme Court, Rhodes v. Chapman, 452 U.S. 337.

American National Standards Institute, Inc.

1986 Providing Accessibility and Usability for Physically Handicapped People, ANSI Standard 117.1-1986. New York.

American Nurses Association

1985 Standards of Nursing Practice in Correctional Facilities. Kansas City, MO.

American Psychiatric Association

1985 Task Force Report 22: Seclusion and Restraint—The Psychiatric Uses. Washington, DC.

1989 Task Force Report 29: Psychiatric Services in Jails and Prisons. Washington, DC.

American Public Health Association

1976 Standards for Health Services in Correctional Institutions. Washington, DC.

American Society for Healthcare Environmental Services

1991 Policy & Procedure Manual for Environmental Services. Chicago: American Hospital Association.

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

1989 Ventilation for Acceptable Air Quality. Atlanta.

Anno, B. Jaye

1972 "Prison riots: Notes on causes, prevention and cure." Paper presented at John Jay College of Criminal Justice, New York, NY. Unpublished.

1977 Analysis of Inmate/Patient Profile Data. Washington, DC: Blackstone Associates, Inc.

1978 Analysis of Inmate/Patient Profile Data, Year Two. Silver Spring, MD: B. Jaye Anno Associates.

1981 Health Care in Jails: An Evaluation of a Reform. Dissertation submitted to the faculty of the Graduate School of the University of Maryland, College Park, MD.

1982 "The role of organized medicine in correctional health care." 247 Journal of the American Medical Association 21:2923-2925.

1985 "Patterns of suicide in the Texas Department of Corrections 1980-1985." 5 Journal of Prison and Jail Health 2:82-93.

1988 "Receiving screening: The number one health care standard." 40 The National Sheriff 6:46-48.

1989 "Prison health care: The state of the states." Pp. 39-47 in the December 1, 1989, Conference on Issues in Corrections, A Record and Proceedings on Medical Issues. Washington, DC: Federal Bureau of Prisons.

1990 "Questions and answers on NCCHC standards." 4 CorrectCare 2:3. Chicago: National Commission on Correctional Health Care.

1991a "Organizational structure of prison health care: Results of a national survey." 10 Journal of Prison and Jail Health 1:59-74.

1991b Prison Health Care: Guidelines for the Management of an Adequate Delivery System. Chicago: National Commission on Correctional Health Care.

1994 "Women's health needs—Toward a new philosophy of care." Keynote address. The National Commission on Correctional Health Care's 18th National Conference on Correctional Health Care in San Diego (November).

1997a "Correctional health care: What's past is prologue." 11 CorrectCare 3:6-11.

1997b "Health behavior in prisons and correctional facilities." Chapter 14 in David S. Gochman (Ed.), Handbook of Health Behavior Research III. New York: Plenum Press.

2000 "Inappropriate prison populations." Chapter 13 in John P. May (Ed.), Building Violence: How America's Rush to Incarcerate Creates More Violence. Thousand Oaks, CA: Sage Publications, Inc.

2001 "Standards of care and treatment for adult and juvenile offenders with special needs." Chapter 3 in Jose B. Ashford, Bruce D. Sales and William Reid (Eds.), Treating Adult and Juvenile Offenders with Special Needs. Washington, DC: American Psychological Association.

Anno, B. Jaye, and Kenneth L. Faiver

1991 "Cost considerations: Financing, budgeting and fiscal management." Chapter XIII in B. Jaye Anno, Prison Health Care: Guidelines for the Management of an Adequate Delivery System. Chicago: National Commission on Correctional Health Care.

Anno, B. Jaye, Kenneth L. Faiver and Jay K. Harness

1996 "A preliminary model for determining limits for health care services." 3 Journal of Correctional Health Care 1:67-84.

1998 "Defining appropriate and necessary health care." Chapter 4 in Kenneth L. Faiver, Health Care Management Issues in Corrections. Lanham, MD: American Correctional Association.

Anno, B. Jaye, and Steven S. Spencer

1998 "Medical ethics and correctional health care." Pp. 32-40 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Atlas, Randall

1989 "Reducing the opportunity for inmate suicide: A design guide." 60 Psychiatric Quarterly 2:161-172.

Austin, James, and Aaron David McVey
1989 The 1989 NCCD Prison Population Forecast: The Impact of the War on Drugs. San Francisco: National Council on Crime and Delinquency.

Badner, Victor, and Robert Margolin
1994 "Oral health status among women inmates at Rikers Island Correctional Facility." 1 Journal of Correctional Health Care 55-72.

Baer, Ora
1989 "Experts see growth in elderly inmate populations." 20 Criminal Justice Newsletter 22:5-7.

Bagby, Rita V., and John H. Clark
1993 "Managing the paraplegic in the correctional setting." 12 Journal of Prison and Jail Health 2:63-72.

Bailey, Walter C.
1971 "Correctional outcome: An evaluation of 100 reports." Pp. 187-195 in Leon Radzinowicz and Marvin E. Wolfgang (Eds.), The Criminal in Confinement. New York: Basic Books, Inc.

Baker, Joel W., Quin B. DeMarsh and Rory Laughery
1971 Review of the Quality of Health Care in the State Penal Institutions. Pp. 142oo-142uu in the American Bar Association's Medical and Health Care in Jails, Prisons, and Other Correctional Facilities—A Compilation of Standards and Materials. Washington, DC. (1974).

Barnes, George P., Theodore H. Heid, Warren A. Parker, James S. Cole, R. Paul Fultz and Richard G. Tollefsbol
1988 "Dental care requirements of male inmates recently incarcerated in Texas Department of Corrections prisons." 7 Journal of Prison and Jail Health 1:37-52.

Baumeister, A.A., and W. MacLean, Jr.
1984 "Declaration of self-injurious and stereotypic responding by exercise." 5 Applied Research in Mental Retardation 385-393.

Baunach, Phyllis Jo
1985 Mothers in Prison. New Brunswick, NJ: Transaction Books.

Bennum, I.
1984 "Psychological models of self-mutilation." 14 Suicide and Life-Threatening Behavior 3:167-186.

Benton, F. Warren
1981 Planning and Evaluating Prison and Jail Staffing. Volume I. Washington, DC: U.S. Department of Justice, National Institute of Corrections.

Berk, Richard A., and Peter H. Rossi
1977 Prison Reform and State Elites. Cambridge, MA: Ballinger Publishing Company.

Bharucha, Kerman D.
1986d Base III Plus: A Comprehensive User's Manual For Nonprogrammers. Blue Ridge Summit, PA: Tab Books, Inc.

Blackstone, William
1769 4 Commentaries on the Laws of England (first edition) 377.

Block, Marvin J.
1983 "An extramural dental care program in a prison setting." 3 Journal of Prison and Jail Health 1:34-39.

Bloom, Barbara
1993 "Incarcerated mothers and their families: Maintaining family ties." Chapter XI in Female Offenders: Meeting Needs of a Neglected Population. Lanham, MD: American Correctional Association.

Bloom, Barbara, Meda Chesney-Lind and Barbara Owen
1994 Women in California Prisons: Hidden Victims of the War on Drugs. San Francisco: Center on Juvenile and Criminal Justice.

Booth, Dorothy E.
1989 "Health status of the incarcerated elderly: Issues and concerns." 13 Journal of Offender Counseling, Services and Rehabilitation 2:193-214.

Bosarge, Betty B. (Ed.)
1989 First/Second Line Jail Supervisor's Training Manual. Washington, DC: U.S. Department of Justice.

Brace, Nancy E.
1990 "Correctional health care cost containment." 4 CorrectCare 3:9-10.

Brandt, Lawrence E.
1990 "The future of health care in the United States." America (October 20) 272-286.

Branson, Roy
1976 "Philosophical perspective on experimentation with prisoners." Appendix to Research Involving Prisoners, National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. U.S. Department of Health, Education, and Welfare, Publication No. (OS) 76-132.

Braslow, Charles A.
1990 "Comment: Quality of care includes access to care." 9 Journal of Prison and Jail Health 2:155-157.

Braun, M. Miles, Benedict I. Truman, Barbara Maguire, George T. DiFerdinando, Jr., Gary Wormser, Raymond Broaddus and Dale L. Morse
1989 "Increasing incidence of tuberculosis in a prison inmate population: Association with HIV infection." 261 Journal of the American Medical Association 3:393-397.

Brazier, Margaret
1982 "Prison doctors and their involuntary patients." Publication Law 282, 285.

Brecher, Edward M.
1978 Treatment Programs for Sex Offenders. Washington, DC: U.S. Department of Justice, Law Enforcement Assistance Administration.

Brecher, Edward M., and Richard D. Della Penna
1975 Health Care in Correctional Institutions. Washington, DC: U.S. Department of Justice, Law Enforcement Assistance Administration.

Brister, Richard C.
1996 "Changing of the guard: A case for privatization of Texas prisons." 76 The Prison Journal 3:310-330.

Brooks, Justin, and Kimberly Bahna
1994 "'It's a family affair'—The incarceration of the American family: Confronting legal and social issues." 28 University of San Francisco Law Review 2:271-308.

Bureau of Justice Statistics
1988 Sourcebook of Criminal Justice Statistics, 1987. Washington, DC: U.S. Department of Justice.

1989 Correctional Populations in the United States, 1987. Washington, DC: U.S. Department of Justice.

1991 "Jail inmates, 1990." Bureau of Justice Statistics Bulletin. Washington, DC: U.S. Department of Justice (June).

1994 "Prisoners in 1993." Bureau of Justice Statistics Bulletin. Washington, DC: U.S. Department of Justice (May).

1997 Sourcebook of Criminal Justice Statistics, 1996. Washington, DC: U.S. Department of Justice.

1999 "Prison and jail inmates at midyear 1998." Bureau of Justice Statistics Bulletin. Washington, DC: U.S. Department of Justice (March).

Bureau of Prisons
1990 Proceedings of Medical Issues Forum in Springfield, MO (December 1, 1989). Washington, DC.

Burnett, Cathleen
1989 "Introduction" in special issue Older Offenders: Current Trends. 13 Journal of Offender Counseling, Services and Rehabilitation 2:1-18.

Burrow, James G.
1963 AMA: Voice of American Medicine. Baltimore: The Johns Hopkins University Press.

Byland, William
1983 "Dental care in prisons: Quality assurance of dental programs." Address to Second World Congress on Prison Health Care. Ottawa.

Carlson, Blair, and Jane A. Kennedy
1998 "The treatment of alcohol and other drug abstinence syndromes." Chapter 23 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Carlson, Norman A.
1978 "Towards a balanced mission for corrections." 40 American Journal of Corrections 1:13, 28.

Carp, Scarlett V., and Joyce A. Davis
1989 Design Considerations in the Building of Women's Prisons. Longmont, CO: U.S. Department of Justice, National Institute of Corrections Information Center.

Cassidy, Bonnie
1990 "Quality assurance and quality improvement." 13 Briefing 1:6-7. Washington, DC: National Health Care Practice.

Cavanaugh, J.L., Jr., and R.D. Marciniak
1989 "Atypical impulse control disorder." Pp. 2477-2486 in Treatments of Psychiatric Disorders, Volume 3. Washington, DC: American Psychiatric Association.

Centers for Disease Control and Prevention
1983 Guidelines for Prevention and Control of Nosocomial Infection. Washington, DC: Superintendent of Documents. (No. CDC 83-8314).

1987 36 Morbidity and Mortality Weekly Report Supplement 25 (August 21). Atlanta.

1988 37 Morbidity and Mortality Weekly Report Update 24 (June 24). Atlanta.

1989a Guidelines for Prevention of Transmission of Human Immunodeficiency Virus and Hepatitis B Virus to Health Care and Public Safety Workers, a response to P.L. 100-607, The Health Omnibus Programs Extension Act of 1988 (February). Atlanta.

1989b 38 Morbidity and Mortality Weekly Report 13 (April 7). Atlanta.

1989c 38 Morbidity and Mortality Weekly Report 18 (May 12). Atlanta.

1990a 39 Morbidity and Mortality Weekly Report RR-2 (February 9). Atlanta.

1990b 43 Morbidity and Mortality Weekly Report 12 (March 30). Atlanta.

1993 41 Morbidity and Mortality Weekly Report RR-17 (January 8). Atlanta.

1995 Controlling TB in Correctional Facilities. Atlanta.

1996a Guidelines for Isolation Precautions in Hospitals. Atlanta.

1996b "Prevention and control of tuberculosis in correctional facilities," 45 Morbidity and Mortality Weekly Report:RR-8 (June 7). Atlanta.

1997 An Assessment of Sexually Transmitted Disease Services in City and County Jails, United States. Atlanta.

1998a Guidelines for the Treatment of Sexually Transmitted Diseases. Atlanta.

1998b HIV/AIDS Surveillance Report: U.S. HIV and AIDS Cases Reported Through June 1998. Atlanta.

1998c 47 Morbidity and Mortality Weekly Report 21 (June 5). Atlanta.

Chaiken, Marcia R.
1989a In-Prison Programs for Drug-Involved Offenders. Washington, DC: U.S. Department of Justice, National Institute of Justice.

1989b "Prison programs for drug involved offenders." Research in Action. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Clare, James H.

1998 "Survey, comparison, and analysis of caries, periodontal pocket depth, and urgent treatment needs in a sample of adult felon admissions, 1996." 5 Journal of Correctional Health Care 1:89-102.

Clark, Judith

1995 "The impact of the prison environment on mothers." 75 The Prison Journal 3:306-329.

Clark, Ramsey

1971 Crime in America. New York: Pocket Books.

Clipson, Colin W., and Joseph J. Wehrer

1979 Correctional Health Care Facilities: Planning, Design and Construction. Lansing, MI: Department of Corrections, Office of Health Care. Distributed by National Commission on Correctional Health Care, Chicago.

Code of Federal Regulations

1981 Title 45. Sections 46.101-124 (Basic HHS Policy for Protection of Human Research Subjects); Sections 46.301-306. 46 Federal Register 16, January 26.

Coffey, Osa P., Norma Procopiow and Neal Miller

1989 Programming for Mentally Retarded and Learning Disabled Inmates: A Guide for Correctional Administrators. Washington, DC: U.S. Department of Justice, National Institute of Corrections.

Cohen, Carl

1978 "Medical experimentation on prisoners." Perspectives in Biology and Medicine 21:357-372.

Cohen, Fred

1998 The Mentally Disordered Inmate and the Law. Kingston, NJ: Civic Research Institute.

Cohen, Robert L., and Margaret D. Wishart

1983 "Editorial." 3 Journal of Prison and Jail Health 1:3-5.

Coleman, Claudia R.

1988 "Clinical effectiveness of correctional staff in prison health units." 18 Psychiatric Annals 12:684-687, 691.

Coleman, Tina E., Steven Whitman, Terre Massey, Cecil Patmon and Lambert King

1984 "Attitudes and knowledge of correctional officers toward people with epilepsy." 4 Journal of Prison and Jail Health 1:16-31.

Comptroller General of the United States

1980 Women in Prison: Inequitable Treatment Requires Action: Report to the Congress of the United States. Gaithersburg, MD: U.S. General Accounting Office.

Conklin, Thomas J., Thomas Lincoln and Timothy P. Flanigan

1998 "A public health model to connect correctional health care with communities." 88 American Journal of Public Health 8:1249-1250.

Conly, Catherine

1999 Coordinating Community Services for Mentally Ill Offenders: Maryland's Community Criminal Justice Treatment Program. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Contact Center, Inc.

1983 "Prison health care costs." VIII Corrections Compendium 2:5-11.

1985 "Inmate lawsuits." Lincoln, NE.

1986 "Prison health care." XI Corrections Compendium 1:7, 13-14.

Conte, Thomas G.

1973 "Survey of dental treatment in New Jersey prisons." 44 New Jersey Dental Association Journal 10-12.

1983 "Dental treatment for incarcerated individuals: For whom? How much?" 3 Journal of Prison and Jail Health 3:25-33.

Cookson, H.M.

1977 "A survey of self-injury in a closed prison for women." 17 British Journal of Criminology 4:332-347.

Cooper, H.H.

1971 "Self-mutilation by Peruvian prisoners." 3 International Journal of Offender Therapy 180-188.

Correctional Association of New York

1990 AIDS in Prison Project Update: A Medical Release Proposal. New York.

Correctional Law Reporter

1990 "Increasing numbers of aged or chronically ill inmates present major challenge for '90's." 2 Correctional Law Reporter 4:57-58.

1996 "Requiring inmates to pay for medical care if they have resources does not violate Eighth Amendment." February/March 70.

Corrections Yearbook

1998 Criminal Justice Institute, Inc. South Salem, NY.

Costello, Jan C., and Elizabeth J. Jameson

1987 "Legal and ethical duties of health care professionals to incarcerated children." 8 Journal of Legal Medicine 2:191-263.

Criminal Justice Newsletter

1981 "25 states now under prison court orders." Volume 12, Number 6:6-7 (February 16).

1990 "Florida electric chair fixed; inmate executed without incident." Volume 21, Number 15:7 (August 1).

1997 "Alcohol and drugs implicated in 80 percent of incarcerations." Volume 28, Number 245:4-5.

Danto, Bruce L.

1973 Jail House Blues: Studies of Suicidal Behavior in Jail and Prison. Orchard Lake, MI: Epic Publications, Inc.

Darnell, Scott W.

1989 "No more victims: Alternative treatment methods for the incarcerated sex offender." 69 The Prison Journal 1:83-87.

Davis, Gordon B.

1974 Management Information Systems: Conceptual Foundations, Structure, and Development. New York: McGraw-Hill.

DeCou, Kate

1998 "Responding to the comprehensive needs of incarcerated women: Management and treatment challenges." 5 Journal of Correctional Health Care 2:129-137.

Decter, Michael D., William K. Vaughn, Jamies S. Madie, Robert H. Hutcheson, Jr., and William Schaffner

1984 "Seroepidemiology of hepatitis B in Tennessee prisoners." 150 Journal of Infectious Diseases 3.

Deming, W. Edwards

1986 Out of the Crisis. Cambridge, MA: Massachusetts Institute of Technology.

DePaul University

1989 "Who lives? Who dies? Who pays? The medical legal ethics of health care in America." 9 DePaul News 3:3-6.

Detore, Robert, and Reginald Jenkins

1989 "Managed care and cost containment in a correctional health system." Paper presented at the National Commission on Correctional Health Care's 13th National Conference on Correctional Health Care in Chicago (November).

Dewitt, Charles B.

1987 Building on Experience: A Case Study of Advanced Construction and Financing Methods for Corrections. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Ditton, Paula M.
1999 "Mental health and treatment of inmates and probationers." Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Donabedian, Avedis
1973 Aspects of Medical Care Administration: Specifying Requirements for Health Care. Cambridge, MA: Harvard University Press.

1980 Explorations in Quality Assessment and Monitoring. Ann Arbor, MI: Health Administration Press.

Dougher, Michael J.
1988 "Clinical assessment of sex offenders." Pp. 77-84 in Barbara K. Schwartz (Ed.) and H.R. "Hank" Cellini, A Practitioner's Guide to Treating the Incarcerated Male Sex Offender: Breaking the Cycle of Sexual Abuse. Washington, DC: U.S. Department of Justice, National Institute of Corrections.

Dubler, Nancy N.
1998 "The collision of confinement and care: End-of-life care in prisons and jails." 26 Journal of Law, Medicine & Ethics 149-156.

Dubler, Nancy N. (Ed.)
1986 Standards for Health Services in Correctional Institutions (second edition). Washington, DC: American Public Health Association.

Dubler, Nancy N., and Budd Heyman
1998 "End-of-life care in prisons and jails." Chapter 30 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Dubler, Nancy N., and Victor W. Sidel
1989 "On research on HIV infection and AIDS in correctional institutions." 67 The Milbank Quarterly 2:171-207.

Durham III, Alexis M.
1989 "Newgate of Connecticut: Origins and early days of an early American prison." 6 Justice Quarterly 1:89-116.

Easley, Michael W., and Richard L. Lichtenstein
1979 Dental Health Programs for Correctional Institutions. Lansing, MI: Correctional Health Care Program, Michigan Department of Corrections. Distributed by National Commission on Correctional Health Care, Chicago.

Edelson, S.M.
1984 "Implications of sensory stimulation in self-destructive behavior." 89 American Journal of Mental Deficiency 2:140-145.

Elias, Gail L., and Kenneth Ricci
1997 Women in Jail: Facility Planning Issues. Washington, DC: U.S. Department of Justice, National Institute of Corrections.

Elliott, Richard L.
1997 "Evaluating the quality of correctional mental health services: An approach to surveying a correctional mental health system." 15 Behavioral Sciences and the Law 427-438.

Ellis, James W., and Ruth A. Luckasson
1985 "Mentally retarded criminal defendants." 53 George Washington Law Review 414.

Epilepsy Foundation of America
1992 The Legal Rights of Persons with Epilepsy (sixth edition). Landover, MD.

Eriksson, Torsten
1976 The Reformers: An Historical Survey of Pioneer Experiments in the Treatment of Criminals. New York: Elsevier Publishing Company.

Faiver, Kenneth L.
1998a Health Care Management Issues in Corrections. Lanham, MD: American Correctional Association.

1998b "Quality is also important." Pp. 201-218 in Kenneth L. Faiver (Ed.), Health Care Management Issues in Corrections. Lanham, MD: American Correctional Association.

1998c "Special issues of aging." Chapter 7 in Kenneth L. Faiver (Ed.), Health Care Management Issues in Corrections. Lanham, MD: American Correctional Association.

Faiver, Kenneth L., B. Jaye Anno and Jay K. Harness
1988 "Setting the standard for correctional health care services." Paper presented at the Third World Congress on Prison Health Care in Bristol, England (August).

Faiver, Kenneth L., and Dean P. Rieger
1998 "Women's health issues." Chapter 8 in Kenneth L. Faiver (Ed.), Health Care Management Issues in Corrections. Lanham, MD: American Correctional Association.

Falter, Robert G.
1999 "Selected predictors of health service needs of inmates over age 50." 6 Journal of Correctional Health Care 2:149-175.

Farberow, N.L. (Ed.)
1980 The Many Faces of Suicide. New York: McGraw-Hill.

Favazza, A.R.
1989 "In reply to V. Siomopoulos' self-mutilation." 40 Hospital and Community Psychiatry 8:856-857.

Favell, J.E., N.H. Azrin, A.A. Baumeister, E.E. Carr, M.F. Dorsey, R. Forehand, R.N. Foxx, O.I. Luvaas, A. Rincover, T.R. Risely, R.G. Romanczyk, D.C. Russo, S.R. Schroeder and J. Solnick
1982 "The treatment of self-injurious behavior." 13 Behavior Therapy 529-554.

Federal Medical Center
no date Hospice in a Correctional Environment. Fort Worth: Federal Bureau of Prisons.

Federal Register
1978 Additional protection pertaining to biomedical and behavioral research involving prisoners as subjects. Volume 43, Number 22 (November 16).

Feldman, M.C.
1988 "The challenge of self-mutilation: A review." 29 Comprehensive Psychiatry 3:252-269.

Feldman, T.B.
1990 "Further thoughts on self-mutilation following trauma." 147 American Journal of Psychiatry 8, 1105.

Feldstein, Paul J.
1983 Health Care Economics. New York: John Wiley & Sons.

Field, Gary
1989 "The effects of intensive treatment on reducing the criminal recidivism of addicted offenders." 52 Federal Probation 51-56.

Fink, Mary Jo, AnneKathryn Goodman, Ellen Hight, Ellen Miller-Mack and Anne De Groot
1998 "Critical prevention, critical care: Gynecological and obstetrical aspects of comprehensive HIV prevention and treatment among incarcerated women." 5 Journal of Correctional Health Care 2:201-223.

Finn, Peter, and Andrea K. Newlyn
1993 Miami's "Drug Court": A Different Approach. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Fogel, Catherine Ingram
1991 "Health problems and needs of incarcerated women." 10 Journal of Prison and Jail Health 1:43-57.

1995 "Pregnant prisoners: Impact of incarceration on health and health care." 2 Journal of Correctional Health Care 2:169-190.

Fogel, David
1975 "We Are the Living Proof": The Justice Model for Corrections. Cincinnati: The W.H. Anderson Company.

Frank, Benjamin
1979 "The American prison: The end of an era." 43 Federal Probation 3:3-9.

Freeman, Ben
1977 Sanitarian's Handbook. New Orleans: Peerless Publishing Co.

Fromberg, Robert
1988 The Joint Commission Guide to Quality Assurance. Oakbrook Terrace, IL: Joint Commission on Accreditation of Healthcare Organizations.

Gaes, Gerald G.
1985 "The effects of overcrowding in prison." Pp. 95-146 in Michael Tonry and Norval Morris (Eds.), Crime and Justice: An Annual Review of Research. Chicago: University of Chicago Press.

Gailiun, Michelle
1997 "Telemedicine takes off." 59 Corrections Today 4:68-70.

Gannon, Camille Caillouet
1988 Health Records in Correctional Health Care: A Reference Manual. Chicago: National Commission on Correctional Health Care.

Gerner, Robert H.
1994 "Pharmacological treatment of violent behaviors." Chapter 61 in Richard Rosner (Ed.), Principles and Practice of Forensic Psychiatry. New York: Chapman & Hall.

Gettinger, Stephen
1976 "U.S. prison population hits all-time high." 2 Corrections Magazine 3:9-20.

1977 "Cruel and unusual prisons." 3 Corrections Magazine 4:3-16.

Gibson, Frances T., and Elizabeth A. Pierce
1996 "Current trends in state inmate user programs for health services." 3 Journal of Correctional Health Care 2:159-178.

Gilliard, Darrell K.
1999 "Prison and jail inmates at midyear 1998." Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Gochman, David S. (Ed.)
1997 Handbook of Health Behavior Research III. New York: Plenum Press.

Goffman, Erving
1961 Asylums. Essays on the Social Situation of Mental Patients and Other Inmates. Garden City, NY: Doubleday and Company, Inc., Anchor Books.

Goldfarb, Ronald L., and Linda R. Singer
1973 After Conviction. New York: Simon and Schuster.

Goldkuhle, Ute
1999 "Health service utilization by women in prison: Health needs indicators and response effects." 6 Journal of Correctional Health Care 1:63-83.

Goldsmith, Seth B.
1975 Prison Health: Travesty of Justice. New York: Prodist Publications.

Goodman, Ellen
1999 "Putting price tag on human organs?" Santa Fe New Mexican (June 1:A-7).

Gordner, Ronald L.
1990 Prison Health Care Current Bibliographies in Medicine: January 1986 Through September 1990. Bethesda, MD: U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, National Library of Medicine. No. 90-12.

Granfield, Robert, Cynthia Eby and Thomas Brewster
1998 "An examination of the Denver drug court: The impact of a treatment-oriented drug-offender system." 20 Law & Policy 2:183-202.

Green, A.H.
1967 "Self-mutilation in schizophrenic children." 17 Archives of General Psychiatry 234-244.

Green, Randy

1988 "Sex offender treatment program evaluation." Pp. 61-68 in Barbara K. Schwartz (Ed.) and H.R. "Hank" Cellini, A Practitioner's Guide to Treating the Incarcerated Male Sex Offender: Breaking the Cycle of Sexual Abuse. Washington, DC: U.S. Department of Justice, National Institute of Corrections.

Greenfeld, Lawrence A.

1997 Sex Offenses and Offenders. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Greenfeld, Lawrence A., and Stephanie Minor-Harper

1991 Women in Prison. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Greenfeld, Lawrence A., and Tracy L. Snell

1999 Women Offenders. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Greifinger, Robert B., and Martin Horn

1998 "Quality improvement through care management." Pp. 317-325 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Griffith, Ezra E.H., and Carl C. Bell

1989 "Recent trends in suicide and homicide among blacks." 262 Journal of the American Medical Association 16:2265-2269.

Gross, Donalyn A.

1990a "Thanatology—Help for the terminally ill inmate." 22 The Correctional Psychologist 1:12-15.

1990b "Thanatology—Help for the terminally ill inmate." 4 CorrectCare 2:4, 13.

Guy, Edward, Jerome Platt, Israel Zwerling and Samuel Bullock

1985 "Mental health status of prisoners in an urban jail." 12 Criminal Justice and Behavior 1:29-53.

Hagan, John, and Ronit Dinovitzer

1999 "Collateral consequences of imprisonment for children, communities, and prisoners." Pp. 121-162 in Michael Tonry and Joan Petersilia (Eds.), Prisons. Chicago: University of Chicago Press.

Hall, Jane N.

1985 "Identifying and serving mentally retarded inmates." 5 Journal of Prison and Jail Health 1:29-38.

1992 "Correctional services for inmates with mental retardation: Challenge or catastrophe?" Pp. 167-190 in R.W. Conley, R. Luckasson and G.N. Bouthilet, The Criminal Justice System and Mental Retardation. Baltimore: Brooks.

Hall, Marie

1990 Special Needs Inmates: A Survey of State Correctional Systems. Boulder, CO: U.S. Department of Justice, National Institute of Corrections.

Hammett, Theodore M., and Nancy N. Dubler

1990 "Clinical and epidemiologic research on HIV infection and AIDS among correctional inmates. Regulations, ethics and procedures." 14 Evaluation Review 5:482-501. Beverly Hills, CA: Sage Publications (October).

Hammett, Theodore M., Patricia Harmon and William Rhodes

2000 The Burden of Infectious Disease Among Inmates and Releasees From Correctional Facilities. Volume II of the National Commission on Correctional Health Care/National Institute of Justice's Report to Congress on the Health Status of "Soon-To-Be-Released" Inmates. Washington, DC.

Hammett, Theodore M., Rebecca Widom, Joel Epstein, Michael Gross, Santiago Sifre and Tammy Enos

1995 1994 Update: HIV/AIDS and STDs in Correctional Facilities. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Hanlon, Thomas E., David N. Nurco, Richard W. Bateman and Kevin E. O'Grady

1998 "The response of drug abuser parolees to a combination of treatment and intensive supervision." 78 The Prison Journal 1:31-44.

Hardy, Owen B., and Lawrence P. Lammers

1986 Hospitals: The Planning and Design Process (second edition). Rockville, MD: Aspen Publishers, Inc.

Harrison, Bernard P.

1973 "A plan to improve health care in our jails." Pp. 50-52 in Proceedings: National Medicolegal Symposium. Las Vegas (March 24).

1996 "In the matter of correctional facilities charging prisoners for health services." 3 Journal of Correctional Health Care 2:109-127.

Harry, Rick, and Fred Shank

1996 "Treating sex offenders." 58 Corrections Today 6:82-85.

Hawkins, Gordon

1976 The Prison: Policy and Practice. Chicago: The University of Chicago Press.

Hayes, Lindsay M.

1995 "Prison suicide: An overview and a guide to prevention." 75 The Prison Journal 4:431-456.

1996 "National and state standards for prison suicide prevention: A report card." 3 Journal of Correctional Health Care 1:5-38.

1998 "Suicide prevention in correctional facilities: An overview." Chapter 21 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Hayes, Lindsay M., and Barbara Kajdan

1981 "And Darkness Closes in . . .": National Study of Jail Suicides. Washington, DC: National Center on Institutions and Alternatives.

Hayes, Lindsay M., and Joseph R. Rowan

1988 National Study of Jail Suicides: Seven Years Later. Alexandria, VA: National Center on Institutions and Alternatives.

Hayward, Cynthia

1985 A Generic Process for Projecting Health Care Space Needs. Washington, DC: American Institute of Architects, Committee for Health.

Health Law Project

1972 "Health care and conditions in Pennsylvania's state prisons." Philadelphia: University of Pennsylvania Law School. Unpublished.

Healton, Edward B.

1981 "The diagnosis and treatment of epilepsy in a prison setting." 1 Journal of Prison and Jail Health 2:134-143.

Helbig, Susan, and Jack A.N. Ellis

1979 Problem Oriented Medical Records in Correctional Health Care. Lansing, MI: Department of Corrections. Distributed by National Commission on Correctional Health Care, Chicago.

Heyman, Budd

1998 "The hospital secure unit." Chapter 9 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Hindelang, Michael J., Michael R. Gottfredson and Timothy J. Flanagan (Eds.)

1981 Sourcebook of Criminal Justice Statistics, 1980. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Hirsch, Amy E.

1999 "Some days are harder than hard." Welfare Reform and Women with Drug Convictions in Pennsylvania. Washington, DC: Center for Law and Social Policy.

Hirschkop, Philip J.

1972 "The rights of prisoners." Pp. 451-468 in Norman Dorsen (Ed.), The Rights of Americans. New York: Vintage Books.

(Holloway), Louis X.

1980 "Prison abolition or destruction is a must!" Pp. 479-482 in Ira P. Robbins (Ed.), Prisoners' Rights Sourcebook: Theory, Litigation, Practice, Volume II. New York: Clark Boardman Company, Ltd.

Hooper, Robert M., and Bruce Wald
1990 "The key program: Drug treatment within a correctional facility." 4 American Jails 3:50-54.

Horner, R.D., and E.S. Barton
1980 "Operant techniques in the analysis and modification of the self-injurious behavior: A review." 1 Behavior Research of Severe Developmental Disabilities 61-91.

Hornung, Carlton A., B. Jaye Anno, Robert B. Greifinger and Soniya Gadre
2000 Health Care for Soon-To-Be-Released Inmates: A Survey of State Prison Systems. Volume II of the National Commission on Correctional Health Care/National Institute of Justice's Report to Congress. Washington, DC.

Hornung, Carlton A., Robert B. Greifinger and Soniya Gadre
2000 A Projection Model of the Prevalence of Selected Chronic Diseases in the Inmate Population. Volume II of the National Commission on Correctional Health Care/National Institute of Justice's Report to Congress. Washington, DC.

Howell, Thomas B., and Thomas Jones Howell [compilers]
2000 A Complete Collection of State Trials and Proceedings for High Treason and Other Crimes and Misdemeanors from the Earliest Period to the Year 1783, with Notes and Illustrations . . . And continued from the Year 1783 to the Present Time. . . . (fifth edition) 1816-1828. Reprint, Buffalo: William S. Hein.

Huffman, Edna K.
1985 Medical Record Management (eighth edition). Berwyn, IL: Physicians' Record Company.

Hufft, Anita G., Lena Sue Fawkes and W. Travis Lawson
1993 "Care of the pregnant offender." Chapter X in Female Offenders: Meeting Needs of a Neglected Population. Lanham, MD: American Correctional Association.

Ignatieff, Michael
1978 A Just Measure of Pain: The Penitentiary in the Industrial Revolution, 1750-1850. New York: Columbia University Press.

Illinois Department of Corrections
1990 "Plan for substance abuse services." Chicago. Unpublished.

1991 "Special needs proposal." Chicago. Unpublished.

Inciardi, James A., Dorothy Lockwood, Steven S. Martin, Anne E. Pottieger and Frank R. Scarpitti
1994 "HIV infection among Delaware prison releasees." 74 The Prison Journal 3:364-370.

Ingalls, Warren J., and T. Fordham Brewer
1988 "Contract health care: A cure for ailing services?" 50 Corrections Today 1:56-58.

Ingram-Fogel, Catherine
1991 "Health problems and needs of incarcerated women." 10 Journal of Prison and Jail Health 1:43-57.

Jamieson, Katherine M., and Timothy J. Flanagan (Eds.)
1987 Sourcebook of Criminal Justice Statistics, 1986. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Jemelka, Ron, Eric Trupin and John A. Chiles
1989 "The mentally ill in prisons: A review." 40 Hospital and Community Psychiatry 5:481-491.

Jenkins, Philip, and Daniel Katkin
1988 "Protecting victims of child sexual abuse: A case for caution." 68 The Prison Journal 2:25-35.

Johnson, Denise
1995 "Child custody issues of women prisoners: A preliminary report from the CHICAS Project." 75 The Prison Journal 2:222-239.

Joint Commission on Accreditation of Healthcare Organizations
1990 Ambulatory Health Care Standards Manual. Oakbrook Terrace, IL.

1993 The Measurement Mandate. Oakbrook Terrace, IL.

1996 Comprehensive Accreditation Manual for Ambulatory Care. Oakbrook Terrace, IL.

2000 2000-2001 Standards for Ambulatory Care. Oakbrook Terrace, IL.

Joint Commission on Correctional Manpower and Training
1969 Manpower and Training in Correctional Institutions. Washington, DC.

1970 Perspectives on Correctional Manpower and Training. Washington, DC.

Jones, A.
1986 "Self-mutilation in prison." 13 Criminal Justice and Behavior 3:286-290.

Jones, David A.
1976 The Health Risks of Imprisonment. Lexington, MA: Lexington Books, D.C. Heath and Company.

Journal of the American Medical Association
1997 "Health agencies update." Volume 28, Number 7:536.

Journal of Correctional Health Care
1998 Special Issue. Compendium of Articles on HIV Care and Incarcerated Women. Volume 5, Issue 2.

Journal of Law, Medicine & Ethics
1999 "Symposium: Death and dying behind bars—Cross-cutting themes and policy imperatives." Volume 27, Issue 3. Boston: American Society of Law, Medicine & Ethics.

Journal of Prison and Jail Health
1992a "Case 4: Correctional training for health professionals." Volume 11, Number 2:86-97 (Winter).

1992b "Special forum: Ethical issues in correctional health care." Volume 11, Number 2.

Kavanagh, Steven J., and Peter M. Yellowlees
1995 "Telemedicine—Clinical applications in mental health." 24 Australian Family Physician 7:1242-1246.

Kay, Susan L.
1991 "The constitutional dimensions of an inmate's right to health care." Chicago: National Commission on Correctional Health Care.

Keamy, Lisa
1998 "Women's health care in the incarcerated setting." Chapter 17 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Kennedy, Daniel B., and Robert J. Homant
1988 "Predicting custodial suicides: Problems with the use of profiles." 5 Justice Quarterly 3:441-456.

Kentucky Public Health Association
1974 "The captive patient: Prison health care." Pp. 142i-142z in the American Bar Association's Medical and Health Care in Jails, Prisons, and Other Correctional Facilities—A Compilation of Standards and Materials. Washington, DC.

King, Lambert N., and Bindu Desai
1979 "An epilepsy program for correctional institutions." Pp. 1-14 in Management of Common Medical Problems in Correctional Institutions: Epilepsy and Tuberculosis. Chicago: National Commission on Correctional Health Care.

King, Lambert N., and George Geis
1977 "Tuberculosis transmission in a large urban jail." 237 Journal of the American Medical Association 8:791-792.

King, Lambert N., and Steven Whitman
1981 "Morbidity and mortality among prisoners: An epidemiological review." 1 Journal of Prison and Jail Health 1:7-29.

King, Lambert N., and Desai Young
1978 "Increased prevalence of seizure disorders among prisoners." 239 Journal of the American Medical Association 2674 (June 23).

Koren, Edward I.
1993 "Status report: State prisons and the courts." 8 The National Prison Project Journal 1 (January).

Kosterlitz, Julie
1989 "Health focus: Random rationing." National Journal 1020 (April 22).

Kramer, Norm
1986 "A treatment program for the developmentally disabled/mentally retarded offender." 66 The Prison Journal 1:85-92.

Kuemmerling, Robert A., and Craig Howell
1990 "1990 rise in prices: Largest increase in eight years." 113 Monthly Labor Review 5:11-20.

Kurtzberg, Richard, Howard Safer and Wallace Mandell
1969 "Plastic surgery in corrections." 33 Federal Probation 3:44-47.

Lachance-McCullough, Malcolm L., James M. Tesoriero, Martin D. Sorin and Claudia Lee
1993 "Correlates of HIV seroprevalence among male New York State prison inmates: Results from the New York State AIDS Institute criminal justice initiative." 12 Journal of Prison and Jail Health 2:103-134.

Lachance-McCullough, Malcolm L., James M. Tesoriero, Martin D. Sorin and Andrew Stern
1994 "HIV infection among New York State female inmates: Preliminary results of a voluntary counseling and testing program." 74 The Prison Journal 2:198-219.

Lamb, Richard H., and Linda E. Weinberger
1998 "Persons with severe mental illness in jails and prisons: A review." 49 Psychiatric Services 4:483-492.

Law Enforcement Assistance Administration
1971 1970 National Jail Census. Washington, DC: U.S. Department of Justice.

1973 Local Jails: A Report Presenting Data for Individual County and City Jails from the 1970 National Jail Census. Washington, DC: U.S. Department of Justice.

1974 "Survey of inmates of local jails 1972: Advance report." Washington, DC: U.S. Department of Justice.

1975 The Nation's Jails. Washington, DC: U.S. Department of Justice.

Lindenauer, Marilyn R., and Jay K. Harness
1981 "Care as part of the cure: An historical overview of correctional health care." 1 Journal of Prison Health 1:56-66.

Lindenauer, Marilyn R., and Richard R. Lichtenstein
1979 The Development of Policy and Procedure Manuals for Correctional Health Care Programs. Lansing, MI: Department of Corrections. Distributed by National Commission on Correctional Health Care, Chicago.

Lion, J.R.
1989 "Intermittent explosive disorder." 3 Treatments of Psychiatric Disorders 2473-2476.

Lipton, Douglas, Robert Martinson and Judith Wilks
1975 The Effectiveness of Correctional Treatment: A Survey of Evaluation Studies. New York: Praeger.

Lopez, Mark, and Kara Chayriques
1994 "Billing prisoners for medical care blocks access." 9 National Prison Project Journal 2:1-2, 17.

Marti, Manual, Jr.
1981 Space Operational Analysis: A Systematic Approach to Spatial Analysis and Programming. West Lafayette, IN: PDA Publishers Corporation.

Martin, Steven S., and James A. Inciardi
1997 "Case management outcomes for drug-involved offenders." 77 The Prison Journal 2:168-183.

Martinez, M.E.
1980 "Manipulative self-injurious behavior in correctional settings: An environmental approach." 4 Journal of Offender Counseling, Services and Rehabilitation 3:275-283.

Martinson, Robert
1974 "What works? Questions and answers about prison reform." 35 Public Interest 22-54.

Maull, Fleet
1991a Dying in Prison: Sociocultural and Psychological Dynamics. Binghamton, NY: Haworth Press, Inc.

1991b "Hospice care for prisoners: Establishing an inmate-staffed hospice program in a prison medical facility." 7 The Hospice Journal 3:43-55.

May, John P. (Ed.)
2000 Building Violence: How America's Rush to Incarcerate Creates More Violence. Thousand Oaks, CA: Sage Publications, Inc.

McCain, Garvin, Verne Cox and Paul B. Paulus
1980 The Effect of Prison Overcrowding on Inmate Behavior. Washington, DC: U.S. Department of Justice, National Institute of Justice.

McCarthy, Belinda, and Robert Langworthy (Eds.)
1989 Older Offenders: Perspectives in Criminology and Criminal Justice. New York: Praeger.

McCarthy, Brian
1985 "Mentally ill and mentally retarded offenders in corrections." Sourcebook on the Mentally Disordered Prisoner. Washington, DC: U.S. Department of Justice, National Institute of Corrections.

McCarthy, John J.
1982 "Contract medical care: Prescription for change." 8 Corrections Magazine 2:6-17.

McDonald, Douglas C.
1995 Managing Prison Health Care and Costs. Washington, DC: U.S. Department of Justice, National Institute of Justice.

McDonald, Douglas C., Andrea Hassol, Kenneth Carlson, Jeffrey McCullough, Elizabeth Fournier and Jennifer Yap
1999 Telemedicine Can Reduce Correctional Health Care Costs: An Evaluation of a Prison Telemedicine Network. Washington, DC: U.S. Department of Justice, National Institute of Justice.

McGaha, Glenda S.
1987 "Health care issues of incarcerated women." 12 Journal of Offender Counseling, Services and Rehabilitation 1:53-60.

McGlynn, Elizabeth A.
1995 "Defining and using outcome measures in mental health: A process to improve quality of care." 7 Focus 2:1-3.

McGraw, Peg, and Walter McGraw
1954 Assignment: Prison Riots. New York: Henry Holt and Company.

McKelvey, Blake
1977 American Prisons: A History of Good Intentions. Montclair, NJ: Patterson Smith.

McKenna, James J., Jr.
1988 "A study of sentenced sexual psychopaths." 68 The Prison Journal 2:36-50.

McShane, Marilyn D.
1989 "The bus stop revisited: Discipline and psychiatric patients in prison." 12 Journal of Psychiatry and the Law 413.

Mecca, Andrew
1995 "Blending policy and research: The California outcomes study." Connection (June). Washington, DC: Foundation for Health Services Research.

Medical Advisory Committee on State Prisons
1971 "Report of the medical advisory committee on state prisons." Pp. 89-104 in the American Bar Association's Medical and Health Care in Jails, Prisons, and Other Correctional Facilities—A Compilation of Standards and Materials. Washington, DC (August 1974).

Medical and Chirurgical Faculty of the State of Maryland
1973 "Report of the Ad Hoc Committee on Medical Care in State Penal Institutions." Pp.142aa-142nn in the American Bar Association's Medical and Health Care in Jails, Prisons, and Other Correctional Facilities—A Compilation of Standards and Materials. Washington, DC.

"Medicine behind bars: Hostility, horror and the Hippocratic oath."
1971 12 Medical World News 23:26-29, 31, 34-35.

Megargee, Edwin I.
1995 "Assessing and understanding aggressive and violent patients." Chapter 27 in J.N. Butcher (Ed.), Clinical Personality Assessment: Practical Approaches. New York: Oxford University Press.

Mehlisch, David F.
1986-87a "Oral health screening—A means to improve dental care in correctional institutions." 6 Journal of Prison and Jail Health 1:62-77.

1986-87b "Using teaching institutions for dental care in correctional facilities." 6 Journal of Prison and Jail Health 2:140-154.

Mendosa, Arthur A.
1969 "Budgeting." Reprinted from Simplified Financial Management in Local Government. Athens: University of Georgia Institute of Government.

Menninger, Karl
1969 The Crime of Punishment. New York: Viking Press.

Messinger, Sheldon L.
1977 "The future of punishment." Pp. 43-44 in Crime and Justice in America. Del Mar, CA: Publisher's, Inc.

Metzner, Jeffrey L.
1997a "An introduction to correctional psychiatry: Part I." 25 Journal of the American Academy of Psychiatry and the Law 3:375-381.

1997b "An introduction to correctional psychiatry: Part II." 25 Journal of the American Academy of Psychiatry and the Law 4:571-579.

1998 "An introduction to correctional psychiatry: Part III." 26 Journal of the American Academy of Psychiatry and the Law 1:107-115.

Miller, Kent S., and Michael L. Radelet
1993 Executing the Mentally Ill. Thousand Oaks, CA: Sage Publications, Inc.

Minshall, Michael E., Daniel J. Dickinson and Mary Lou Fleissner
1993 "Prevalence of syphilis, hepatitis B virus, and human immunodeficiency virus (HIV) infection in new arrestees at the Lake County Jail, Crown Point, Indiana." 12 Journal of Prison and Jail Health 2:135-155.

Mitty, Jennifer A., Leah Holmes, Anne Spaulding, Timothy Flanigan and JoAnne Page
1998 "Transitioning HIV-infected women after release from incarceration: Two models for bridging the gap." 5 Journal of Correctional Health Care 2:239-254.

Moore, Ernest O.
1989 "Prison environments and their impact on older citizens." 13 Journal of Offender Counseling, Services and Rehabilitation 2:175-192.

Moore, Jacqueline M.
1998 "Considering the private sector." Chapter 3 in Kenneth L. Faiver (Ed.), Health Care Management Issues in Corrections. Lanham, MD: American Correctional Association.

1999 Correctional Health Care: Forms, Checklists & Guidelines. Frederick, MD: Aspen Publishers, Inc.

Morrill, Allison C., Elizabeth Mastroieni and Sarah Roskam Leibel
1998 "Behavioral HIV harm reduction programs for incarcerated women: Theory and practice." 5 Journal of Correctional Health Care 2:225-237.

Morris, Norval
1974 The Future of Imprisonment. Chicago: The University of Chicago Press.

Morton, Jean, DeAnn Hughes and Eric Evans
1986 "Individualizing justice for offenders with developmental disabilities: A descriptive account of Nebraska's IJP model." 66 The Prison Journal 1:52-66.

Morton, Joann B.
1992 An Administrative Overview of the Older Inmate. Washington, DC: U.S. Department of Justice, National Institute of Corrections.

Moses, Marilyn C.
1995 Keeping Incarcerated Mothers and Their Daughters Together: Girl Scouts Behind Bars. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Mullen, Joan, Kenneth Carlson and Bradford Smith
1980 American Prisons and Jails, Volume I: Summary of Findings and Policy Implications of a National Survey. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Mullen, Joan, and Bradford Smith
1980 American Prisons and Jails, Volume III: Conditions and Costs of Confinement. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Mumola, Christopher J., and Allen J. Beck
1997 Prisoners in 1996. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Murphy, R. Patrick
1990 "Diagnosing oral, dental, and maxillofacial emergencies." 9 Journal of Prison and Jail Health 1:75-94.

Myers, Pamela J.
1999 "Gauging the effectiveness of a preventive dental program in a large state prison system." 6 Journal of Correctional Health Care 2:207-222.

Nacci, Peter L., Hugh E. Teitelbaum and Jerry Prather
1977 "Population density and inmate misconduct rates in the federal prison system." 41 Federal Probation 2:26-31.

Nackel, John G., and Thomas A. Collier
1989 Implementing a Quality Improvement Program. Cleveland: Ernst & Young.

Nadel, Barbara
1995 "Cutting the costs of jailhouse health care." American City & County 54.

Natarajan, Mangai, and Gregory P. Falkin
1997 "Can corrections operate therapeutic communities for inmates?: The impact on the social environment of jails." 4 Journal of Correctional Health Care 1:19-36.

Nathan, Vincent M.
1985 "Guest editorial." 5 Journal of Prison and Jail Health 1:3-12.

National Advisory Commission on Criminal Justice Standards and Goals

1973 Corrections. Washington, DC: U.S. Department of Justice.

National Alliance for the Mentally Ill

1990 Care of the Seriously Mentally Ill. Washington, DC: Public Research Group.

National Center on Addiction and Substance Abuse

1996 Substance Abuse and the American Woman. New York: Columbia University.

National Commission on Correctional Health Care

1980 Guide for the Care and Treatment of Chemically Dependent Inmates. Chicago.

1984 Standards for Health Services in Juvenile Confinement Facilities. Chicago.

1987a Standards for Health Services in Jails. Chicago.

1987b Standards for Health Services in Prisons. Chicago.

1990 "New Orleans conference to hear experts address aging prison population." 4 CorrectCare 4:1.

1994 "Health care associations join to oppose participation in executions." 8 CorrectCare 2:5.

1995a "Position statement on the administrative management of inmates with HIV positive test results or AIDS." 2 Journal of Correctional Health Care 1:61-65.

1995b "Position statement on competency for execution." 2 Journal of Correctional Health Care 1:75.

1995c "Position statement on DNA analysis." 2 Journal of Correctional Health Care 1:77.

1995d Women's Health Care in Correctional Settings. Chicago.

1996a "Official position statement: Charging inmates a fee for health care services." 3 Journal of Correctional Health Care 2:179-184.

1996b Standards for Health Services in Jails. Chicago.

1997 Standards for Health Services in Prisons. Chicago.

1999a Correctional Mental Health Care: Standards and Guidelines for Delivering Services. Chicago.

1999b Standards for Health Services in Juvenile Detention and Confinement Facilities. Chicago.

1999c "Use of telemedicine technology in correctional facilities." 6 Journal of Correctional Health Care 1:129-135.

National Commission on Correctional Health Care/National Institute of Justice

2000 Report to Congress: The Health Status of Soon-to-be-Released Inmates. Volume I. Washington, DC.

National Commission on Correctional Health Care and the Society of Correctional Physicians

1999 "Joint position statement on licensed health care providers in correctional institutions." Chicago (November 7).

National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research

1976 Report and Recommendations: Research Involving Prisoners. Washington, DC: Department of Health, Education, and Welfare, Publication No. (OS) 76-131.

National Criminal Justice Information and Statistics Service

1980 Sourcebook of Criminal Justice Statistics, 1979. Washington, DC: U.S. Department of Justice.

National Fire Protection Association

1997 Life Safety Code Handbook. Quincy, MA.

National Health Care Practice

1990 13 "The National Practitioner Data Bank." 1:8 Briefing. Washington, DC.

1999a Fact sheet on entity eligibility. Chantilly, VA.

1999b Fact sheet for physicians, dentists, and other health practitioners. Chantilly, VA.

National Institute of Corrections

1985 Sourcebook on the Mentally Disordered Prisoner. Washington, DC: U.S. Department of Justice.

1991 Intervening with Substance-Abusing Offenders: A Framework for Action. The Report of the National Task Force on Correctional Substance Abuse Strategies. Washington, DC: U.S. Department of Justice.

1996 Women Offender Issues: Annotated Bibliography. Longmont, CO: U.S. Department of Justice, National Institute of Corrections Information Center.

1997 "Fees paid by jail inmates: Findings from the nation's largest jails." Longmont, CO: U.S. Department of Justice, National Institute of Corrections Information Center.

National Institute of Justice

1990 1989 Drug Use Forecasting Annual Report. Washington, DC: U.S. Department of Justice.

1993 Construction Cost Indexes. Washington, DC: U.S. Department of Justice.

1996 1995 Drug Use Forecasting Annual Report. Washington, DC: U.S. Department of Justice.

1999a 1998 Annual Report on Cocaine Use Among Arrestees. Washington, DC: U.S. Department of Justice.

1999b 1998 Annual Report on Marijuana Use Among Arrestees. Washington, DC: U.S. Department of Justice.

1999c 1998 Annual Report on Methamphetamine Use Among Arrestees. Washington, DC: U.S. Department of Justice.

1999d 1998 Annual Report on Opiate Use Among Arrestees. Washington, DC: U.S. Department of Justice.

National Prison Hospice Association

no date "Deep in the heart of (East) Texas: The Michael Unit hospice." NPHA News. Boulder, CO.

National Prison Project

1985 Bibliography of Material on "Women in Prison" Contained in National Prison Project Files. Washington, DC.

1990 "Status report: State prisons and the courts." Journal of the National Prison Project 22:7-8, 14-17, 20.

1995 "Status report: State prisons and the courts." Washington, DC.

1999 "Congressman challenges privatization trend." 13 Journal of the National Prison Project 1 & 2:1-2.

National Sheriffs' Association

1974a Inmates' Legal Rights. Washington, DC.

1974b Jail Administration. Washington, DC.

1974c Jail Programs. Washington, DC.

1974d Jail Security, Classification and Discipline. Washington, DC.

1974e Sanitation in the Jail. Washington, DC.

2000 "NSA files amicus curiae brief with Oklahoma Supreme Court against jail privatization." 52 Sheriff 1:52.

Neeley, Connie L., Laura Addison and Delores Craig-Moreland

1997 "Addressing the needs of elderly offenders." Corrections Today (August).

Neisser, Eric

1977 "Is there a doctor in the joint? The search for constitutional standards for prison health care." 83 Virginia Law Review 921:956-957.

New England Journal on Criminal and Civil Confinement
1998 Symposium: Women in Prison. Volume 24, Issue 2:339.

New York State Commission on Quality of Care for the Mentally Disabled
1991 "Inmates with developmental disabilities in New York State correctional facilities." Albany, NY.

New York State Special Commission on Attica
1972 Attica—The Official Report of the New York State Special Commission on Attica. New York: Bantam Books.

New York Times
1997 "In 90s, prison building." (August 8:A-14).

1999 "Prisons brim with mentally ill, study finds." (July 12:A-10).

2000 "States and cities removing prisons from courts' grip." (January 30:A-1).

Newman, Charles L., Barbara R. Price, Jacqueline B. Sobel, Sheldon Adelberg, Marque Bagshaw and Dean Phillips
1976 Local Jails and Drug Treatment. University Park, PA: College of Human Development, The Pennsylvania State University.

North Carolina Department of Corrections
1990 "Draft inmate health care plan." Raleigh: Division of Prisons.

O'Farrell, T.J., and D.S. Goodenough
1981 "Behavioral contracting for repeated suicide attempts." 5 Behavior Modification 2:225-272.

Office of Health and Medical Affairs
1975a Key to Health for a Padlocked Society. Lansing: Michigan Department of Corrections.

1975b Key to Health for a Padlocked Society: A Technical Supplement. Lansing: Michigan Department of Corrections.

Ogle, Robbin S.
1999 "Prison privatization: An environmental catch-22." 16 Justice Quarterly 3:579-600.

O'Leary, William D.
1989 "Custodial suicide: Evolving liability considerations." 60 Psychiatric Quarterly 1:31-72.

Ormes, Walter S., Dean Carlyon, W. Foster Thompson and Melanie Brim
1997 "The measurement of dental disease in a correctional setting and its importance to functional service delivery." 4 Journal of Correctional Health Care 2:105-119.

Ornduff, Jason S.
1996 "Releasing the elderly inmate: A solution to prison overcrowding." 4 Elder Law Journal 173-200.

Palmer, Ted
1975 "Martinson revisited." 12 Journal of Research in Crime and Delinquency 1:133-152.

Pappas, Nick (Ed.)
1972 The Jail: Its Operation and Management. Washington, DC: U.S. Department of Justice, Federal Bureau of Prisons.

Paris, Joseph E.
1989 "Daily self-declared emergencies." Paper presented at the 13th National Conference on Correctional Health Care in Chicago (November).

1990 "The quest for quality management measurements in the correctional setting: Outpatient health care review." 9 Journal of Prison and Jail Health 2:135-154.

1994 "Inmate over-utilization of health care: Is there a way out?" 1 Journal of Correctional Health Care 1:73-90.

1998a "Infirmary care." Chapter 8 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

1998b "Sick call as medical triage." Chapter 7 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

1998c "Care of the impaired and disabled." Chapter 27 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Parrino, Mark W.
2000 "Methadone treatment in jail." 14 American Jails 2:9-12.

Parwatikar, S.D., James J. Williamson and Cynthia McGee
1990 "Treatment of hearing impaired in a psychiatric prison setting." Paper presented at the 14th National Conference on Correctional Health Care in New Orleans (September 18).

Pennsylvania Prison Society
1983 Women in Prison, I. 63 The Prison Journal 2:1-66.

Petersilia, Joan
1997 "Justice for all? Offenders with mental retardation and the California corrections system." 77 The Prison Journal 4:358-380.

Pitman, R.K.
1990 "Self-mutilation in combat-related PTSD." 147 American Journal of Psychiatry 123-124.

Poling, A., K.D. Gadow and J. Cleary
1991 Drug Therapy for Behavior Disorders. Elmsford, NY: Pergamon Press.

Pollack, Daniel
1996 "Legal briefs." 58 Corrections Today 2:194.

Potter, Joan
1980 "Annual population survey: Growth slows, at least for now." 6 Corrections Magazine 2:25-30.

Preiser, Wolfgang F.E., Harvey Z. Rabinowitz and Edward T. White
1988 Post Occupancy Evaluation. New York: Van Nostrand Reinhold Company.

Prendergast, Michael L., Jean Wellisch and Gregory P. Falkin
1995 "Assessment of and services for substance-abusing women offenders in community and correctional settings." 75 The Prison Journal 2:240-256.

Prendergast, Michael L., Jean Wellisch and Mamie Mee Wong
1996 "Residential treatment for women parolees following prison-based drug treatment services." 76 The Prison Journal 3:253-274.

Prendergast, William E.
1991 Treating Sex Offenders in Correctional Institutions and Outpatient Clinics: A Guide to Clinical Practice. New York: Haworth Press.

The President's Commission on Law Enforcement and Administration of Justice
1967a The Challenge of Crime in a Free Society. Washington, DC: U.S. Department of Justice, Law Enforcement Assistance Administration.

1967b Task Force Report: Corrections. Washington, DC: U.S. Department of Justice, Law Enforcement Assistance Administration.

1967c Task Force Report: Drunkenness. Washington, DC: U.S. Department of Justice, Law Enforcement Assistance Administration.

1967d Task Force Report: Narcotics and Drugs. Washington, DC: U.S. Department of Justice, Law Enforcement Assistance Administration.

President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research
1983 Making Health Care Decisions: A Report on the Ethical and Legal Implications of Informed Consent in the Patient-Practitioner Relationship. Washington, DC.

Price, Cheryl
1999 "To adopt or adapt? Principles of hospice care in the correctional setting." NPHA News (Spring). Boulder, CO.

"Prison health care."
1986 XI Corrections Compendium 1:7, 13-14.

The Prison Journal
1991 Special Issue: Women in Prisons and Jails. Volume 75, Number 2.

1993 Special issue: Drug-involved offenders. Volume 73, Numbers 3 and 4.

Pugh, Michael, with Mark Kunkel

1986 "The mentally retarded offenders program of the Texas Department of Corrections." 66 The Prison Journal 1:39-51.

Puisis, Michael (Ed.)

1998 Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Puisis, Michael, and John M. Robertson

1998 "Chronic disease management." Chapter 6 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Quijano, Walter Y.

1990 "Site visit report: Model mental health programs in prisons." Chicago: National Commission on Correctional Health Care. Unpublished.

1993 "Book review: Treating sex offenders' personality traits—Focus on behavior." 12 Journal of Prison and Jail Health 1:33-46.

Raba, Jack

1998 "Mortality in prisons and jails." Chapter 25 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Raba, John M., and Clare Barrett Obis

1983 "The health status of incarcerated urban males: Results of admission screening." 3 Journal of Prison and Jail Health 1:6-24.

Rafter, Nicole Hahn

1985 Partial Justice: Women in State Prisons, 1800-1935. Boston: Northeastern University Press.

1990 "Equal protection forcing changes in women's prisons." 2 Correctional Law Reporter 4:49-52.

Rector, Frank L.

1929 Health and Medical Service in American Prisons and Reformatories. New York: National Society of Penal Information, Inc.

Reiger, W.

1971 "Suicide attempts in a federal prison." 25 Archives of General Psychiatry 465-469.

Resnick, Judith, and Nancy Shaw

1980 "Prisoners of their sex: Health problems of incarcerated women." In Ira Robbins (Ed.), Prisoners' Rights Source Book: Theory, Litigation, and Practice, Volume II. New York: Clark Boardman Co., Ltd.

Rice, Allan F., Larry L. Smith and Fred V. Janzen

2000 "Mental health services and women inmates." 14 American Jails 2:39-42.

Richardson, Stamatia Z.

1998 "Preferred care of the pregnant inmate." Chapter 16 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Rideau, Wilbert, and Billy Sinclair

1983 "The mentally retarded offender." 3 Journal of Prison and Jail Health 2:101-111.

Rieder, Hans L., George M. Cauthen, Gloria D. Kelly, Alan B. Bloch and Dixie E. Snider, Jr.

1989 "Tuberculosis in the United States." 262 Journal of the American Medical Association 3:385-389.

Riley, Pamela J., and Vici McNickle Rose

1980 "Public vs. elite opinion on correctional reform: Implications for social policy." 8 Journal of Criminal Justice 6:345-356.

Robbins, Ira P. (Ed.)

1988 The Legal Dimensions of Private Incarceration. Washington, DC: American Bar Association.

Robert Wood Johnson Foundation

1995 On Dying in America. Princeton, NJ.

1998 "Eldercare: Where medicine, economics, and demographics collide." Quarterly Newsletter, Issue 3:1-2.

Roberts, James S., and Paul M. Schyve
1990 "From QA to QI: The views and role of the Joint Commission." The Quality Letter 9-12.

Robinson, James O., and Gerald Smith
1971 "The effectiveness of correctional programs." 17 Crime and Delinquency 67-80.

Rold, William J.
1988 "Legal developments in the constitutional right to dental care." 7 Journal of Prison and Jail Health 1:8-14.

1992 "Consideration of mental health factors in inmate discipline." 11 Journal of Prison and Jail Health 1:41-49.

1995 "Another perspective on inmate lawsuits." 9 CorrectCare 4:4.

1996 "Charging inmates for medical care: A legal, practical, and ethical critique." 3 Journal of Correctional Health Care 2:129-144.

1997 "An examination of medical necessity and the law." 11 CorrectCare 1:6,14.

1999 "Civil commitment of sexually violent offenders: Some legal, ethical, and practical considerations." 13 CorrectCare 3:6.

Romero, Colin A., and Frederick A. Connell
1988 "A survey of prison policies regarding smoking and tobacco." 7 Journal of Prison and Jail Health 1:27-36.

Rosefield, Herbert A.
1993 "Letter to the editor: The older inmate—Where do we go from here?" 12 Journal of Prison and Jail Health 1:51-58.

Rosen, P.M., W.W. Walsh and S.A. Rode
1990 "Interpersonal loss and self-mutilation." 20 Suicide and Life-Threatening Behavior 2:177-184.

Ross, Robert R., and H. Bryan McKay
1979a "Behavioral approaches to treatment in corrections: Requiem for a panacea." Pp. 694-710 in Sheldon R. Messinger and Egon Bittner (Eds.), Criminology Review Yearbook, Volume I. Beverly Hills, CA: Sage Publications, Inc.

1979b Self-Mutilation. Toronto, Canada: D.C. Heath Company.

Rostenberg, Bill
1986 Design Planning for Freestanding Ambulatory Care Facilities: A Primer for Health Care Providers and Architects. Chicago: American Hospital Association.

Rothman, David J.
1971 The Discovery of the Asylum. Boston: Little, Brown and Company.

Rowan, Joseph R., and Lindsay M. Hayes
1988 Training Curriculum on Suicide Detection and Prevention in Jails and Lockups. Alexandria, VA: National Center on Institutions and Alternatives.

Ruback, R. Barry, and Christopher A. Innes
1988 "The relevance and irrelevance of psychological research (the example of prison crowding)." 43 American Psychologist 9:683-693.

Russell, Marjorie P.
1994 "Too little, too late, too slow: Compassionate release of terminally ill prisoners—Is the cure worse than the disease?" Widener Journal of Public Law 3:799-855.

Ryan, T.A., and James B. Grassano
1993 "Pregnant offenders: Profile and special problems." Chapter IX in Female Offenders: Meeting Needs of a Neglected Population. Lanham, MD: American Correctional Association.

Salive, Marcel E., Gordon S. Smith and T. Fordham Brewer
1989 "Suicide mortality in the Maryland state prison system, 1979 through 1987." 262 Journal of the American Medical Association 3:365-369.

1990 "Death in prison: Changing mortality patterns among male prisoners in Maryland, 1979-87." 80 American Journal of Public Health 12:1479-1480.

Salvato, Joseph A.

1990 Environmental Engineering and Sanitation (fourth edition). Somerset, NJ: John Wiley and Sons, Inc.

Sanders, Roxanne, Anderson Freeman and Laurie Goldman

1998 "Managing the patient with an acute psychiatric condition." Chapter 20 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Sandyk, R.

1988 "Self-mutilation in Tourette's syndrome." 3 Journal of Child Neurology 147-148.

Santa Fe New Mexican

1999a "Bloody Florida execution spurs questions." (July 9:A-3).

1999b "Lower profits trigger hikes in health insurance." (October 30:A-3).

2000 "Report ranks United States 37th in health care." (June 21:A-6).

Santamour, Miles B.

1989 The Mentally Retarded Offender and Corrections. Laurel, MD: American Correctional Association.

Santamour, Miles B., and Bernadette West

1977 The Mentally Retarded Offender and Corrections. Washington, DC: U.S. Department of Justice, Law Enforcement Assistance Administration.

Sapp, Allen D.

1989 "Arrests for major crimes: Trends and patterns for elderly offenders." 13 Journal of Offender Counseling, Services and Rehabilitation 2:19-44.

Schiff, Gordon, and Ronald Shansky

1998 "Challenges of improving quality in the correctional setting." Pp. 12-25 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Schuster, Dwight W.

1980 The Recognition of Jail Inmates with Mental Illness, Their Special Problems and Needs for Care. Chicago: National Commission on Correctional Health Care.

Schwartz, Barbara K. (Ed.), and H.R. "Hank" Cellini

1988 A Practitioner's Guide to Treating the Incarcerated Male Sex Offender: Breaking the Cycle of Sexual Abuse. Washington, DC: U.S. Department of Justice: National Institute of Corrections.

Seidlitz, Anne

1998 "'Fixin' to die': Hospice program opens at LSP-Angola." NPHA News (Spring). Boulder, CO.

Select Committee on Children, Youth and Families

1989 "Hearing summary—The changing face of health care: The movement towards universal access." Washington, DC: U.S. House of Representatives (December).

Selwyn, Peter A., Diana Hartel, Victor A. Lewis, Ellie E. Schoenbaum, Sten H. Vermund, Robert S. Klein, Angela T. Walker and Gerald H. Friedland

1989 "A prospective study of the risk of tuberculosis among intravenous drug users with human immunodeficiency virus infection." 320 The New England Journal of Medicine 9:545-550.

Shansky, Ronald M.

1989 "Identifying and correcting constitutional violations in correctional settings: The role of physician experts." Paper presented at the annual meeting of the American Public Health Association in Chicago (November).

Sheps, Samuel B., Martin T. Schechter and Real G. Prefontaine
1987 "Prison health services: A utilization study." 12 Journal of Community Health 1:4-22. Human Sciences Press.

Shervington, Walter
1974 "Prison, psychiatry and mental health." 4 Psychiatric Annals 3:43, 47-49, 53, 56-57, 60.

Shichor, David, and Dale K. Sechrest
1995 "Quick fixes in corrections: Reconsidering private and public for-profit facilities." 75 The Prison Journal 4:457-478.

Shuter, Jonathan
2000 Public Health Opportunities for the Correctional Intervention on Inmates With Communicable Disease. Volume II of the National Commission on Correctional Health Care/National Institute of Justice's Report to Congress on the Health Status of "Soon-To-Be-Released" Inmates. Washington, DC.

Smirnoff, Meg, and Robert Keith
1983 "Hypertension control in a prison setting." 3 Journal of Prison and Jail Health 1:54-62.

Smith, Roger C.
1988 "Program planning and implementation." Pp. 31-41 in Barbara K. Schwartz (Ed.) and H.R. "Hank" Cellini, A Practitioner's Guide to Treating the Incarcerated Male Sex Offender: Breaking the Cycle of Sexual Abuse. Washington, DC: U.S. Department of Justice, National Institute of Corrections.

Snell, Tracy L.
1992 Women in Jail 1989. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Snell, Tracy L., and Danielle C. Morton
1994 Women in Prison. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

South Carolina Department of Corrections
1972 The Emerging Rights of the Confined. Columbia, SC: The Correctional Development Foundation, Inc.

Spellman, Anthony, and Barbara Heyne
1989 "Suicide? Accident? Predictable? Avoidable? The psychological autopsy in jail suicides." 60 Psychiatric Quarterly 2:173-184.

Spencer, Steven S.
1999 "Standardizing chronic illness care behind bars." 6 Journal of Correctional Health Care 1:41-61.

Start, Armond H.
1988 "Correctional health care programs: Properly designed, properly administered." 50 Corrections Today 1:16-18.

Stead, William W.
1978 "Undetected tuberculosis in prison." 240 Journal of the American Medical Association 23:2544- 2547.

Steadman, Henry J., Stanley Fabisiak, Joel Dvoskin and Edward J. Holohean, Jr.
1987 "A survey of mental disability among state prison inmates." 38 Hospital and Community Psychiatry 10:1086-1090.

Steadman, Henry J., and Bonita M. Veysey
1997 Providing Services for Jail Inmates With Mental Disorders. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Stein, Leslie, and Carl Alaimo
1998 "Psychiatric intake screening." Chapter 18 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Stephan, James J., and Doris J. Wilson
1996 Correctional Populations in the United States. 1994. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Stevens, Jessica, Sally Zierler, Diane Dean, AnneKathryn Goodman, Betsy Chalfen and Anne S. De Groot

1995 "Prevalence of prior sexual abuse and HIV risk-taking behaviors in incarcerated women in Massachusetts." 2 Journal of Correctional Health Care 2:137-149.

Stoltz, Barbara Ann

1997 "Privatizing corrections: Changing the corrections policy-making subgovernment." 77 The Prison Journal 1:92-111.

Swetz, Anthony, Marcel E. Salive, Thomas Stough and T. Fordham Brewer

1989 "The prevalence of mental illness in a state correctional institution for men." 8 Journal of Prison and Jail Health 1:3-16.

Sykes, Gresham M.

1958 The Society of Captives. Princeton, NJ: Princeton University Press.

Sykes, Gresham M., and Sheldon L. Messinger

1971 "Inmate social systems." Pp. 77-85 in Leon Radzinowicz and Marvin E. Wolfgang (Eds.), The Criminal in Confinement. New York: Basic Books, Inc.

Tardiff, Kenneth

1994 "Violence: Causes and non-psychopharmacological treatment." Chapter 60 in Richard Rosner (Ed.), Principles and Practice of Forensic Psychiatry. New York: Chapman & Hall.

Tartaro, Christine

1999 "Reduction of suicides in jails and lock-ups through situational crime prevention: Addressing the needs of a transient population." 6 Journal of Correctional Health Care 2:235-263.

Teplin, Linda A.

1983 "The criminalization of the mentally ill: Speculation in search of data." 94 Psychological Bulletin 54-67.

1990 "The prevalence of severe mental disorder among male urban jail detainees: Comparison with the Epidemiologic Catchment Area Program." 80 American Journal of Public Health 6:663-669.

Teplin, Linda A., Karen M. Abram and Gary M. McClelland

1996 "Prevalence of psychiatric disorders among incarcerated women." 53 Archives of General Psychiatry 505-512.

1997 "Mentally disordered women in jail: Who receives services?" 87 American Journal of Public Health 4:604-609.

Teplin, Linda A., and James Schwartz

1989 "Screening for severe mental disorder in jails." 13 Law and Human Behavior 1.

Texas Department of Corrections

1974 "Medical student externship program." Huntsville, TX.

Texas Department of Corrections and Sam Houston State University

1989 Transferring Special Needs Offenders to Community-Based Programs. Huntsville, TX.

Texas Department of Criminal Justice

1990 A Treatment Program For the Aggressive Mentally Ill Offender. Huntsville, TX. (December).

Thomas, Charles W.

1996 "Correctional privatization: The issues and the evidence." Toronto, Canada: The Fraser Institute.

Thomas, J. William

1979 Information Systems for Correctional Health Care Programs. Lansing, MI: Department of Corrections. Distributed by National Commission on Correctional Health Care, Chicago.

Thomas, Jim

1989 "The 'reality' of prison litigation: Repackaging the data." 15 Criminal and Civil Confinement 27.

Thorburn, Kim Marie
1984 "Self-mutilation and self-induced illness in prison." 4 Journal of Prison and Jail Health 1:40-53.

Tobias, C., D.M. Turns, S. Lippman, R. Pary and T.B. Oropilla
1988 "Evaluation and management of self-mutilation." 81 Southern Medical Journal 10:1261-1263.

Toch, Hans
1982 "The disturbed disruptive inmate: Where does the bus stop?" 10 Journal of Psychiatry and the Law 327.

Torrey, E. Fuller, Joan Steiber, Jonathan Ezekiel, Sidney M. Wolfe, Joshua Sharfstein, John H. Noble and Laurie M. Flynn
1992 Criminalizing the Seriously Mentally Ill: The Abuse of Jails as Mental Hospitals. Washington, DC: Public Citizen's Health Research Group.

Travin, Sheldon
1994 "Sex offenders: Diagnostic assessment, treatment, and related issues." Chapter 75 in Richard Rosner (Ed.), Principles and Practice of Forensic Psychiatry. New York: Chapman & Hall.

Trupin, Eric, Peter N. Wood and Victoria L. Harris
1999 "Mentally ill offenders and community transitions: Resource acquisition and recidivism." 6 Journal of Correctional Health Care 1:27-40.

Tucker, Bonnie P.
1989 "The Americans with Disabilities Act: An overview." University of Illinois Law Review 923.

Twaddle, Andrew C.
1976 "Utilization of medical services by a captive population: An analysis of sick call in a state prison." 17 Journal of Health and Social Behavior 236-248.

U.S. Department of Health and Human Services
1989 Guidelines for Prevention of Transmission of Human Immunodeficiency Virus and Hepatitis B Virus to Health-care and Public-Safety Workers. Washington, DC: National Institute for Occupational Safety and Health.

1990 HIV/AIDS Surveillance Report. Washington, DC (June).

1992 Progress and Issues in Case Management. Washington, DC: Alcohol, Drug Abuse, and Mental Health Administration.

1997 If You Have Hepatitis C. Washington, DC.

U.S. Department of Labor
1998 General Industry Standards, 29 CFR 1910. Washington, DC: Occupational Safety and Health Administration.

U.S. General Accounting Office
1976 Conditions in Local Jails Remain Inadequate Despite Federal Funding for Improvements. Washington, DC: GGD-76-36 (April 5).

1979 Female Offenders: Who Are They and What Are the Problems Confronting Them? Washington, DC.

U.S. Public Health Service
1991 Healthy People 2000: National Health Promotion and Disease Prevention Objectives. Washington, DC: U.S. Department of Health and Human Services.

1997 Food Code. Washington, DC: Food and Drug Administration.

USA Today
1999 "Today's debate: Organ donations." (June 2:A-14).

2000 "Medical spending up." (January 10:6D).

Van Alstyne, William W.
1968 "The demise of the right-privilege distinction in constitutional law." 81 Harvard Law Review 1439-1464.

Vaughn, Michael S., and Allen D. Sapp
1989 "Less than utopian: Sex offender treatment in a milieu of power struggles, status positioning, and inmate manipulation in state correctional institutions." 69 The Prison Journal 2:73-89.

Veneziano, Louis, Carol Veneziano and Charles Tribolet
1987 "The special needs of prison inmates with handicaps: An assessment." 12 Journal of Offender Counseling, Services and Rehabilitation 1:61-72.

Ventura, Lois A., Charlene A. Cassel, Joseph Jacoby and Bu Huang
1998 "Case management and recidivism of mentally ill persons released from jail." 49 Psychiatric Services 10:1330-1337.

Veysey, Bonita M.
1997 "Specific needs of women diagnosed with mental illnesses in U.S. jails." Pp. 368-389 in Women's Mental Health Services: A Public Health Perspective. Thousand Oaks, CA: Sage Publications, Inc.

Veysey, Bonita M., and Gisela Bichler-Robertson
In Press Providing Psychiatric Services in Correctional Settings. Volume II of the National Commission on Correctional Health Care/National Institute of Justice's Report to Congress. Washington, DC.

Von Hirsch, Andrew
1976 Doing Justice: The Choice of Punishments. New York: Hill and Wang.

Walker, Bailus, Jr., and Theodore J. Gordon
1977 "Environmental health needs in correctional institutions." 41 Federal Probation 4:34-38.

1980 "Health and high density confinement in jails and prisons." 44 Federal Probation 1:53-58.

Walsh, B.W., and P.M. Rosen
1988 Self-Mutilation. New York: Guilford Press.

Walsh, C. Eamon
1989 "The older and long term inmate growing old in the New Jersey prison system." 13 Journal of Offender Counseling, Services and Rehabilitation 2:215-248.

Walton, Mary
1986 The Deming Management Method. New York: Putnam Publishing Group.

1990 Deming Management at Work. New York: G.P. Putnam's Sons.

Washington Post
1999 "Old men behind bars." (July 25:B-8).

Weiland, Carolyn
1996 "Fee-for-service programs: A literature review and results of a national survey." 3 Journal of Correctional Health Care 2:145-158.

Weiner, Janet, and B. Jaye Anno
1992 "The crisis in correctional health care: The impact of the National Drug Control Strategy on correctional health services." 117 Annals of Internal Medicine 1:71-77.

Weinstein, Henry C.
1989 "Psychiatric services in jails and prisons: Who cares?" 146 American Journal of Psychiatry 9:1094-1095.

Weisman, Andrea
1998 "Mental health outpatient services in correctional settings." Chapter 19 in Michael Puisis (Ed.), Clinical Practice in Correctional Medicine. St. Louis: Mosby.

Welch, Patrick J., and Gerry F. Welch
1986 Economic Theory and Practice (second edition). CBS College Publishing.

Wellisch, Jean, Michael L. Prendergast and M. Douglas Anglin
1994 "Jail: A found opportunity for intervening with drug-abusing pregnant women." 1 Journal of Correctional Health Care 17-38.

Wilcock, Karen, Theodore M. Hammett, Rebecca Widom and Joel Epstein
1996 Tuberculosis in Correctional Facilities 1994-95. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Wilkins, Leslie T.
1975 "Putting 'treatment' on trial." 5 The Hastings Center Report 1:35-36, 39-48.

Williams, Elizabeth Friar
1996 "A tie that binds—Fostering the mother-child bond in a correctional setting." 58 Corrections Today 6:80-81.

Williams, Walter W.
1983 CDC Guidelines for Infection Control in Hospital Personnel. Atlanta: Centers for Disease Control (July).

Winner, Ellen
1981 "An introduction to the constitutional law of prison medical care." 1 Journal of Prison Health 1:67-84.

Wishart, Margaret D., and Nancy N. Dubler
1983 Health Care in Prisons, Jails and Detention Centers: Some Legal and Ethical Dilemmas. Bronx, NY: Department of Social Medicine, Montefiore Medical Center.

Woodson, Robert N., and Russell O. Settle, Sr.
1971 The Clinical Services of the Kansas Penal System. The Governor's Committee on Criminal Administration. Pp. 142a-142h in the American Bar Association's Medical and Health Care in Jails, Prisons, and Other Correctional Facilities—A Compilation of Standards and Materials. Washington, DC (August 1974).

Wright, Erik Olin
1973 "Prison reform and radical change." Pp. 313-346 in The Politics of Punishment: A Critical Analysis of Prisons in America. New York: Harper Colophon Books.

Zald, Mayer N.
1968 "Power balance and staff conflict in correctional institutions." Pp. 397-425 in Lawrence E. Hazelring (Ed.), Prison within Society: A Reader in Penology.

Zalman, Marvin
1972 "Prisoners' rights to medical care." 63 Journal of Criminal Law, Criminology and Police Science 2:185-189.

Zarate, Carlos A., Jr., Lisa Weinstock, Peter Cukor, Cassandra Morabito, Linda Leahy, Craig Burns and Lee Baer
1997 "Applicability of telemedicine for assessing patients with schizophrenia: Acceptance and reliability." 58 Journal of Clinical Psychology 1:22-25.

2. COURT CASES

Ancata v. Prison Health Services, 769 F.2d 700 (11th Cir. 1985).

Balla v. Idaho Board of Corrections, 595 F. Supp. 1558 (D. Idaho 1984).

Ballard v. Woodard, 641 F. Supp. 432 (W.D.N.C. 1986).

Bell v. Wolfish, 441 U.S. 520 (1979).

Berrios-Berrios v. Thornburg, 716 F. Supp. 987 (E.D. Ky. 1989).

Bishop v. Stoneman, 508 F.2d 1224 (2d Cir. 1974).

Boswell v. Sherburne County, 849 F.2d 1117 (10th Cir. 1988).

Burks v. Teasdale, 492 F. Supp. 650 (W.D. Mo. 1980).

Casey v. Lewis, 834 F. Supp. 1477, 1483–84 (D. Ariz. 1993).

Cates v. Ciccone, 422 F.2d 926 (8th Cir. 1970).

City of Revere v. Massachusetts General Hospital, 463 U.S. 239 (1983).

Commissioner of Correction v. Myers, 399 N.E.2d 452 (Mass. 1979).

Coppinger v. Townsend, 398 F.2d 392 (10th Cir. 1968).

Cruzan v. Missouri Department of Health, 497 U.S. 261 (1990).

Cummings v. Roberts, 628 F.2d 1065 (8th Cir. 1980).

Davis v. District of Columbia, 158 F.3d 1342 (D.C. Cir. 1998).

Dean v. Coughlin, 623 F. Supp. 392, 404 (S.D.N.Y. 1985).

Delker v. Maass, 843 F. Supp. 1390, 1400 and n. 6 (D. Or. 1994).

Doe v. City of New York, 15 F.3d 264 (2d Cir. 1994).

Doe v. Coughlin, 697 F. Supp. 1234 (N.D.N.Y. 1988).

Duckworth v. French, 68 U.S.L.W. 3116 (1999).

Dunn v. White, 880 F.2d 1188 (10th Cir. 1989).

Duran v. Anaya, 642 F. Supp. 510, 524 (D.N.M. 1986).

Eng v. Kelly, Civ. 80-0385T (W.D.N.Y., January 27, 1987).

Estelle v. Gamble, 429 U.S. 97 (1976).

Farmer v. Brennan, 511 U.S. 825 (1994).

Fields v. Gander, 734 F.2d 1313 (8th Cir. 1984).

Finney v. Arkansas Board of Corrections, 505 F.2d 194 (8th Cir. 1974).

Ford v. Wainwright, 477 U.S. 699 (1986).

Foster v. Fulton County, 99-CV-0900 (N.D. Ga. 1999).

Gates v. Collier, 501 F.2d 1291 (5th Cir. 1970).

Glick v. Henderson, 885 F.2d 536 (8th Cir. 1988).

Green v. Carlson, 581 F.2d 669 (2d Cir. 1978), aff'd, 446 U.S. 14 (1980).

Grubbs v. Bradley, 821 F. Supp. 496 (M.D. Tenn. 1993).

Guthrie v. Evans, Vol. I. Civ. A: No. CV 3068 1st Report of the Special Monitor (S.D. Ga., Savannah Div., 1987).

Haggerty v. Wainwright, 427 F.2d 1137 (5th Cir. 1970).

Hamilton v. Landrieu, 351 F. Supp. 549 (E.D. La. 1972).

Harris v. Thigpen, 727 F. Supp. 1564 (M.D. Ala. 1990).

Holt v. Hutto, 363 F. Supp. 194 (E.D. Ark. 1973).

Holt v. Sarver, 309 F. Supp. 362 (E.D. Ark. 1970).

Hopper v. Davis, 171 F.3d 1289 (11th Cir. 1999), *cert. denied sub nom. Davis v. Hopper,* 120 S. Ct. 931 (2000).

Hoptowit v. Ray, 682 F.2d 1237 (9th Cir. 1982).

Hughes v. Turner, 14 Utah 2d 128 (1963).

Jacobson v. Massachusetts, 197 U.S. 11 (1905).

Johnson v. Bowers, 884 F.2d 1053 (8th Cir. 1989).

Johnson v. Hardin County, 908 F.2d 1280 (6th Cir. 1990).

Johnson-El v. Schoemehl, 878 F.2d 1043 (8th Cir. 1989).

Jones v. Johnson, 781 F.2d 769 (9th Cir. 1986).

Kansas v. Hendricks, 521 U.S. 346 (1997).

Kelley v. McGinnis, 899 F.2d 612 (7th Cir. 1990).

Knecht v. Gillman, 488 F.2d 1136 (8th Cir. 1973).

Krist v. Smith, 309 F.Supp. 497 (S.D. Ga. 1970), *aff'd,* 439 F.2d 146 (5th Cir. 1971).

Langley v. Coughlin, 888 F.2d 252 (2d Cir. 1989).

Lightfoot v. Walker, 486 F. Supp. 504 (S.D. Ill. 1980).

Louisiana v. Perry, 610 So.2d 746 (1992).

Martinez v. Mancusi, 443 F.2d 1192 (2d Cir. 1970).

Mills v. Oliver, 366 F. Supp. 77 (E.D. Va. 1973).

Mitchell v. Aluisi, 872 F.2d 577 (4th Cir. 1989).

Monmouth County Correctional Institution Inmates v. Lanzaro, 834 F.2d 326 (3d Cir. 1987).

Morales Feliciano v. Rosello Gonzalez, 13 F. Supp. 2d 151 (D.P.R. 1998).

Newman v. Alabama, 349 F. Supp. 285 (M.D. Ala. 1972), *aff'd,* 503 F.2d 1320 (5th Cir. 1974); cert. denied, 421 U.S. 948 (1975).

O'Connor v. Donaldson, 422 U.S. 563 (1975).

Pennsylvania Department of Correctional v. Yeskey, 524 U.S. 206 (1998).

People ex rel. Reed v. Scully, 140 Misc. 2d 379, 531 N.Y.S.2d 196 (Sup. Ct. 1988).

Perry v. Louisiana, 498 U.S. 538 (1992).

Powell v. Schriver, 175 F.3d 107 (2d Cir. 1999).

Price v. Johnson, 364 U.S. 266 (1948).

Pugh v. Locke, 406 F. Supp. 318 (M.D. Ala. 1976).

Ramos v. Lamm, 639 F.2d 559, 575 (10th Cir. 1980).

Ramsey v. Ciccone, 305 F. Supp. 600 (W.D. Mo. 1970).

Reynolds v. Wagner, 930 F. Supp. 1216, 1222 (E.D. Pa. 1996).

Rhem v. Malcolm, 507 F.2d 333 (2d Cir. 1974).

Rhodes v. Chapman, 452 U.S. 337, 343 (1981).

Rivers v. Katz, 67 N.Y.2d 485, 504 N.Y.S.2d 74 (1986).

Robinson v. California, 370 U.S. 660 (1962).

Rogers v. Evans, 792 F.2d 1052 (11th Cir. 1986).

Ruffin v. Commonwealth, 62 Va. (21 Gratt.) 790 (1871).

Ruiz v. Estelle, 503 F. Supp. 1265 (S.D. Tex. 1980), *aff'd in part and rev'd in part,* 679 F.2d 1115 (5th Cir. 1982), *am. in part, vac. in part,* 688 F.2d 266 (5th Cir. 1982), *cert. denied,* 460 U.S. 1042 (1983).

Sanders v. Elyea, 1998 WL 67615 (N.D. Ill. 1998).

Schloendorff v. Society of New York Hospitals, 211 N.Y. 125, 129 (1914).

Smith v. Jenkins, 919 F.2d 90 (8th Cir. 1990).

Snow v. Gladden, 338 F.2d 999 (9th Cir. 1964).

Spicer v. Williamson, 191 N.C. 487, 490 (1926).

State ex rel. White v. Narick, 292 S.E.2d 54 (W.Va. 1982).

Steward v. Henderson, 364 F. Supp. 283 (N.D. Ga. 1973).

Tarasoff v. Regents of the University of California, 551 P.2d 334, 337 (Cal. 1976).

Thomas v. Pate, 493 F.2d 151 (7th Cir. 1974).

Thompson v. City of Los Angeles, 885 F.2d 1439 (9th Cir. 1989).

Tillery v. Owens, 719 F. Supp. 1256, 1286 (W.D. Pa. 1989), aff'd, 907 F.2d 418 (3d Cir. 1990).

Todaro v. Ward, 431 F. Supp. 1129 (S.D. N.Y.), aff'd, 565 F.2d 48, 54 n. 7 (2d Cir. 1977).

Tumath v. County of Alameda, 1996 WL 660611 (N.D. Cal. 1996).

United States v. Michigan, 680 F. Supp. 928 (W.D. Mich. 1987).

Vitek v. Jones, 445 U.S. 480 (1980).

Washington v. Harper, 494 U.S. 210 (1990).

Wayne County Jail Inmates v. Lucas, 216 N.W.2d 910 (Mich. 1974).

Wells v. Franzen, 777 F.2d 1258, 1264-65 (7th Cir. 1985).

West v. Atkins, 487 U.S. 42, 57 n. 15, (1988).

West v. Keve, 541 F. Supp. 534 (D. Del. 1982).

White v. Napoleon, 897 F.2d 103, 113 (3d Cir. 1990).

Williams v. Ceorlock, 993 F. Supp. 1192 (C.D. Ill. 1998).

Williams v. Vincent, 508 F.2d 541, 544-45 (2d Cir. 1974).

Willis v. White, 310 F. Supp. 205 (E.D. La. 1970).

Wilson v. Seiter, 501 U.S. 294 (1991).

Woods v. White, 689 F. Supp. 874 (W.D. Wisc. 1988).

Zaire v. Dalsheim, 698 F. Supp. 57 (S.D. N.Y. 1988).

Zant v. Prevette, 248 Ga. 832, 286 S.E.2d 715 (1982).

Zehner v. Trigg, 133 F.3d 459 (7th Cir. 1997).

Health Summary for Classification, Texas Department of Criminal Justice

Appendix A

TDCJ HEALTH SERVICES DIVISION POLICY MANUAL	Effective Date: 8/97	NUMBER: A-08.4
	Reviewed: 1/99	
	Replaces: 3-11	Page 1 of 1
	Formulated: 8/87	
OFFENDER MEDICAL AND MENTAL HEALTH CLASSIFICATION		

PURPOSE: To provide a standardized system of classifying the medical and/or mental health limitations for the offender population incarcerated within the Texas Department of Criminal Justice (TDCJ).

POLICY: Each offender incarcerated within the TDCJ shall be medically and mentally assessed in relation to their housing, work assignment, disciplinary process, individual treatment plan, and transportation needs. Any limitation will be indicated on the Health Summary for Classification.

PROCESS:

I. Each offender will be medically and mentally assessed by trained health services personnel during the intake process and appropriate limitations entered on the Health Summary for Classification screen. Updates will be made whenever there are significant status changes with the offender's medical or mental status.

II. Any restrictions regarding an offender's housing, work, disciplinary process, individual treatment plan, and transportation requirements will be appropriately documented in their medical records.

III. Medical and psychiatric diagnoses will be assigned appropriate alert codes and input onto the agency's data processing system in a timely manner. (Reference: Health Services Data Processing Manual.)

Reference: NCCHC Standard P-08, Communication on Special Needs Patients (essential)

ATTACHMENT A
POLICY #A-08.4

GUIDELINES FOR COMPLETING THE HEALTH SUMMARY FOR CLASSIFICATION FORM

The purpose of the "Health Summary" form is to provide medical and mental health information for each offender to assist the classification committee in making appropriate assignments. Unit housing, work and transportation restrictions must be based upon orders by a physician, mid-level practitioner, dentist, or psychiatrist and are entered into the HSM-18 computer program. Disciplinary, ITP and mental health restrictions may be based upon recommendation of a psychologist, nurse, physician or mid-level practitioner. Reference the HSM-18 users guide for data entry instructions.

The specific information to be placed in each item of the form is described below:

I. **Facility Assignment** -- The following facility assignments are requested by E-form through the office of the TDCJ Health Services Liaison.

A. **No Restrictions** -- In terms of health consideration, the offender can be placed on any facility in the system. (This is the default selection).

B. **Regional Medical Facility (RMF)** -- This means that the offender requires secondary (specialty) care, which is not available at all units.

C. **Extended Care Facility** -- Designated only by Utilization Review.

D. **Mental Health Care Facility** -- For offenders needing acute inpatient psychiatric care, mentally retarded sheltered care, or treatment in the aggressive mentally ill offender program.

E. **Barrier-Free Facility** -- This category is intended for wheelchair bound offenders and must be approved by the Clinical Director of PHOP.

F. **Single Level Facility** -- This category is for offenders who are physically unable to climb stairs and are therefore unable to access approved programs on a multi-level unit. This category is approved by the Clinical Director of PHOP.

G. **Suitable for Trustee Camp Assignment** -- Answer this question based on the offender's ability to live in housing removed from the main facility.

H. **Suitable for SAIP facility** -- Offenders must be able to participate in strenuous physical activity and not require chronic medical attention.

II. **Housing Assignments** - Information to complete these categories should be obtained from the physical exam, doctor's orders, and/or the Individualized Treatment Plan.

A. **Basic Housing**

1. **No restrictions** -- This means that from a health standpoint, the offender can be assigned to any available housing.

2. **Single Cell Only** -- The following types of offenders must be single celled:

   a. physically handicapped offenders as recommended by their Individualized Treatment Plan;

   b. offenders at MROP facilities as recommended by their ITP;

   c. mental health patients at the recommendation of the treating psychiatrist or psychiatric mid-level practitioner.

3. **Double Cell Only** -- For certain categories of mental health patients, single celling is contraindicated. For example, individuals who are potentially suicidal or who are extremely withdrawn or depressed or those who have a loss of contact with reality should not be isolated in a single cell.

4. **Special Housing** -- (Housing with patient with like medical condition). See Infection Control Manual. This designation must be entered on all patients who meet the criteria contained in the Infection Control Manual. This is not a housing type (cell block vs. dorm) instruction to classification. This notifies unit classification that if for security reasons an offender must be housed on a cell block and he/she meets specific classification guidelines, that a suitable housing partner must be located by communicating with Health Services.

5. **Cell Block Only** -- For offenders who are psychiatrically inappropriate for dormitory housing.

B. **Bunk Assignment**

1. **No Restrictions** -- This means the offender can be assigned either the upper or lower bunk.

2. **Lower Only** -- This category should be used for anyone whose medical condition makes it difficult to climb into an upper bunk. Examples include small stature, anyone who is feeble or infirm due to age or a condition such as arthritis, amputation, paraplegia, epilepsy, sensory disturbances, obesity, enuresis, significant back pathology (e.g. grade 2 or > spondylolisthesis, symptomatic post surgical pain, etc.), significant CV or Respiratory Disease, etc. (This restriction impacts heavily on facility operations and should be used judiciously).

C. **Row Assignments**

1. **No Restrictions** -- This means the offender can be placed on any row.

2. **Ground Floor Only** -- This category should be used for individuals whose medical or mental health condition makes it difficult (or contraindicated) for them to climb stairs or live on a higher row. Examples include offenders whose condition requires a wheel chair, walker, or two crutches; bilateral lower extremity prostheses: severe lower extremity instability without prescription brace; severe CHF and/or CAD with moderate to severe angina; and/or severe COPD (requires respiratory therapy consultation).

ATTACHMENT A
POLICY #A-08.4
Page 3

III. Work Assignment/Restrictions

A. These categories are intended to reflect restrictions of six days or longer.

B. Indicate all of the following work restrictions that apply:

1. **Medically Unassigned** -- This means the offender should not be given a regular work assignment due to a medical condition. (Offender may attend school).

2. **Psychiatrically Unassigned** -- This means the offender should not be given a regular work assignment due to mental illness. (Offender may attend school).

3. **Sedentary Work Only** -- Assign to work that is limited to a seating position and that does not require strenuous activity.

4. **Four Hour Work Restriction** -- May be assigned to any job commensurate with HSM-18 work restrictions for four hours only. The offender may be then assigned to sedentary work for the remainder of the shift.

5. **Four Hour Limited Work Restriction** -- May be assigned to any job commensurate with HSM-18 work restrictions for four hours daily only.

6. **Excuse From School** -- May not attend regular schooling due to medical or mental health conditions.

7. **Limited Standing** -- Assign to work where offender may elevate lower extremities for 10 minutes each hour. If stricter limitations are necessary, consider "Sedentary Work Only".

8. **No Walking > ___ yards** -- Indicate general distances (50, 100, 1000, etc.) which an offender should not exceed on the job due to physical limitations. This number should not be less than the distance required to sustain activities of daily living (distance to chow hall, shower, medical department.)

9. **No Lifting > _ lbs.** -- Indicate the number of pounds the offender can safely lift in light of an existing physical impairment.

10. **No Bending at Waist** -- Assign to work not requiring repetitive or frequent bending at waist. This applies to individuals with severe obesity, back problems, vertigo, etc.

11. **No Squatting** -- Assign to work not requiring repetitive or frequent bending of the knees. This applies to individuals with arthritis, internal derangements of the knee, etc.

12. **No Climbing** -- Assign to work not requiring the use of stairs, ladders, step stools, scaffolding, or steep inclines. This applies to individuals with unstable cardiovascular or pulmonary disease, joint problems, seizure disorders, etc.

ATTACHMENT A
POLICY #A-08.4
Page 4

13. **Limited Sitting** -- Assign to work where prolonged sitting is not required. This applies to individuals with hemorrhoidal disease, fractured coccyx, etc.

14. **No Reaching Over Shoulders** -- This applies to individuals with upper extremity functional restrictions, dislocations, etc.

15. **No Food Service** -- This applies to individuals with diseases that could be transmitted via food products. Consult the office of Preventive Medicine as needed.

16. **No Repetitive Use of Hands** -- Restrict from work requiring grasping, typing, pulling, etc. This applies to individuals with multiple digit amputations, joint problems, carpal tunnel syndrome, etc.

17. **No Walking on Wet, Uneven Surfaces** -- Restrict from work on slippery, sticky, or uneven surfaces.

18. **Do Not Assign to Medical** --This applies to individuals who could be compromised by working around medically contaminated matter.

19. **No Work in Direct Sunlight** -- This applies to individuals with vitiligo, photophobia, or who are taking medications that predispose them to sunlight reactions.

20. **No Temperature Extremes** -- This applies to individuals with a history of heat stroke, Renaud's Phenomenon, medication sensitivities, etc.

21. **No Humidity Extremes** -- Restrict from work requiring exposure to very dry or very moist air. This applies to individuals with asthma.

22. **No Exposure to Environmental Pollutants** -- Restrict from work in areas of high concentration of pollen or dust. This applies to individuals with susceptible allergic rhinitis or reactive airway disease. This restriction is to be used based solely on individual symptomatology and is not intended for all asthmatics.

23. **No Work With Chemicals or Irritants** -- Restrict from work exposure to identified irritants such as poison ivy, detergents and irritating fumes, smoke or chemicals. (Water is considered an irritant if prolonged exposure produces extreme skin reaction or disease.)

24. **No Work Requiring Safety Boots.**

25. **No Work Around Machines With Moving Parts** -- This applies to individuals with seizure disorder or any condition (disease or pharmaceutically induced) which could impair alertness.

26. **No Work Exposure to Loud Noises** -- This applies to individuals who require strict hearing conservation measures, individuals with anxiety disorders, etc.

27. **No Work Requiring Complex Instructions** -- This applies to intellectually impaired offenders.

ATTACHMENT A
POLICY #A-08.4
Page 5

IV. Disciplinary Process:

A. **No restrictions** -- This means that no special consideration needs to be made for health reasons prior to a disciplinary action being taken.

B. Consult representative of mental health department before taking disciplinary action -- This category should be checked for diagnosed psychiatric patients, mentally retarded offenders and for individuals with certain psychological problems such as suicidal offenders at the discretion of the mental health team.

V. **Individualized Treatment Plan** - This is the classification committee process which identifies areas of treatment, schooling, vocational training and job plan best suited to the individual rehabilitative effort. This treatment plan can be greatly impacted for offenders with significant physical or mental limitations (e.g., mobility, endurance, environmental or cognitive impairments).

A. No Restriction -- having no medical or mental health conditions requiring planning input.

B. Medical Representative Required -- due to significant medical restrictions, input is required.

C. Mental Health Representative Required -- due to significant mental illness, input is required.

VI. **Transportation Restrictions**

A. No Restriction -- In terms of physical limitations, the offender may be transported routinely.

B. EMS Ambulance -- This applies to offenders with chronic medical/physical conditions that require skilled medical attendants during transport. This does not apply to acute conditions requiring urgent/emergent transportation.

C. Wheelchair Van -- This applies to offenders who are wheelchair confined and can sit up unattended during routine transfers.

D. Van (Southern Region Only) -- This applies to the established van transportation system in the Southern Region for enfeebled offenders in the southern region who by doctor's order require expeditious transfers between the sending facility and Hospital/Galveston for scheduled specialty clinic appointments.

Reviewed 1/99

TEXAS DEPARTMENT OF CRIMINAL JUSTICE
INSTITUTIONAL DIVISION

HEALTH SUMMARY FOR CLASSIFICATION

UNIT NAME: _____ HT _____

INMATE NAME: _____ WT _____

TDCJ ID#: _____

P	U	L	H	E	S

IF RESTRICTIONS ARE TEMPORARY, CHECK ONE: DURATION: A.__14 Days B.__30 Days C.__60 Days D.__90 Days

I. UNIT OF ASSIGNMENT (CHECK ONE)

____ A. NO RESTRICTION
____ B. REGIONAL MEDICAL FACILITY
____ C. EXTENDED CARE FACILITY
____ D. PSYCHIATRIC CARE FACILITY
____ E. BARRIER-FREE FACILITY
____ F. SINGLE LEVEL FACILITY

SUITABLE FOR TRUSTEE CAMP ASSIGNMENT? ____YES ____NO
SUITABLE FOR SAIP FACILITY? ____YES ____NO

II. HOUSING ASSIGNMENT

A. BASIC HOUSING (CHECK ONE)

____ 1. NO RESTRICTION
____ 2. SINGLE CELL ONLY
____ 3. DOUBLE CELL ONLY
____ 4. SPECIAL HOUSING (HOUSING WITH PATIENT WITH LIKE MEDICAL CONDITION)
____ 5. CELL BLOCK ONLY

B. BUNK ASSIGNMENT (CHECK ONE)

____ 1. NO RESTRICTION
____ 2. LOWER ONLY

C. ROW ASSIGNMENT (CHECK ONE)

____ 1. NO RESTRICTION
____ 2. GROUND FLOOR ONLY

III. WORK ASSIGNMENT/RESTRICTIONS (CHECK ALL THAT APPLY)

____ 1. MEDICALLY UNASSIGNED
____ 2. PSYCHIATRICALLY UNASSIGNED
____ 3. SEDENTARY WORK ONLY
____ 4. FOUR HOUR WORK RESTRICTION
____ 5. FOUR HOUR LIMITED WORK RESTRICTION
____ 6. EXCUSE FROM SCHOOL
____ 7. LIMITED STANDING
____ 8. NO WALKING > ___YARDS
____ 9. NO LIFTING > ___LBS.
____ 10. NO BENDING AT WAIST
____ 11. NO SQUATTING
____ 12. NO CLIMBING
____ 13. LIMITED SITTING
____ 14. NO REACHING OVER SHOULDERS
____ 15. NO FOOD SERVICE WORK
____ 16. NO REPETITIVE USE OF HANDS
____ 17. NO WALKING ON WET UNEVEN SURFACES
____ 18. DO NOT ASSIGN TO MEDICAL
____ 19. NO WORK IN DIRECT SUNLIGHT
____ 20. NO TEMPERATURE EXTREMES
____ 21. NO HUMIDITY EXTREMES
____ 22. NO EXPOSURE TO ENVIRONMENTAL POLLUTANTS
____ 23. NO WORK WITH CHEMICALS OR IRRITANTS
____ 24. NO WORK REQUIRING SAFETY BOOTS
____ 25. NO WORK AROUND MACHINES WITH MOVING PARTS
____ 26. NO WORK EXPOSURE TO LOUD NOISES
____ 27. NO WORK REQUIRING COMPLEX INSTRUCTIONS

IV. DISCIPLINARY PROCESS (CHECK ONE)

____ A. NO RESTRICTIONS
____ B. CONSULT REPRESENTATIVE OF MENTAL HEALTH DEPARTMENT BEFORE TAKING DISCIPLINARY ACTION

V. TRANSPORTATION RESTRICTIONS (CHECK ONE)

____ A. NO RESTRICTION
____ B. EMS AMBULANCE
____ C. WHEELCHAIR VAN
____ D. VAN (SOUTHERN REGION ONLY)

_____ _____
PRINTED NAME AND TITLE OF REVIEWER DATE SIGNATURE OF REVIEWER

HSM - 18 (REV. 9/92)

Organizational Structure of Health Services in Selected Departments of Correction

Appendix B

Organizational Structure of Health Services in Selected State Departments of Correction*

Arizona

The deputy director of health services for the Arizona Department of Corrections (DOC) is a physician who reports to the director of the DOC. The deputy director oversees medical, dental, and mental health services. Ten facility health administrators report to the deputy director and have line authority over the unit health staff. Three private prisons operate within the state and provide health care for inmates housed there. Two regional health staff monitor health staff at specific units. The health services central office has a total of 44 staff.

District of Columbia

Health services in the District of Columbia DOC are under the direction of a physician with a master's degree in public health. The medical director is responsible for medical, dental, and mental health care and reports to the director of the DOC. There are 15 full-time equivalent (FTE) staff in health services in the central office. The person in charge of health services at the central office has line authority over the health staff in the prison units.

Federal Bureau of Prisons

A corrections administrator is in charge of the Health Services Division and reports to the director of the federal Bureau of Prisons (BOP). The separate Correctional Programs Division manages the mental health services and is directed by a corrections administrator who also reports to the director of the bureau. Health staff in the prisons report to six regional directors who report to the director. The central office has 63 FTE health services staff. Of the 94 prisons in BOP, 2 are operated by private firms, and 1 additional facility uses a private provider to deliver health services. The remaining prisons are operated by BOP personnel.

Florida

Five of Florida's 60 prisons are operated by private firms, and health services in 10 more facilities are contracted to private providers whose contracts cover medical, dental, and mental health care as well as psychiatric services.[1] These contracts are monitored by DOC employees. The Florida system's health services director is a physician to whom the director of mental health services reports. The statewide medical director has line responsibility for the employees who work in individual institutions and reports directly to the secretary of the DOC. There are 4 regional and 49 FTE central office health services staff.

Idaho

Comprehensive health services in Idaho's seven prisons are provided by an outside contract firm with a physician medical director who reports to

*Information as of fall 1999 compiled by Judi Chavez from a survey conducted by B. Jaye Anno for the National Commission on Correctional Health Care.

the administrator of institutional services. Mental health services are directed by the medical director and a contract psychiatrist. All the individuals who provide health services at the institutions are employees of the private contractor, with the exception of some psychologists who are state employees and report to deputy wardens.

KANSAS

Health services in all eight Kansas institutions are contracted to a single for-profit firm. The contract includes medical, dental, psychiatric, and other mental health services.[2] The deputy secretary of corrections oversees health services operations and reports to the secretary of corrections. The deputy secretary does not have line authority over the health staff working in the prison units because they are contract personnel. There are 3.5 FTE staff employed in the central office and 8.5 FTE staff employed in regional health services.

MARYLAND

With the exception of some state staff who provide mental health care, the health service system of the Maryland DOC is contracted to private, for-profit firms. A physician serves as the medical director and reports to the director of the health services section who reports to the secretary of the DOC. A psychiatrist/administrator is in charge of mental health services and reports directly to the secretary. Seven regional health services staff supervise/monitor health staff at specific prison units, and 20 health staff work in the central office.

MASSACHUSETTS

The health services director for the Massachusetts DOC is a corrections administrator who reports to the deputy commissioner of corrections, who reports to the commissioner. Health services is a separate division for which 13 FTE staff work in the health services central office; 5 monitor health staff at specific prisons. Comprehensive health services for the 21 institutions in the DOC system are operated under a contract with a single for-profit provider. Certain health care is provided by the University of Massachusetts Medical School.

MICHIGAN

Of the 54 prisons in Michigan, only 1 is operated by an outside private firm. The DOC manages its own health services, with the exception of specialty and offsite hospital care. Health services is a separate bureau (division) within the DOC. It is headed by a health administrator who reports to the deputy director for administration and programs. The central office has a total of 22 health staff members. An additional 28 regional health services staff supervise health staff at specific prison units. Inpatient care for the seriously mentally ill is provided by another state department.

MINNESOTA

A health care policy manager serves as the director of health services in the Minnesota DOC. This position reports to the deputy commissioner of the DOC. A psychologist is responsible for mental health services and reports to the director of health services. Medical and psychiatric care are contracted to a single provider, but the DOC operates its own dental and mental health services. The DOC also contracts for inpatient and outpatient hospital services, ancillary provider services, pharmaceutical services, and diagnostic services. There are 5.8 FTE members of the health services staff at the central office who oversee the provision of health care and monitor the health service contracts. The director of health services at the central office and the associate wardens of the facilities share line authority over the health staff in the institutions.

Missouri

Medical and dental care at the 21 prisons in Missouri are contracted to a single for-profit provider. The state continues to operate mental health and psychiatric services with its own providers. The medical services director for the Missouri DOC is a health administrator who reports to the division director of offender rehabilitative services. Mental health services are headed by a mental health administrator who also reports to that division director. Four FTE individuals staff the central office health services.

Montana

The medical director in Montana is a physician who reports to the administrator of the Professional Services Division of the DOC. This individual also oversees dental care and mental health services in the eight institutions in the state. The health staff working in the facilities report to the medical director in the central office. Four FTE individuals are employed as health staff in the central office. Private provider contracts are used for physician and dentist services as well as for mental health counselors.

Nebraska

In Nebraska, a health care administrator is in charge of the Department of Correctional Services (DCS) medical and dental care and has line authority over the medical and dental staff working in the institutions. The DCS medical director has clinical authority over medical and dental staff at the facilities. The DCS health care administrator reports to the assistant director of administrative services. A clinical psychologist oversees mental health services and reports to the assistant director of classification and programs. Excluding mental health services, the central office has four FTE health services staff. There are also nine regional health services staff who supervise medical and dental staff at specific institutions.

New York

The health services director in New York is a physician who is responsible for both medical and dental services and reports directly to the commissioner of DCS. Mental health services are provided by the New York State Office of Mental Health. None of the 70 institutions in New York is operated by private firms or has an outside contract provider for its medical and dental services. The health professionals are all employees of DCS, with the exception of secondary and tertiary care services that are provided through a coordinated specialty care contractor who subcontracts with direct care providers. Thirty FTE individuals in the central office oversee medical and dental care, and 30 FTEs work at the regional level. The correctional facility superintendents have line authority over medical and dental staff who work in the institutions. Mental health staff report to supervisors at the New York State Office of Mental Health.

North Carolina

North Carolina has a unified health services division that covers medical, dental, and mental health care. The director of health services for the 84 prisons in North Carolina is a physician who reports to the director of the Department of Prisons. Two units are operated by private firms, and two units have health services provided by a contractor. The contract provides only medical and dental care. There are 85 FTE individuals in health services at the central office, which includes staff of a large central pharmacy that provides medications throughout the state. Ten FTE health services staff work at the regional level. The superintendents/wardens have line authority over the health staff working in the individual prison units.

OHIO

Ohio has a unified health services system that covers medical, dental, and mental health care. The health services director for the state of Ohio is a health administrator who reports to the assistant director of the Department of Rehabilitation and Correction. Central office staff do not have line responsibility for the unit health services staff; the deputy wardens of special services provide direct supervision at individual institutions. The central office has indirect supervision and controls funding and hiring. Three of the 31 Ohio institutions have their medical and dental services provided by a private contractor. There are 24 full-time individuals who work in the central office and 43 regional staff (31 medical and 12 mental health) devoted to health services matters.

OKLAHOMA

The chief medical officer in Oklahoma is a physician who reports to the associate director of the DOC. Health staff at the institutions are clinically responsible to the statewide medical director and administratively responsible to the wardens in the individual institutions. Six of the 31 facilities contract their health services to private firms. State-operated mental health services are overseen by a director of mental health services who reports to the chief medical officer. Twenty individuals work in the health services central office.

OREGON

Oregon has 13 prisons, none managed by a private firm. Medical and dental services in Oregon are overseen by a health administrator who reports to the assistant director of correctional programs. A mental health administrator oversees mental health services and reports to the assistant director. Although Oregon does not use systemwide contract providers to deliver health care, it does have a statewide contract for offsite specialty care and hospitalization as well as several contracts for onsite and offsite dialysis and radiology and laboratory services. There are 14 health services staff working in the central office but no regional staff.

PENNSYLVANIA

Health services in all 25 of Pennsylvania's prisons have been contracted to private providers. Contracts cover medical, psychiatric, and mental health care as well as oral surgery, but not basic dental care.[3] At the central office, the Bureau of Health Care Services is headed by a corrections administrator who reports to the deputy secretary of the DOC. Mental health services are overseen by a separate bureau chief. Unit health care staff report to the deputy of centralized services, who reports to the superintendent. There are 19 FTE individuals in health services in the central office and 3 quality improvement nurses at the regional level.

SOUTH CAROLINA

In South Carolina, medical and dental care are under the direction of the deputy director for health services, a health administrator who has line authority over the health staff working in the state-run prison units and who reports to the director of the DOC. In July 1999, a psychiatrist was placed in charge of mental health services; this position reports to the deputy director for program services. An outside contract firm provides health services in 10 prison units in South Carolina. The contract covers medical, dental, mental health, and psychiatric care.[4] One part-time contract monitor is employed by the DOC. There are 36 FTE employees in the health services section of the central office and 2 FTE health services employees at the regional level.

SOUTH DAKOTA

Comprehensive health services in the three South Dakota prisons are provided by an outside contract firm. The health services administrator in South

Dakota is a corrections administrator who reports to the secretary of the DOC. This individual monitors medical, dental, mental health, and psychiatric care on a part-time basis. There are no other central office or regional health services staff. Unit health staff report to company supervisors rather than to any DOC employee.

Tennessee

The director of health services for the Tennessee DOC is a health administrator who reports to the deputy commissioner. A master's-level psychologist serves as director of mental health and is supervised by the director of health services. The wardens of the individual institutions have line authority over the DOC health staff working in the prison units. Of the 14 prisons in the DOC, 2 are operated by private firms and health services at 3 other facilities are contracted to private vendors. Each contract has its own scope of service that covers medical, dental, and basic mental health care. Doctoral-level mental health care, including all psychiatric care, is provided by a statewide vendor. The DOC does not employ a full-time contract monitor. The central office health services staff consist of five individuals, and there are no regional staff.

Texas

In Texas, the health services director is a physician, a division director who reports to the executive director of the Texas Department of Criminal Justice (TDCJ). Of the 113 prisons in TDCJ, 12 are operated by private firms. The department also houses some TDCJ offenders at eight Texas county facilities, which also are operated by private firms. The University of Texas Medical Branch and Texas Tech University Health Science Center provide contracted medical, dental, mental health, and psychiatric care to the remaining 101 units.[5] Sex offender and substance abuse treatment are provided by TDCJ through its Programs and Services Division. Texas has 94 FTE individuals employed in central office health services.

Utah

Utah has a unified health services system, which it operates with its own staff. The individual in charge of the Bureau of Clinical Services for the Utah state prisons is a corrections administrator who reports to the director of the Division of Institutional Operations for the DOC. A mental health administrator is responsible for mental health services and reports to the correctional clinical services administrator. The person in charge of health services has line authority over the staff working in the prison units. There are 22 FTE individuals on the central office health services staff and no regional staff.

Vermont

Medical and dental care in Vermont's eight prisons are contracted to a single private vendor. Vermont has a psychologist who serves as the clinical director and reports to the deputy commissioner of the DOC. The DOC provides mental health and psychiatric care under the direction of this same psychologist.[6] The contractor has line authority over the unit health staff. Three FTE individuals staff the health services section in the central office. There are no regional health services staff.

Virginia

In Virginia, the director of health services is a health administrator who reports to the deputy director for administration. The health services administrator has line responsibility for clinical matters for health care staff. A mental health administrator is in charge of mental health services and reports to the director of health services. The Virginia DOC system has 52 prisons. One prison is operated by a private firm, and seven have health care services provided by a single outside contractor that provides medical, dental, mental health, and psychiatric care.[7] At least one full-time contract monitor works for the DOC. Thirteen FTE employees work in the health services central office. There are four regional health services staff for mental health.

WASHINGTON

In the state of Washington, the health services director is a doctoral-level health administrator who reports to the assistant deputy secretary of the DOC. The health care staff working in the prison units report to individual health care managers. None of the 30 institutions in the DOC are operated by private firms. Medical, dental, mental health, and psychiatric care are provided through contracts with individual contractors or hospitals.[8] At least one full-time contract monitor works for the DOC, and 12 health staff work in the central office.

WISCONSIN

The director of the Bureau of Health Services in Wisconsin is a registered nurse who reports to the assistant administrator of the Division of Adult Institutions. Seven of the 23 facilities in the state are operated by private firms. Outside contractors provide medical, dental, mental health, and psychiatric care in seven additional facilities.[9] The DOC employs at least one full-time contract monitor. The warden of each facility is in charge of mental health services, but a psychiatrist prescribes psychotropic medications. The 15 health services staff in the central office have line authority over the physicians, psychiatrists, dentists, and health staff at special care units. Other health staff who work in the prison units report to the wardens of each facility. Four regional health services staff supervise health staff in specific prison units.

NOTES

1. "Psychiatric services" refers only to care provided by psychiatrists. In some systems (e.g., Minnesota and Tennessee), the psychiatrists are contractors, but other mental health care is provided by DOC employees (e.g., psychologists, social workers, and psychiatric nurses).

2. Ibid.

3. Ibid.

4. Ibid.

5. Ibid.

6. Ibid.

7. Ibid.

8. Ibid.

9. Ibid.

Organizational Structure of Health Services in Selected County Departments of Correction*

Bexar County Adult Detention Center, Texas

The health services director of the Bexar County Adult Detention Center is a physician who reports to the senior executive vice president/chief operating officer of the Bexar County Hospital District. Medical, dental, psychiatric, and mental health care are provided to inmates through a contract with the hospital district.[1] A psychiatrist from the Bexar County Hospital District is in charge of mental health services and reports to the senior executive vice president/chief operating officer. These two physicians have line authority over the health staff working in the jail. At least one full-time contract monitor works for the detention center.

Dallas County Jail, Texas

A physician is in charge of health services and a psychiatrist is in charge of mental health services in the Dallas County Jail facilities. Both positions report to the medical director for health and human services. None of the five units within the jail system are operated by private firms. The director of health services has line authority over the health staff working in the units.

Harris County Sheriff's Department, Texas

A corrections administrator is in charge of health services for the Harris County Sheriff's Department. He reports directly to the sheriff. None of the four jails within the sheriff's department are operated by private firms. Physicians are under contract with the University of Texas Medical School, and mental health providers are under contract with the Mental Health/Mental Retardation Authority. Other health staff in the jails report to the corrections administrator in charge of health services, who is also responsible for monitoring the outside contracts.

Hillsborough County Sheriff's Office, Florida

A health administrator is responsible for the inmate health care services in Hillsborough County and reports to the detention major/contract monitor. A single outside contract firm provides the three jails within the system with medical, dental, psychiatric, and mental health care.[2] A different health care administrator employed by the contractor is in charge of mental health services and reports to the colonel/jail commander. Unit health staff report to supervisors who are employees of the contractor.

*Information as of fall 1999 compiled by Judi Chavez from a survey conducted by B. Jaye Anno for the National Commission on Correctional Health Care.

KING COUNTY CORRECTIONAL FACILITIES, WASHINGTON

The local public health department provides comprehensive health services to inmates in the two King County Correctional Facilities. A doctoral-level health administrator oversees health services. This position has line authority over the health staff who work in the jail units and reports to the public health community-oriented primary care manager. King County employs at least one full-time contract monitor.

MARICOPA COUNTY JAIL, ARIZONA

The director of correctional health services in Maricopa County is a health administrator who reports to the county's chief health officer. All five jails in the Maricopa County system are operated by the county. The director of health services has line authority over the health staff who work in the units and oversees mental health, medical, and dental services.

MIAMI-DADE COUNTY CORRECTION AND REHABILITATION CENTER, FLORIDA

Responsibility for health services in Miami-Dade County is shared by a physician and a corrections administrator who report to the director of the corrections agency. Mental health services are directed by a doctoral-level mental health administrator who reports to the administrator for correctional health services. The six units in the county use a single provider for medical, dental, mental health, and psychiatric care.[3] There is an intracounty contract with the county hospital to provide health services. The department employs at least one full-time contract monitor.

SAN BERNARDINO COUNTY SHERIFF'S DEPARTMENT, CALIFORNIA

The head of health services in the San Bernardino Sheriff's Department is a health administrator who reports to the sheriff's deputy chief and has line authority over the health staff of the three units. Mental health services are the responsibility of a mental health administrator from the county department of behavioral health who reports to the county mental health program manager.

NOTES

1. "Psychiatric services" refers only to care provided by psychiatrists. In some systems, the psychiatrists are contractors, but other mental health care is provided by DOC employees (e.g., psychologists, social workers, and psychiatric nurses).

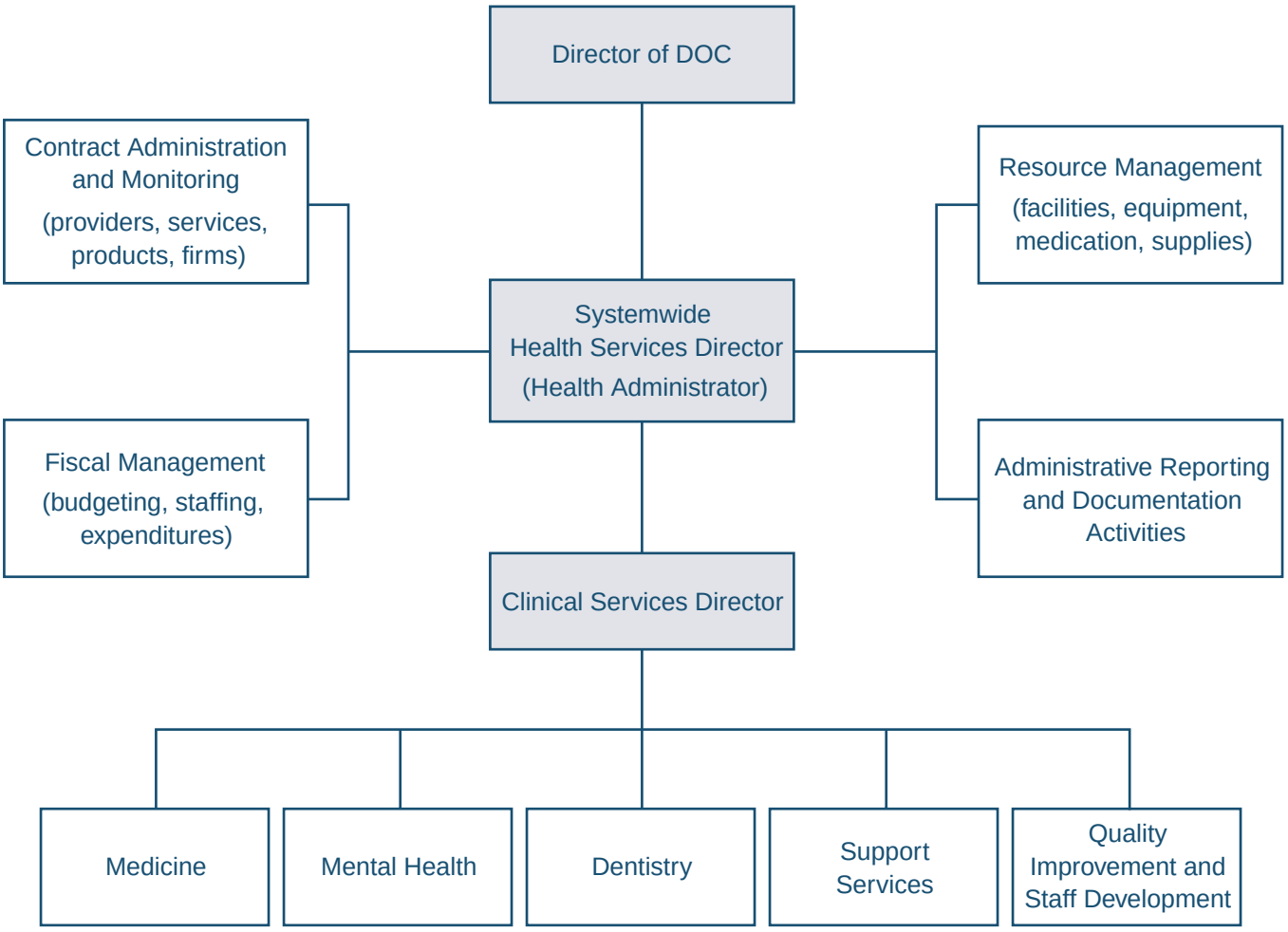
2. Ibid.

3. Ibid.

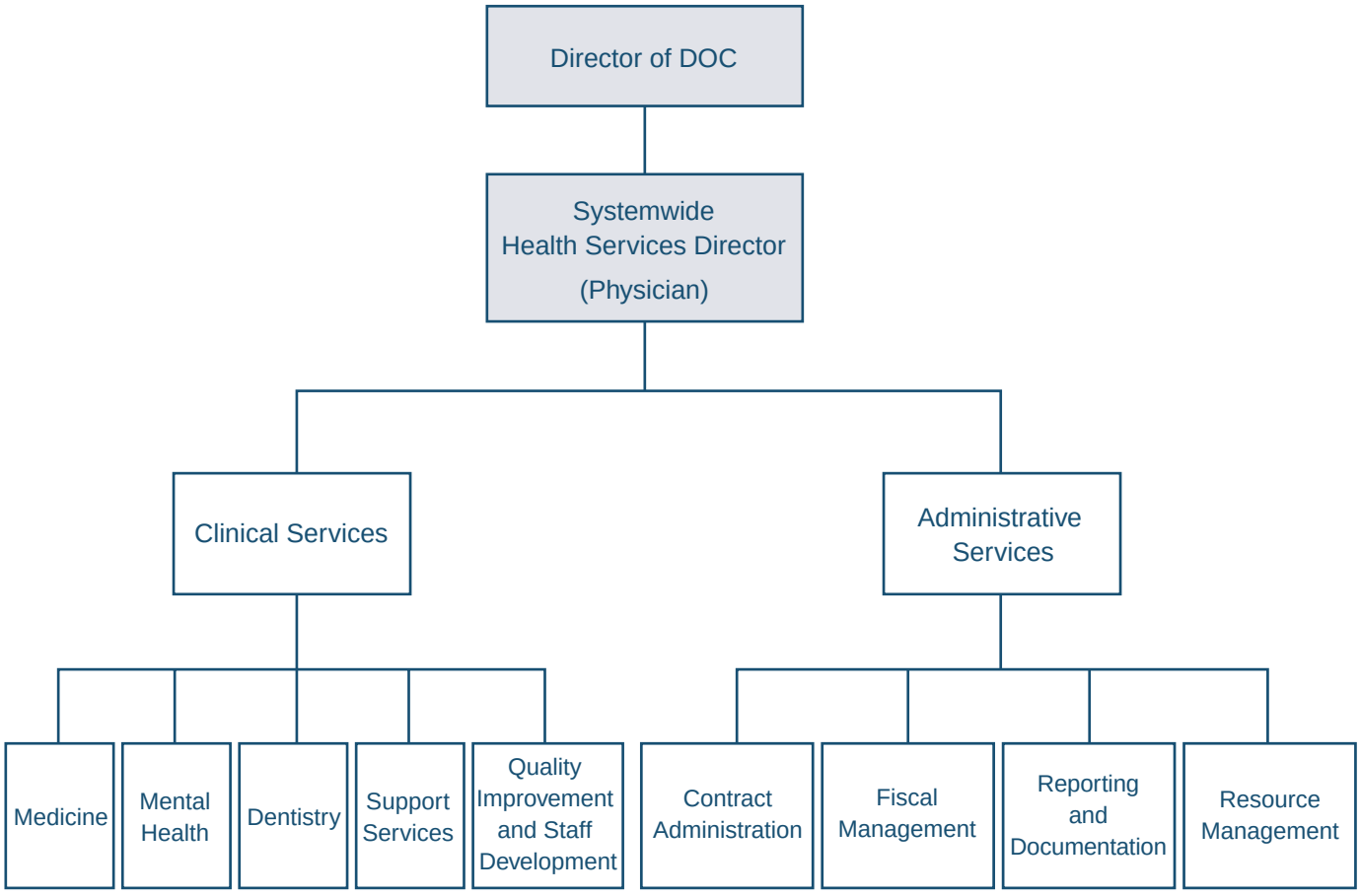
Sample Organizational Structure Charts for Correctional Health Services

Appendix C

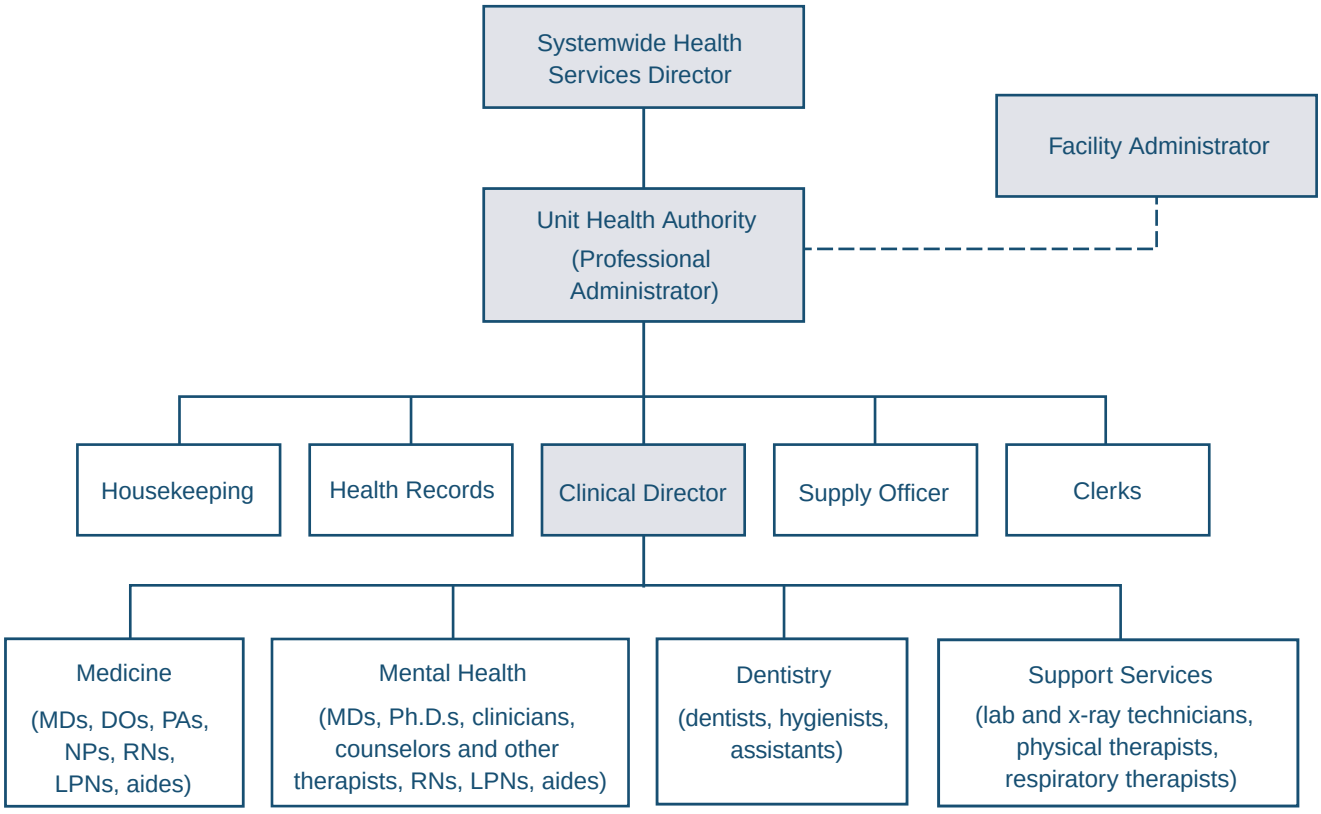
C–1. Sample Organizational Structure of Health Services in the DOC's Central Office: Health Administrator as Health Services Director



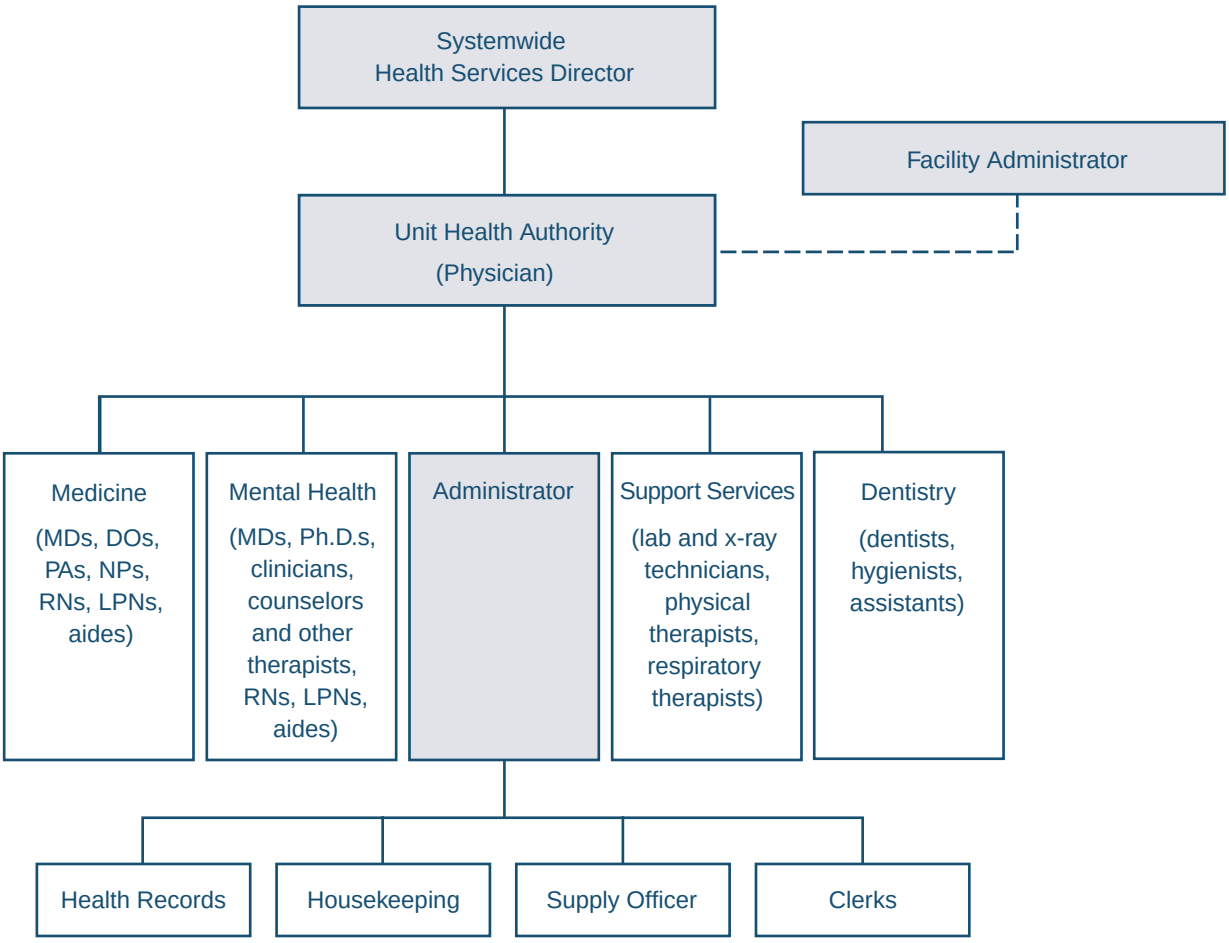
C–2. Sample Organizational Structure of Health Services in the DOC's Central Office: Physician as Health Services Director



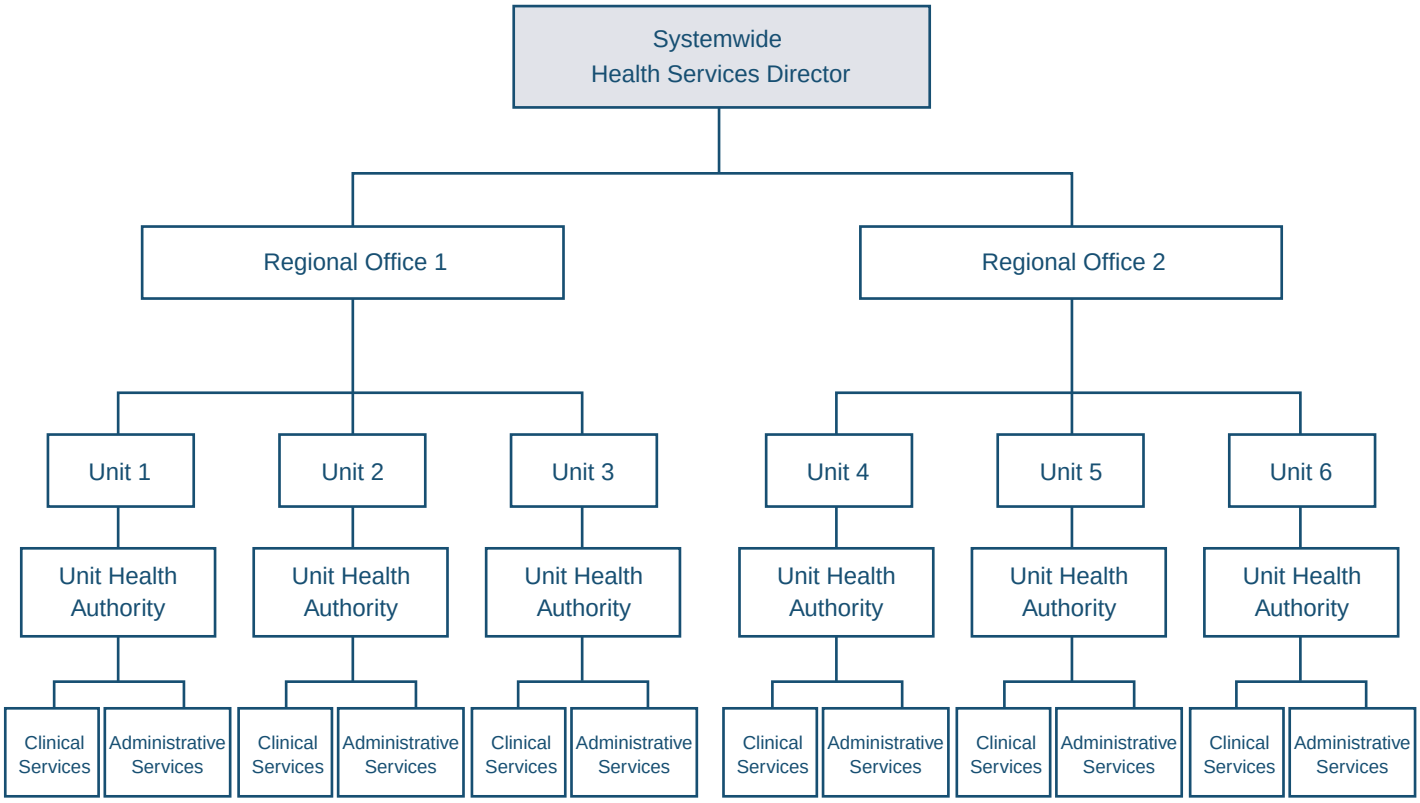
C–3. Sample Organizational Structure of Unit Health Services: Professional Administrator as Unit Health Authority



C–4. Sample Organizational Structure of Unit Health Services: Physician as Unit Health Authority



C–5. Sample Reporting Structure of Unit Health Services



Coverage Factor Calculation Summary

Appendix D

Coverage Factor Calculation Summary

Step	Example	Calculation
1. Regular days off per employee per year (usually 52 weeks per year x 2 days off per week)	104	_____
2. Remaining work days per year, which is 365 minus #1	261	_____
3. Vacation days off per employee per year	10	_____
4. Holiday days off per employee per year	16	_____
5. Average number of sick days taken per employee per year	5	_____
6. Average number of in-service training days per employee per year	3	_____
7. Additional initial training days for each new employee beyond in-service training in #6 above	10	_____
8. Percent of employees employed one year or less	20	_____
9. Number of other days off per year, such as for union meetings, litigation, military leave, special assignments, funeral leave, injury, etc.	2	_____
10. Total days off per year equals #3+4+5+6+9 to which is added #7 multiplied by #8	36+2	_____
11. Number of actual work days per employee per year equals #2 minus #10	223	_____
12. Coverage factor equals #2 divided by #11	1.17	_____
13. Seven-day coverage ratio equals #12 multiplied by 1.4, which is 7/5	1.64	_____
14. Continuous coverage ratio equals #12 multiplied by 168 [24 hrs x 7 days], and divided by the number of hours an employee works each week, not including overtime, which is usually 40	4.91	_____

Reproduced from: Benton, F. Warren, Planning and Evaluating Prison and Jail Staffing. Volume I. Washington, DC: National Institute of Corrections (1981).

Comparative Analysis of Standards on Health Care in Prisons and Jails

Appendix E

Appendix E

Comparative Analysis of Standards on Health Care in Prisons and Jails

Introduction

The analysis that follows summarizes some of the similarities and differences among the four sets of national standards used to govern health services in correctional facilities in the United States. In all instances, the most recent version of the standards was consulted. Such a comparative analysis is complicated by several factors. For example, the types of facilities to which the different sets of standards apply are not the same. The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) ambulatory care standards were designed for community facilities and thus cover none of the elements specific to correctional institutions (Joint Commission on Accreditation of Healthcare Organizations, 2000). The American Public Health Association (APHA) standards are said to apply to "large state prisons serving major urban communities as well as small county jails in rural areas" (Dubler, 1986:viii). Only the American Correctional Association (ACA) (American Correctional Association, 1990 and 1998) and the National Commission on Correctional Health Care (NCCHC) have separate sets of standards designed specifically for adult jails and prisons (National Commission on Correctional Health Care, 1996 and 1997).

Additionally, the topics covered by the different sets vary widely. Hence, no attempt was made to compare every standard in each set with all standards in the other sets. To do so would have made a difficult task impossible. Instead, major topic areas were compared only with respect to certain elements.

Finally, three sets of standards (all except APHA's) are used in accreditation programs. Each organization weights its standards differently. ACA uses "mandatory" and "nonmandatory" designations, JCAHO uses a weighted scale in calculating compliance, and NCCHC identifies "essential" and "important" standards. Thus, even where the content of a standard may be similar, the significance attached to it for accreditation purposes may vary.

In the chart, the standards are referenced in parentheses by the number appearing in the text or by page number. A trailing capital letter in parentheses indicates the significance of the standard: E refers to NCCHC essential standards, I refers to NCCHC important standards, M refers to ACA mandatory standards, and N refers to ACA nonmandatory standards.

There is one final caveat. In attempting to summarize data and compare basic requirements of the various sets of standards, certain nuances may have been ignored. The reader should not rely on this chart as the complete statement of these organizations regarding any issue. Instead, the original texts should be consulted and the standards read in their entirety.

References

American Correctional Association

1990 Standards for Adult Correctional Institutions (third edition). Laurel, MD.

1998 1998 Standards Supplement. Lanham, MD.

Dubler, Nancy N. (Ed.)

1986 Standards for Health Services in Correctional Institutions (second edition). Washington, DC: American Public Health Association.

Joint Commission on Accreditation of Healthcare Organizations

2000 2000-2001 Standards for Ambulatory Care. Oakbrook Terrace, IL.

National Commission on Correctional Health Care

1996 Standards for Health Services in Jails. Chicago.

1997 Standards for Health Services in Prisons. Chicago.

System Elements	ACA (1990) & (1998)	APHA (1986)
I. MANAGEMENT CONCERNS		
A. Legal Obligations	Requires facility to follow informed consent practices of jurisdiction. Allows health care to be rendered against inmate's will, if in accord with state and federal laws and regulations (#3-4372,N). Prohibits experimental research on prisoners, but allows individual inmates to participate in clinical trials (#3-4373,N). Recognizes the principle of confidentiality of the health record (#3-4377,N).	Recognizes that inmates have a right to consent to and to refuse treatment (pp. 109-110). Specifies that confidentiality of health information should be maintained (pp. 111-112). Does not permit forcing mental health treatment except in an emergency or with a court order (pp. 42-43). Inmate participation in research not addressed.
B. Ethical Issues	Does not address role of health staff in evidence-gathering or disciplinary measures, except that conducting body-cavity searches is permitted (#3-4185,N). Requires all segregated inmates to be visited daily by health staff (#3-4246,N). Requires classification to consider inmates' special needs (#3-4292,N) and provides for information sharing from health authority to warden, although permissible circumstances not specified (#3-4377,N). Specifies need for consultation between warden and physician prior to housing, program, disciplining, and transfer decisions regarding mentally ill and retarded (#3-4369,N).	Prohibits nonmedical use of medical personnel in strip and cavity searches, forced transfers, evidence gathering without inmate's consent, certifying wellness for punishment, and executions (pp. 112-114). Requires daily visits of all segregated inmates by medical staff and weekly physician rounds (p. 10). Requires health information to be provided to classification committees to determine special housing needs (p. 8).
C. Documentation Needs	Requires quarterly meetings between warden and health authority, quarterly reports on health delivery system and health environment, and annual statistical reports (#3-4328,N). Also requires policy and procedure manual governing health care operations with annual review (#3-4329,N).	Policy and procedure manual addressing adherence to standards required (p. 105).
D. Quality Improvement Activities	Topic not addressed, except for standard on inmate grievance procedures (#3-4271,N).	Requires both independent and internal audits of services and programs. Multidisciplinary committee to meet at least every other month. Inmate complaints must be addressed (pp. 97-98).

JCAHO (2000)	NCCHC (1996) & (1997)	Comments
Has a section on the rights and responsibilities of patients that provides for informed consent (RI. 1.2.2) and the right to refuse to participate in experimental research (RI. 1.2.4). Requires confidential treatment of disclosures and records (RI. 1.3).	Like APHA, NCCHC standards recognize a right to refuse treatment (P-71,I; J-67,I) as well as a right to consent to treatment (P-70,I; J-68,I). Certain treatment (e.g., psychotropic medications) may be forced only in an emergency situation and then only when specific guidelines are followed (P-67,E; J-65,E). Inmate participation in experimental research prohibited except where ethical, medical, and legal guidelines are followed (P-72,I; J-69,I).	All four sets are fairly consonant on the issues of informed consent and confidentiality, although APHA and NCCHC provide the most specificity.
Has a general section on patient rights and organization ethics (pp. 71-79), but does not address any ethical issues specific to correctional health professionals.	Prohibits participation of correctional health professionals in body-cavity searches for contraband, and psychological evaluations of inmates for use in adversarial proceedings. Allows personnel to perform court-ordered lab or radiology procedures with inmate consent and to gather evidence in sexual assault if requested by victim (P-68,I; J-66,I). Prohibits health staff participation in punishment, but requires daily monitoring of the health status of inmates placed in disciplinary segregation (P-39,E); checks of other segregated inmates three times per week (P-45,I; J-43,I); and ongoing monitoring of inmates in disciplinary restraints (P-66,E; J-64,E). Also requires custody and health staff to share information (P-62,E; J-60,E) and to consult on housing and program assignments as well as disciplinary measures and admissions to and transfers from institutions for all special needs inmates, whether for medical or mental health reasons (P-08,E; J-07,E).	APHA and NCCHC standards (particularly the latter) provide the most guidance to health professionals in interfacing with correctional staff on inmates' health needs. Also, these two sets address the role of health staff in evidence-gathering and disciplinary measures while the other two basically do not. Although ACA does address body cavity searches, it permits health professionals to conduct them, whereas the standards of NCCHC and APHA expressly prohibit this activity for medical personnel.
Not specific to corrections, but requires policies and procedures for all functional activities.	Requires documented quarterly meetings among local health authority, facility administration, and other relevant health and correctional staff regarding effectiveness of delivery system, health environment factors, etc.; documented monthly meetings for all health staff; and statistical report at least annually regarding health services delivered (P-03,04E; J-03,E). Also requires policy and procedure manual covering standards with annual review (P-05,E; J-04,E).	NCCHC standards are the most stringent.
Requires quality control in assessment of patients, leadership, and management of information activities.	Requires regular chart reviews by physician and at least quarterly meetings of multidisciplinary quality improvement (QI) committee (P-06,E; J-05,E). Also addresses external peer review program (P-13,I) and resolution of inmate grievances on medical matters (P-12,I; J-11,I). Most comparable to APHA standards.	JCAHO standards are the most comprehensive on QI matters and ACA's are the least.

KEY E = NCCHC essential standards I = NCCHC important standards
M = ACA mandatory standards N = ACA nonmandatory standards

System Elements	ACA (1990) & (1998)	APHA (1986)
E. Safety and Environmental Issues	Has whole sections covering building and safety codes (p. 39), environmental conditions (pp. 47-48), safety and emergency procedures (pp. 65-68), health and safety regulations (#3-4302,M; #3-4303,M) and inspections of food services (pp. 102-103), sanitation and hygiene (pp. 105-108), and work, health, and safety standards for prison industries (#3-4401,M).	Has a large section on environmental health (pp. 61-94) that covers grounds and structures, services and utilities, special facilities, safety issues, hygiene requirements, and inspections. Also has standards governing occupational health (pp. 55-60).
II. SERVICE DELIVERY		
A. Resources		
1. Personnel	Health authority may be a physician, health administrator, or health agency. If not a physician, there also must be a designated physician who makes final medical judgments (#3-4326,N). States that all health professionals must be licensed, certified, or registered. Written job descriptions are required (#3-4334,M). Inmates are prohibited from performing patient care activities unless participating in a certified vocational training program (#3-4340,N). Any students or interns must work under direct staff supervision (#3-4339,N). Numbers and types of health staff not specified.	The principal medical authority must be a physician (p. 105). All health staff must be licensed or certified (p. 106). Written job descriptions are required (p. 105). Inmates may be used in the health area only for janitorial services (p. 107). Staffing ratios not specified except for 1 full-time equivalent (FTE) physician for every 200-750 inmates (p. 104).
2. Space and Equipment	Contains only a general statement that "space, equipment, supplies and materials for health services are provided and maintained as determined by the health authority" (#3-4333,N).	Topic not addressed except for availability of reference materials for staff (p. 19).
B. Direct Services		
1. Emergency Care	Requires availability of 24-hour emergency medical, dental, and mental health care as outlined in a written plan (#3-4350,M). Also, access to a licensed hospital required (#3-4332,M) as are first aid kits as needed (#3-4352,N). "Correctional and other personnel" must be trained in first aid, cardiopulmonary resuscitation (CPR), and other emergency procedures and must respond to emergencies within 4 minutes (#3-4351,M). States that "designated individuals" specified by the inmate should be notified in case of serious illness or injury (#3-4374,N) and that there must be written procedures for actions to be taken in the event of an inmate's death (#3-4375,N).	Requires 24-hour emergency care availability, and if the census is more than 250, staff on site 24 hours/day. Health staff must be certified in CPR, first aid, and emergency care and all correctional staff must be CPR certified (pp. 15-17). Trained correctional officers must be able to enter inmate living areas within 60 seconds in an emergency (p. 70). Arrangements for secondary care services must be made (pp. 25-26). Notification of next of kin and authorities not discussed.

JCAHO (2000)	NCCHC (1996) & (1997)	Comments
Has a section on management of environment of care (pp. 173-195) that includes adherence to safety codes, disaster planning, disposal of hazardous materials and wastes, equipment inspections, safety procedures, utilities, etc.	Has a few standards addressing safety and environmental issues such as disaster planning (P-07,E; J-06,E), first aid kits (J-16,I), infection control (P-14,E; J-12,E), ectoparasite control (P-17,I; J-15,I), personal hygiene (P-49,I; J-47,I), environmental inspections (P-15,E; J-13,E), and kitchen sanitation and food handlers (P-16,I; J-14,I).	For correctional health services, APHA standards provide the most guidance and NCCHC standards the least.
Does not specify type of person in charge. Requires licensure or certification of staff (pp. 203-206) and job descriptions (p. 200).	Health authority may be a physician, health administrator, or health agency. If not a physician, there also must be a designated physician who makes final medical judgments (P-02,E; J-01,E). States that all health professionals must be licensed, certified, or registered (P-18,E; J-17,E). Written job descriptions are required (P-23,I; J-22,I). Inmates are prohibited from performing patient care activities, although they may make health care products (e.g., dentures, orthotics) under certain circumstances (P 22,E; J-21,E). Staffing ratios not specified except for 1 FTE physician for every 500 inmates in jails. (J-23,I).	All sets require licensure and job descriptions. Differences are in level of staff serving as health authority and role of inmate workers. All four of these professional groups shy away from specifying the exact numbers and types of health care staff required. Although previous publications sometimes indicated the number of staff needed based on the number of inmates in the facility on an average daily basis, more recent efforts have recognized that there is no simple formula for determining appropriate staff size. The number and type of health care personnel required by an institution are dependent not only on its average daily population but also on the total number of inmates received during the course of a year, their varying lengths of stay, and the particular health care needs of inmates (e.g., alcoholics, addicts, geriatrics), among other factors. See chapter VI for a more complete discussion.
Topic not addressed.	Includes a standard on clinic space, equipment, and supplies (P-28,I; J-27,I) that provides some guidance regarding minimal areas needed and requires regular inventory of abusable items.	Although NCCHC standards provide more guidance than the other sets, they are still too general to be useful to administrators in planning and stocking facilities.
Topic not addressed in ambulatory care standards.	Mandates a written plan for providing 24-hour emergency care (P-41,E; J-36,E), written agreements with designated hospitals (P-30,I; J-29,I), first aid kits (J-16,I), CPR training and continuing education for all health staff who work with inmates (P-19,E; J-18,E), other health-related training for correctional officers including CPR and first aid (P-20,E; J-19,E) and notification of next of kin in case of serious illness, injury, or death (P-10,I; J-09,I). In the latter instance, local authorities also must be notified (P-11,I; J-10,I).	The three sets of standards designed for corrections agree on most issues but differ regarding training requirements —that is, which staff and how many staff must be trained in what emergency responses.

KEY E = NCCHC essential standards I = NCCHC important standards
M = ACA mandatory standards N = ACA nonmandatory standards

System Elements	ACA (1990) & (1998)	APHA (1986)
2. Nonemergency Care		
a. Intake Procedures	States that inmates be medically screened on arrival by health-trained or qualified health personnel (#3-4343,M), that all intrasystem transfers receive a health screening by health-trained or qualified health personnel (#3-4344,M), that a full health appraisal be completed within 14 days of arrival at any facility (#3-4345,N) (the mental health appraisal within 30 days), and that periodic exams (at least biennially) be conducted (#3-4348,N). Allows certain data to be collected by health-trained personnel (#3-4346,N).	Requires intake medical screening with an extensive list of areas to be covered by a "trained medical person" for all inmates on admission, followed by a complete medical examination within 7 days (including a mental health assessment) (pp. 1-6). Specifies additional data collection that should be performed for females (pp. 6-7). Requires annual health evaluation (p. 14).
b. Sick Call	Inmates must be notified on arrival of the system for accessing care (#3-4331,M). Sick call, conducted by qualified personnel, should be held as follows: adult daily population (ADP) < 100, once per week; ADP 100-300, 3 times per week; ADP 300+, 4 times per week. If inmate's custody status precludes attendance at sick call, it should be provided where the inmate is detained (#3-4353,N). Segregated inmates must be visited daily (#3-4246,N).	Inmates must be informed on arrival of procedures for requesting medical attention. Medical requests must be collected and reviewed daily by trained medical personnel. Inmates must be seen within 24 hours of request. Segregated inmates must be visited daily and seen in the medical area at the request of medical staff (pp. 8-10). Sick call must be conducted at least 5 days per week by MD/DO or NP/PA (p. 11), presumably regardless of facility size.
c. Specialty Services	Requires arrangements with specialists in advance of need (#3-4356,N) and continuity of care (#3-4330, N).	Requires arrangements for specialty consultants prior to need (pp. 11-12).
d. Infirmary Care	Specifies, e.g., an oncall physician, 24-hour health care staff, patients within sight or sound of a staff person, a manual of nursing procedures, and separate infirmary record (#3-4354,N).	States that secondary care services must be available and that infirmaries should meet JCAHO ambulatory care standards (pp. 25-26).
e. Management of Communicable Diseases and Infection Control	Requires facilities to have policies and procedures on "serious and infectious diseases" (#3-4365,N). Specific policy on AIDS required (#3-4366,N).	Has a section on communicable diseases that requires quarantine and isolation as needed and contact tracing and testing (pp. 22-23). Also has an appendix that discusses appropriate care and precautions for certain communicable diseases common to correctional facilities (pp. 117-128).

JCAHO (2000)	NCCHC (1996) & (1997)	Comments
Has a section on initial assessment that provides some general guidelines for intake, but not specific to corrections (pp. 85-87).	Most comparable to APHA standards. Requires immediate receiving screening of all inmates upon entrance to the correctional system. Specifies test for tuberculosis (P-32,E; J-30,E). A full health assessment (including pelvic exams and Paps for females) must be completed within 7 days and repeated annually for prisons (P-34,E). For jails, the health assessment must be completed within 14 days (J-33,E). A complete mental health examination is required within 14 days (P-35,E; J-39,I). All data collection must be performed by qualified health professionals.	The three sets of standards designed for corrections all require specific intake procedures, but differ regarding the level of staff that can perform them (ACA allows health-trained staff for some functions and the other two require qualified health professionals for all tasks in prisons and large jails) and the timeframe in which they must be completed. NCCHC and APHA standards are the most comprehensive and the most similar.
Topic not addressed.	All inmates must be notified on arrival about access to health services (P-31,E; J-31,E). All inmates (including those in segregation) have the opportunity to request medical care daily. Requests are received and acted on by qualified health personnel (P-37,E; J-34,E). For prisons, nurses and/or other qualified health personnel must hold sick call 5 days a week and a physician must hold clinics (P-38,E). For jails, sick call must be held as follows: ADP <100, once per week ; ADP 100-200, 3 times per week; ADP 200+, 5 times per week. (J-35,E). All care must be provided in a clinical setting (P-38,E; J-35,E). In addition, disciplinary segregation inmates must be visited daily (P-39,E) and those in administrative segregation must be seen at least three times per week by health personnel (P-45,I; J-43,I).	The three sets of standards specific to correctional facilities agree on the issue of notification but differ regarding where sick call may be held, how often it must be held, and the level of health staff that must conduct it. APHA and NCCHC standards are the most stringent.
Requires the availability and use of appropriate consultation (pp. 129, 131).	Requires continuity of care, including referral to community resources when indicated (P-44,I; J-42,I).	All four sets of standards are in accord, although none provide much specificity.
Topic not addressed in ambulatory care standards.	Similar to ACA's except that NCCHC's (P-52,E; J-50,E) is essential for accreditation.	The sets of standards are fairly consistent, except that ACA standards do not specify that only a physician can admit or discharge patients, which is required under NCCHC standards.
Has a section on infection control (pp. 227-232).	Requires policies and procedures governing care of inmates with communicable diseases including isolation when medically indicated, and a comprehensive infection control program (P-14,E; J-13,E).	All four sets are consistent, but fairly general. APHA and then NCCHC standards provide the most commentary.

KEY E = NCCHC essential standards I = NCCHC important standards
M = ACA mandatory standards N = ACA nonmandatory standards

System Elements	ACA (1990) & (1998)	APHA (1986)
f. Mental Health Care	States that "specifically referred inmates" should have a comprehensive evaluation within 14 days of the date of the referral (#3-4349,N); that arrangements be made for inmates who are severely disturbed and/or retarded (#3-4367,N); that such inmates be afforded due process (#3-4368,N); that there be a policy governing the use of restraints for medical and psychiatric purposes (#3-4362,N); that psychotropic drugs be ordered by a physician (#3 4342,N); and that there be a suicide prevention and intervention program (#3-4364,N).	Has a section on mental health that specifies that diagnostic and therapeutic services be available; that certain services be provided; that special training be conducted for health and correctional staff; that there be a program on suicide prevention; that specific rules be followed if restraints are used; that such care not be imposed; and that mental health staff work to enhance the mental health of the institution (pp. 35-46).
g. Dental Care	Beyond intake procedures (see #3-4343, #3-4344, and #3-4345), has a standard on dental care that specifies availability of screening and oral hygiene instruction on intake, a dental exam within 3 months, a charting and treatment priority system, and specialty consultation (#3-4347,N).	Has a section on dental care that requires the availability of comprehensive services; adequate staff, facilities, and equipment; a comprehensive exam within 30 days of admission performed by a dentist or hygienist; oral hygiene instruction and supplies; and followup care as needed with a goal of preventive care (pp. 47-51).
h. Other Special Needs	Specifies individual treatment plans for inmates requiring close medical supervision (#3-4355,N); the provision of chronic and convalescent care (#3-4357,N); prostheses and orthodontic devices when needed (#3-4358,N); policies governing detoxification (#3-4370,N); management of chemical dependency (#3-4371,N) and substance abuse programs (#3-4388,-1, -2, -3, & -4 N); counseling for pregnant inmates on their options (#3-4387,N); and pregnancy management (#3-4343-1,N). Does not address the role of the health staff in responding to sexual assaults.	Requires followup plans on all medical encounters (pp. 13-14); has a section on drug and alcohol treatment (pp. 19-21); a standard on rape (p. 24); one on the special needs of women (pp. 27-28); a section on services for the chronically ill, frail elderly, or disabled (pp. 29-30) as well as homosexuals (pp. 33-34); and one covering vision and eyewear (pp. 53-55).
C. Support Services		
1. Laboratory and Radiology	Topic not addressed.	Topic not addressed.

JCAHO (2000)	NCCHC (1996) & (1997)	Comments
Not covered in the ambulatory care standards manual. JCAHO has a separate set of standards for mental health facilities.	Requires that all inmates have a mental health evaluation within 14 days of admission and that treatment services and referral sources be available (P-35,E; J-39,I); that care be provided for inmates who are mentally ill or retarded (P-51,E; J-49,E); that correctional staff be trained to recognize and respond to mentally ill, developmentally disabled, or suicidal inmates (P-20,E; J-19,E); that specific rules be followed when medical restraints are used (P-66,E; J-64,E); that there be a policy governing the use of forced psychotropic medications (P-67,E; J-65,E); and that there be a suicide prevention plan addressing a variety of issues (P-53,E; J-51,E).	APHA and NCCHC standards provide the most specificity and guidance for correctional facilities.
Topic not addressed.	Beyond intake procedures for prisons (see P-32,E and P-34,E), has an essential standard that requires screening, oral hygiene instruction, and dental health education for all inmates within 7 days of admission; a dental exam within 30 days of admission performed by a dentist; a system of treatment priorities; use of fluorides and other preventive measures when ordered; and consultation with specialists (P-36,E). For jails, there is an essential standard on oral screening (J-32) and an important one on dental treatment (J-40).	The three sets of standards designed for corrections all require some dental services, but differ as to the extent of services, the timeframe for providing them, and the level of provider required. APHA and NCCHC standards are the more stringent and provide the most guidance.
Has extensive general sections on the care of patients (pp. 97-119) and continuum of care (pp. 127-133), but does not specifically address special needs.	Has standards mandating the provision of care to meet special needs (including care of the chronically and terminally ill, the elderly, and the physically disabled) and the development of individual treatment plans (P-51,E; J-49,E), including prostheses when indicated (P-59,I; J-57,I); the need for protocols governing intoxication and withdrawal (P-54,E; J-52,E) and the management of chemically dependent inmates (P-56,I; J-54,I); the role of health staff in responding to sexual assaults (P-57,I; J-55,I); and pregnancy counseling (P-58,I; J-56,I), perinatal care (P-55,E), and prenatal care (J-53,E) for pregnant women.	JCAHO standards do not specifically address many special needs issues. The other three sets of standards all recognize the importance of special needs planning but differ in their emphasis.
Has section on laboratory services (pp. 83-84, 90-92) that contains several standards governing these procedures. Radiology not covered.	Has a standard (P-29,I; J-28,I) requiring a list of the resources used, the need for procedural manuals, and specifications as to the minimal tests and equipment that must be onsite.	Only JCAHO standards address these services in any detail.

KEY E = NCCHC essential standards I = NCCHC important standards
M = ACA mandatory standards N = ACA nonmandatory standards

System Elements	ACA (1990) & (1998)	APHA (1986)
2. Pharmacy	Has a standard on pharmaceuticals that covers some aspects of medication management. Allows pharmacy to be managed by "a resident pharmacist or by health-trained personnel under the supervision of the health authority" (#3-4341,M).	Has a section on pharmacy services that covers many aspects of medication management, but not items such as conditions for drug storage, medication disposal, etc. (pp. 95-96).
3. Nutrition	Has a section on food service that requires, among other things, that a dietitian or nutritionist review menus at least annually and a food service supervisor at least quarterly regarding dietary allowances (#3-4297,M); that regular menus and special diets be planned in advance and followed (#3-4298,N); that special diets be provided when prescribed (#3-4299,M); and that food not be used as a disciplinary measure (#3-4301,N). Food service workers must be free of disease and monitored daily for cleanliness (#3-4303,M).	Intake health information should include dietary needs (p. 2), food should be "wholesome, safe for human consumption, and nutritionally adequate" (p. 68), and food handlers should be trained in safe and sanitary practices (p. 69).
4. Medical Records	Specifies contents of the health record (#3-4376,N); states that health information is confidential except for that shared with the warden regarding inmates' "medical management, security and ability to participate in programs" (#3-4377,N); that records or summaries should accompany inmates on transfer and information should be released to community providers with written authorization of the inmate (#3-4378,N); and that inactive records should be retained (#3-4379,N).	Has a section on health records that covers same areas as ACA's (except information sharing with warden) plus requires a single uniform record for all services and specifies a problem-oriented medical record system of organization. Also requires standardization of the record, legibility of entries, and a person in charge (pp. 99-101).
5. Education Services		
a. Staff	Training is required for emergency situations (#3-4351,M), suicide prevention (#3-4364,N), and medication administration (#3-4341,M). Regular inservice for health professionals is not addressed.	Requires emergency training for health and correctional staff (p. 16). Also states that inservice training (including continuing medical education) for health professionals should be provided and documented (p. 106).
b. Inmates	Has a standard on health education for inmates and lists some suggested topics (#3-4363,N).	Same as ACA standards, but provides more commentary (pp. 17-19).

JCAHO (2000)	NCCHC (1996) & (1997)	Comments
Has sections on pharmaceutical services that provide some general guidelines on policies and personnel (e.g., a licensed pharmacist required) and address administration of medications, etc. (pp. 98-99, 105-110).	Has the most extensive standard on pharmaceuticals and their management (P-27,E; J-26,E).	NCCHC standards cover areas missing in other sets. The three health groups all require a pharmacist to be in charge.
States only that "nutritional status is assessed when warranted by the patient's needs or condition" (p. 82).	Requires an adequate diet based on current RDAs for all inmates, provision of therapeutic diets as prescribed by a physician or dentist, and review of regular and therapeutic menus for nutritional adequacy by a registered dietitian at least every 6 months (P-47,I; J-45,I). Requires food handlers to be free from disease and monitored daily for cleanliness (P-16,I; J-14,I).	ACA food service standards are the most comprehensive and JCAHO's are the least. The three sets designed for corrections are fairly consistent, although the emphasis given to certain aspects of food handling may differ.
Has a section on management of information that is comparable to APHA's, but more extensive in terms of specific requirements (pp. 209-225). Only area not covered is transfer of record with patient because these standards were not designed for correctional systems.	Has a section on medical records that covers format and contents (P-60,E; J-58,E), confidentiality (P-61,E; J-59,E), transfer of the medical record (P-64,I; J-62,I), and retention of inactive records including reactivation if an inmate returns to the system (P-65,I; J-63,I). Similar to ACA's in format (both were based on prior AMA standards), but NCCHC's have more extensive commentary and differ in emphasis (P-60, P-61, J-58, and J-59 are designated as essential standards for accreditation whereas ACA's are nonmandatory).	There is substantial agreement on most items governing health records and information. Except for the issue of transfer of records, JCAHO standards are the most specific. ACA standards provide the least commentary and direction.
Has sections on educational activities that specify the need for initial orientation and continuing medical education, including emergency training. Documentation required (pp. 200-201). Does not address health-related training of correctional staff.	Has standards mandating initial orientation (P-25,I; J-25,I) and at least 12 hours of inservice training annually for all full-time health professionals (P-19,E; J-18,E); one mandating emergency and other health-related training for correctional staff (P-20,E; J-19,E); CPR for all staff (P-19,E; J-18,E); medication administration training for applicable staff (P-21,E; J-20,E); and training in suicide prevention (P-53,E; J-51E).	NCCHC and then APHA standards are the most comprehensive and specific. JCAHO's are good with respect to health staff, but ignore training of correctional staff. ACA's address training of correctional staff but not health staff.
Has section on education of patients and family (pp. 121-126).	Requires health education for inmates, training in self-care, and inoculations as needed. Suggested topic list included (P-46,I; J-44,I).	The three sets for corrections are fairly comparable. None identifies patient education as a priority.

KEY E = NCCHC essential standards I = NCCHC important standards
M = ACA mandatory standards N = ACA nonmandatory standards

Sample Health Record Forms

Appendix F

Reprinted with permission from the Georgia Department of Corrections and
the New York State Department of Correctional Services.

Name_____

GEORGIA DEPARTMENT OF CORRECTIONS

State ID No._____

Date of Birth_____

HEALTH SERVICES REQUEST

THIS FORM IS NOT TO BE FILED IN THE HEALTH RECORD

Race_____Sex_____

REQUEST **Prisoner may check all statements that apply and submit to medical this entire form. Do not tear off yellow copy.**

☐ **I wish to be seen at** ☐ **Medical** ☐ **Dental** ☐ **Other** **sick call** for the following reason(s):

_____

_____

☐ **I do not wish to be seen at sick call**, however, I need:

- ☐ Medication refilled (specify) _____
- ☐ Over-the-counter medication (explain)_____
- ☐ Lab test results information (specify)_____
- ☐ Appointment information regarding (specify)_____
- ☐ Other (specify) _____

☐ **I wish to cancel a previous sick call request dated** _____/_____/_____

Patient Signature:_____ Date signed: _____/_____/_____

DISPOSITION **Prisoner: Do not write in this section. Medical personnel only.** Date received: _____/_____/_____

Disposition: _____

_____

Staff Signature:_____ Date signed: _____/_____/_____

HEALTH SERVICES REPLY **Prisoner: Do not write in this section. Medical will forward prisoner yellow copy with response.**

Name:_____ State ID No._____ Dorm:_____

Response:_____

_____

_____

Staff Signature:_____ Date signed: _____/_____/_____

VERIFICATION OF SERVICES PROVIDED **Medical personnel will tear this completed section and send to the Business Office.**

Prisoner _____ State ID #_____

was seen by ☐ Medical ☐ Dental ☐ Other on:_____/_____/_____

☐ $5.00 copay due ☐ $5.00 copay is waived

☐ $5.00 copay is waived due to mental health condition. Prisoner signature:_____ Staff signature:_____

FOR BUSINESS OFFICE USE ONLY

☐ Deducted $5.00 copay ☐ No copay deducted ☐ Deducted copay of $_____ ☐ Account frozen for $_____

WHITE COPY: Medical , Business Office **YELLOW COPY: Returned to prisoner with response**

3194 (04/98)

NYSDOCS REQUEST & REPORT OF CONSULTATION

ATTENTION: DO NOT TELL INMATE OF FUTURE APPOINTMENTS

Name _____

Facility _____

DIN _____ DOB _____ Date _____

Coordinated Care Information

Referral # _____

CCP decision? Yes _____ No _____

Consultation Type Initial _____

Follow up ____ Procedure ____ Telemed ____

TOS Code _____ POS Code _____

Date: _____ Time: _____

Consult Requested By: _____ To: _____

TOS/POS*

Reason for consultation (include lab findings, x-ray results, current needs and treatments.)

Urgency of Care: Emergency _____ (24 HOURS) Urgent _____ (5 DAYS) Soon _____ (14 DAYS) Routine _____ (30 DAYS) Assigned _____ (MORE THAN 30 DAYS)

Transportation: Wheelchair _____ Litter _____ HCA _____ Nurse _____ Ambulance _____

CONSULTANT REPORT

If this is a telemedicine encounter, has the inmate read the instructional sheet or been instructed on the telemedicine encounter? Yes ❑ No ❑

S:

O:

A:

P:

FACILITY MD REVIEWER/DATE

CONSULTANT SIGNATURE (Please Print) _____ DATE: _____

FOLLOW UP APPOINTMENT _____

*TOS/POS - Write type of service / Place of service here

DISTRIBUTION: **WHITE** - INMATE HEALTH RECORD **CANARY** - CONSULTANT
PINK - VENDOR CLINIC RECORD **GOLDENROD** - PENDING CONSULT COPY

ATTENTION: DO NOT TELL INMATE OF FUTURE APPOINTMENTS

Form 3288 (12/99)

STATE OF NEW YORK - DEPARTMENT OF CORRECTIONAL SERVICES

_____ Correctional Facility

EYE RECORD

DATE _____

Name	DIN	DOB	Age

HISTORY

Chief Complaint

Meds

Prior Rx

TESTS & FINDINGS

Ocular History: Prior Injury/Surgeries

$\overline{CC}$ / $\overline{SC}$

Acuity

OD

OS

Add

Objective

OD

OS

Subjective

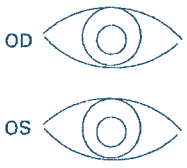
OD

OS

$\overline{C}$Cacuity

20

External
WNL OD / OS



OD

OS

Cornea
Iris
Conj.
Lids
Pupils
Puncta
Angle

Internal: Via mydriatic method
WNL OD / OS

OD

OS

C/D Ratio
A/V Ratio
Macula
Vitreous
Periphery

Additional Tests & Findings

IOP OD Time ___ Method ___

OS

ASSESSMENT:

New Rx	Sph.	Cyl.	Axis	Prism	Add
OD					
OS					

Size	Frame	Color
Seg. ht.	Mat.	P.D.

PLAN: Circle

Rx Glasses

Referral to

Follow-up (date)

Other

_____ _____
Provider - Signature Date

DISABILITY IMPAIRMENTS:

☐ Legal Blindness - A) Visual acuity of 20/200 or less in the better eye with best correction, or - B) Visual field of no greater than 20° in the better eye.

☐ Severe Visual Impairment - A) Visual acuity of 20/70 or less in the better eye with best correction, or - B) Visual field of no greater than 40° in the better eye.

☐ Visual Impairment - Recommend the following accommodations:

☐ Large Print ☐ Guidance Cane ☐ Mobility Assistant ☐ Books on Tape
☐ Magnifier ☐ Braille Materials ☐ High Intensity Lamp ☐ Preferred Seating

☐ Tinted U/V Glasses % _____ Color _____

☐ Other _____

DR. EDWARD BERGER
333 Hoosick Street
Troy, NY 12180
518-270-LENS
518-331-4944 Cellular

CORRECTIONAL EYE CARE NETWORK SERVICES

DR. MARK MAXON
P.O. Box 2040
Lake Placid, NY 12946
518-523-0111
518-574-2848 Pager

EYE GLASS FAX ORDER FORM

1. Inmate Name: _____ Date Received: _____

Facility Name: _____ Billing Date: _____

2.

	SPHERE	CYL.	AXIS	DEC.	PRISM	BASE
DISTANCE R						
DISTANCE L						

	ADD	SEG. HEIGHT	SEG. WIDTH	SEG. INSET	TOTAL INSET
NEAR R					
NEAR L					

PD	DIST	NEAR

FAX FORM INSTRUCTIONS

1. Enter Name & Facility
2. Copy Rx into
   a. Sphere, Cyl & Axis
   b. Include +/-I
   c. Near Power if Bifocal
3. Enter Frame Info
   a. Style
   b. Size
   c. Color
4. Enter any Options
   Tint, Hardcoat
   Upgrade Lens Material
5. Enter Account Name & Address

FAX TO or Contact us at:

Correctional Eye Care Network Services
333 Hoosick Street
Troy, NY 12180

Phone: 518-270-5367

FAX: 518-272-2032

3.

FRAME INFORMATION		
STYLE	SIZE	COLOR

4.

LENS INFORMATION			
PLASTIC	POLY	PGX	HI IND

HARDCOAT: **YES** **NO**

COLORS

ROSE _____%
GREEN _____%
GRAY _____%
BROWN _____%
SOLID-GRADIENT

PGX
TRANSITIONS
U.V.

BILLING	
FRAME	
LENS	
METAL	
HARDCOAT	
PGX	
CASE	
SHIPPING	
TOTAL	

NOTES/COMMENTS:

5. Account Name: _____

Address: _____

_____

Matrix for Special Health Needs

Appendix G

Matrix for Special Health Needs				
	Category			
Implications for:	**Subheading**	**Subheading**	**Subheading**	**Subheading**
Housing				
Programming				
Staffing Medical				
Other				
Specialty services				
Special space/equipment				
Fiscal planning				

Sample Mental Health Policies

Appendix H

TDCJ MENTAL HEALTH SERVICES MANUAL	Effective Date: 10/1/97	NUMBER: MHS IV D
	Replaces:	
	Formulated: NEW	Page 1 of 4

OUTPATIENT PSYCHOLOGICAL OBSERVATION

PURPOSE: To provide guidelines for the identification, evaluation, and management of outpatient unit-level offenders who may be at risk of harm to themselves or others.

POLICY: When determined to be clinically appropriate, offenders exhibiting potentially harmful verbalizations or behavior may be placed in psychological observation in a cell or room within the offender's assigned unit.

DEFINITION: "Psychological Observation" means the confinement of an offender/patient in a controlled, safe environment for the purpose of observing his/her behavior and emotional state to assess mental disorder, if any, and to prevent destructive or self-destructive behavior.

PROCEDURE:

I. HOUSING

A. Any room or cell used for psychological observation must have the following:

1. Adequate lighting
2. No exposed electrical outlets
3. Ability for the observer to see the entire room without entering
4. No fixtures which the offender may use to harm himself
5. Adequate ventilation during warm weather and adequate heat during cold weather

B. All cells or rooms intended for use as psychological observation areas must be visually inspected and approved prior to use by the Facility Warden, responsible psychologist, Health Authority and Director of Nurses.

Written confirmation of this approval must be maintained as an addendum to this policy in the Facility Health Services Manual and the Mental Health Services Manual.

C. Units without 24-hour onsite nursing coverage and a designated outpatient psychological observation cell may not participate in psychological observation.

D. If a unit does not have a suitable, approved housing area in which to provide psychological observation, the offender/patient must be transferred immediately to a facility that provides this service.

TDCJ MENTAL HEALTH SERVICES MANUAL	Effective Date: 10/1/97	NUMBER: MHS IV D
	Replaces:	Page 2 of 4
	Formulated: NEW	

II. IDENTIFICATION

When an offender verbalizes or exhibits potentially self-destructive behavior, or behavior which may otherwise present a risk to himself or others, she/he should be referred immediately to mental health or medical staff.

A. An offender may be placed in psychological observation subject to the following:

1. The psychologist shall evaluate the offender and recommend psychological observation in accordance with Section III of this policy.

2. If no psychologist is available, the offender must be evaluated by a physician, mid-level practitioner or nurse. Recommendations for psychological observation are documented in accordance with Section III of this policy.

B. An offender may be appropriate for psychological observation if:

1. She/he has made no acts of self-injury requiring ongoing medical attention.

2. Behavior and/or mental status do not necessitate the use of physical restraint.

3. Behavior and/or mental status do not necessitate enforced medication.

4. The offender/patient is not acutely psychotic, severely depressed, suicidal or otherwise seriously mentally ill.

Those offender/patients who do not meet the above criteria are inappropriate for psychological observation and should be transferred immediately to a psychiatric inpatient facility. Psychological observation must not be used as punishment, as a substitute for effective treatment or solely for the convenience of the staff.

III. DOCUMENTATION

A. All admissions to psychological observation require the written orders of a psychologist, psychiatrist, physician and/or mid-level practitioner. The following information should be clearly documented:

TDCJ MENTAL HEALTH SERVICES MANUAL	Effective Date: 10/1/97	NUMBER: MHS IV D
	Replaces:	
	Formulated: NEW	Page 3 of 4

1. Referral source and reason for referral
2. Description of behavior and mental status
3. Recommendation for psychological observation to include duration (NTE 72 hours).
4. Items which the offender may possess and appropriate servingware for meals
5. Treatment plan

B. All documentation will be made in the outpatient medical record.

C. During normal working hours, Mental Health Services clinical staff are responsible for all documentation and usual checks on offenders on psychological observation status.

D. After normal working hours, nursing staff are responsible for all documentation and usual checks on offenders on psychological observation status.

E. Documentation of the offender/patient's behavior and/or mental status should be made in the medical record as changes occur and a summary of the observations made at the end of each shift.

IV. MONITORING

A. Offenders in psychological observation must be visually checked a minimum of once every 30 minutes. Behavior is documented on the Mental Health Observation Checklist (Attachment A).

B. During regular working hours, Mental Health Services clinical staff are responsible for all monitoring of the patient and documenting all visual checks.

C. After regular hours and on weekends and holidays, nursing staff are responsible for making visual checks and documenting behavior on the Mental Health Observation Checklist.

D. Any observed behavior which appears to be highly unusual and/or potentially dangerous should be documented in the medical record.

E. Upon arriving for duty each day, Mental Health Services staff will immediately assume responsibility for monitoring patients in psychological observation.

F. Any offender on psychological observation whose behavior or condition becomes unmanageable shall be transferred immediately to a crisis management facility.

TDCJ MENTAL HEALTH SERVICES MANUAL	Effective Date: 10/1/97	NUMBER: MHS IV D
	Replaces:	
	Formulated: 8/97	Page 4 of 4

V. DISCHARGE FROM PSYCHOLOGICAL OBSERVATION

A. Offender/patients may be discharged from outpatient psychological observation at any time prior to or upon the expiration of a 72 hour period. A discharge order must be written by a psychologist, psychiatrist, physician or mid-level practitioner.

B. Upon expiration of psychological observation orders, the offender/patient must be:

1. Returned to his/her assigned housing area, or

2. Transferred to an inpatient psychiatric facility for further treatment/observation

C. Upon discharge, documentation is made in the medical record which includes:

1. Summary of events which occurred during the offender's stay in psychological observation

2. Current behavior and mental status

3. Diagnostic impression

4. Recommendations or plans for further treatment, or transfer to an inpatient facility

D. Completed Mental Health Psychological Observation Checklist forms will be filed in the medical record.

VI. LEGAL MATERIALS

Offenders may not be denied possession of legal materials except under the following circumstances:

1. Items with which the offender may harm himself, such as pencils, pens, paper clips and staples may be denied with written justification in the medical record.

2. State-furnished legal materials may be restricted or denied should the offender/patient exhibit behavior which may result in the destruction of such materials. Justification of any restriction must be documented in the medical record.

3. Offenders on psychological observation status may not go to the law library.

Reference: NCCHC Standard P-53, Suicide Prevention (essential)

TDCJ MENTAL HEALTH SERVICES MANUAL	Effective Date: 10/1/97	NUMBER: MHS IV E
	Replaces: 3.02	
	Formulated: Revised 9/97	Page 1 of 3

PSYCHIATRIC CRISIS MANAGEMENT

PURPOSE: To provide guidelines for the use of Crisis Management.

POLICY: Crisis management will be provided only in inpatient psychiatric facilities as a special treatment procedure for limited periods of time by physician order. The use of crisis management requires clinical justification and is employed to protect the patient from self-injury or from injury to others when the offender exhibits suicidal threats or gestures or disorganized, psychotic or bizarre behavior. Crisis management must not be used as punishment, as a substitute for effective treatment or rehabilitation, or solely for the convenience of the staff.

DEFINITION: "Crisis Management" means the confinement of an offender/patient in a controlled, safe environment for the purpose of observing his/her behavior and cognitive and emotional state in order to protect the patient from harm. Crisis management should not be used to initiate or discontinue long-term outpatient treatment and the recommendation of the outpatient treatment team should be considered when clinically appropriate.

PROCEDURE:

I. Referral

The procedures for referring offenders to crisis management are located in Mental Health Services policy II.A, Referral of Offenders to Psychiatric Inpatient or Crisis Management Facilities.

II. Care of the Offender/Patient While on Crisis Management Status:

A. Clothing, mattress, blanket and legal material are allowed unless otherwise ordered by a physician/mid-level practitioner. Items with which an offender/patient might injure himself must be removed before the offender/patient is placed on crisis management status.

B. The offender/patient is observed by a nurse or psychiatric aide every 15 minutes.

C. Regular meals and foods will be served on servingware appropriate for safety.

D. Daily bathing is made available.

E. Bathroom privileges are offered at least every two hours if no facilities are available in the room.

TDCJ MENTAL HEALTH SERVICES MANUAL	Effective Date: 10/1/97	NUMBER. MHS IV E
	Replaces: 3.02	
	Formulated: Revised 9/97	Page 2 of 3

III. Admission Documentation

A. Upon admission to crisis management an entry must be made in the medical record that includes, but is not limited to, the following information:

1. The reason and authority for the admission to crisis management
2. The time and date of the admission to crisis management
3. The duration of stay (NTE 3 working days)

B. Crisis Management Checklist (Attachment A)

1. The crisis management checklist will be initiated by the receiving nurse.

2. The nurse and/or psychiatric/rehabilitation aides will begin to record the following on the checklist:

a. The precaution level
b. Behaviors observed during scheduled visual checks by placing the code(s) and initials on the appropriate time line.

IV. Crisis Management Documentation

A. Initial assessment by a psychiatrist/mid-level practitioner will be completed within 24 hours of admission, or within 72 hours on weekends and holidays.

B. All treatment and/or interventions that the patient receives should be documented.

C. During routine working hours, the patient will be assessed by a mental health services clinician daily.

D. The goal of crisis management is to resolve the presenting crisis and/or to determine the need for inpatient care. The attending psychiatrist may order 1 extension not to exceed 3 working days in crisis management if clinically indicated and with the written concurrence of the clinical director.

TDCJ MENTAL HEALTH SERVICES MANUAL	Effective Date: 10/1/97	NUMBER: MHS IV. E
	Replaces: 3.02	Page 3 of 3
	Formulated: Revised 9/97	

V. Discharge Documentation

A. Upon discharge from crisis management, the psychiatrist/mid-level practitioner will document the following information in the medical record in the SOAP format:

S: Presenting symptoms, clinical course of stay, and current level of symptomology

O: Mental status examination at the time of discharge and the results of any applicable laboratory or x-ray procedures

A: Diagnosis (DSM IV)
Axis I
Axis II
Axis III

P: 1) Discharge orders
2) Recommendations for further treatment

B. Patients discharged from crisis management and awaiting transportation will be monitored by clinical staff at least weekly.

Reference: NCCHC Standard P-53, Suicide Prevention (essential)

ATTACHMENT A – MHS IV. E

TEXAS DEPARTMENT OF CRIMINAL JUSTICE
MENTAL HEALTH SERVICES

OBSERVATION CHECKLIST FOR CRISIS MANAGEMENT, PSYCHOLOGICAL OBSERVATION, SECLUSION OR RESTRAINT

NAME: _____ TDCJ # _____ UNIT: _____

CHECK THE APPROPRIATE TYPE:

_____ CRISIS MANAGEMENT _____ PSYCHOLOGICAL OBSERV. _____ SECLUSION
_____ RESTRAINT

DATE & TIME BEGUN _____

ITEMS ALLOWED: (Check appropriate boxes)

_____ CLOTHING
_____ UNDERGARMENTS ONLY
_____ SUICIDE BLANKET
_____ MATTRESS
_____ PILLOW
_____ REGULAR TRAY
_____ PAPER TRAY
_____ SACK LUNCH
_____ OTHER (Specify): _____
_____

CODE	EXPLANATION
1.	Beating on door/wall
2.	Yelling, screaming
3.	Crying
4.	Laughing
5.	Singing
6.	Mumbling
7.	Talking to self
8.	Talking to others
9.	Standing still
10.	Walking
11.	Sitting or lying
12.	Quiet
13.	Sleeping
14.	Meals/fluids
15.	Bath/shower
16.	Toilet
17.	Restraint loosened
18.	Range of motion
19.	Out-of-cell
20.	_____
21.	_____

PRINTED NAME	INITIALS
_____	_____
_____	_____
_____	_____
_____	_____

TIME OF VISUAL CHECK		
7 a.m. - 3 p.m.	3 p.m. - 11 p.m.	11 p.m. - 7 a.m.
7:00 _____	3:00 _____	11:00 _____
7:15 _____	3:15 _____	11:15 _____
7:30 _____	3:30 _____	11:30 _____
7:45 _____	3:45 _____	11:45 _____
8:00 _____	4:00 _____	12:00 _____
8:15 _____	4:15 _____	12:15 _____
8:30 _____	4:30 _____	12:30 _____
8:45 _____	4:45 _____	12:45 _____
9:00 _____	5:00 _____	1:00 _____
9:15 _____	5:15 _____	1:15 _____
9:30 _____	5:30 _____	1:30 _____
9:45 _____	5:45 _____	1:45 _____
10:00 _____	6:00 _____	2:00 _____
10:15 _____	6:15 _____	2:15 _____
10:30 _____	6:30 _____	2:30 _____
10:45 _____	6:45 _____	2:45 _____
11:00 _____	7:00 _____	3:00 _____
11:15 _____	7:15 _____	3:15 _____
11:30 _____	7:30 _____	3:30 _____
11:45 _____	7:45 _____	3:45 _____
12:00 _____	8:00 _____	4:00 _____
12:15 _____	8:15 _____	4:15 _____
12:30 _____	8:30 _____	4:30 _____
12:45 _____	8:45 _____	4:45 _____
1:00 _____	9:00 _____	5:00 _____
1:15 _____	9:15 _____	5:15 _____
1:30 _____	9:30 _____	5:30 _____
1:45 _____	9:45 _____	5:45 _____
2:00 _____	10:00 _____	6:00 _____
2:15 _____	10:15 _____	6:15 _____
2:30 _____	10:30 _____	6:30 _____
2:45 _____	10:45 _____	6:45 _____

HSP-5 (Rev. 12/97)

ATTACHMENT A – MHS IV. E

TEXAS DEPARTMENT OF CRIMINAL JUSTICE
MENTAL HEALTH SERVICES

INSTRUCTIONS FOR COMPLETING OBSERVATION CHECKLIST FOR CRISIS MANAGEMENT PSYCHOLOGICAL OBSERVATION, SECLUSION OR RESTRAINT

1. At the time the patient is placed in crisis management, psychological observation, seclusion or restraint, an entry must be made in the medical record that includes the following information.

   A. Reason and authority

   B. Duration of order

      1. Inpatient Crisis management - not to exceed 3 working days
      2. Outpatient Psychological Observation - not to exceed 72 hours
      3. Seclusion - not to exceed 24 hrs.
      4. Restraint - not to exceed 12 hrs.

   C. Information given to the patient regarding reason for placement, duration of order and behavior required for release

   D. Items allowed in room

2. The top half of the form must be completed by a psychiatrist/psychiatric mid-level practitioner, nurse or psychologist and includes:

   A. Patient name
   B. TDCJ number
   C. Name of facility
   D. Type of observation (crisis management, psychological observation, seclusion, restraint)
   E. Date and time begun
   F. Duration of order
   G. Items allowed - Personal legal materials are permitted upon request except with appropriate documented clinical justification.

3. Visual checks must be recorded on the checklist every 15 minutes (30 minutes for Outpatient Psychological Observation). Each staff member must write his/her name and initials at the bottom of the form. Visual checks are documented by entering both the code number(s) which best describes the patient's behavior and the observer's initials in the blank beside the appropriate time.

4. Completed forms are forwarded to the Medical Records Department to be filed in the medical record.

NCCHC's Position Statement on the Administrative Management of Inmates With HIV-Positive Test Results or AIDS

Appendix I

Appendix I

National Commission on Correctional Health Care

Position Statement

Administrative Management of HIV in Corrections

The National Commission on Correctional Health Care (NCCHC) is a not-for-profit 501(c)(3) organization whose board of directors is comprised of individuals named by 34 professional associations. The Commission's primary purpose is to work toward improving health services in the nation's jails, prisons, and juvenile detention and confinement facilities. Toward that end, the Commission has published health services standards that are revised every three years.

Occasionally, an issue arises that has not been addressed by the Commission's standards or has changed since the standards were last revised. One such issue is the administrative management of Human Immunodeficiency Virus (HIV) positive inmates and health care workers (HCWs), and those with AIDS (Acquired Immune Deficiency Syndrome). Accordingly, NCCHC has adopted the following position statement that, along with the published standards, may assist correctional facilities in designing their own procedures on this matter.

Please note that the Commission's policies do not address the medical management of HIV-positive inmates or correctional staff, since this information is available from other national agencies such as the Centers for Disease Control (CDC) in Atlanta. The Commission's Board of Directors believes that the medical management of HIV-positive inmates and HCWs should parallel that offered to individuals in the non-correctional community. Also note that these position statements have been approved by the Commission's Board of Directors but do not necessarily reflect the position of the supporting organizations who named those individuals to the Commission's Board.

I. HIV Testing For The Incarcerated

A. Testing for HIV is valid as a diagnostic tool. With advances in the diagnosis and treatment of HIV, it is important that those who are seropositive be identified early. Accordingly, voluntary testing for the purpose of initiating treatment should be available to persons who request it. Anyone with clinical indication of HIV disease and anyone who has engaged in high risk behaviors should be encouraged to test for HIV. While recent research has demonstrated that early treatment can delay the progression of the disease, it is not clear that large scale screening is efficacious.

B. New research has indicated that pregnant women who are infected with HIV are less likely to transmit the virus to their newborn if they are treated with AZT during their pregnancy. In consideration of this new evidence it makes sense to educate women about this new finding and encourage them to be tested for HIV if they are pregnant.

II. Special Housing

A. The Commission opposes segregated housing for HIV-positive inmates who have no symptoms of the disease. Since HIV is not airborne and is not spread by casual contact, HIV-positive inmates should be maintained in the general population in whatever housing is appropriate for their age, custody class, etc. However, people with AIDS may require medical isolation for their well-being as determined by the treating physician.

III. Special Precautions

A. The NCCHC supports and recommends strict compliance with the Centers for Disease Control (CDC) statement on Universal Precautions in all settings within corrections:

> "All HCWs should adhere to universal precautions, including the appropriate use of hand washing, protective barriers, and care in the use and disposal of needles and other sharp instruments. HCWs who have exudative lesions or weeping dermatitis should refrain from all direct patient care and from handling patient-care equipment and devices used in performing invasive procedures until the condition resolves. HCWs should also comply with current guidelines for disinfection and sterilization of reusable devices used in invasive procedures." (Centers for Disease Control, Recommendations for Preventing Transmission of Human Immuno-deficiency Virus and Hepatitis B Virus to Patients During Exposure Prone Invasive Procedures, 1991)

B. Except under unusual circumstances (e.g., the inmate is violent), correctional staff need not take special precautions in managing HIV-positive inmates. Masks, gowns, and/or gloves are not required in performing routine duties such as feeding, escorting, or transporting HIV-positive inmates.

C. Medical staff need not take special precautions in performing routine, non-invasive procedures on HIV-positive inmates such as interviews or examinations. However, for any invasive procedure (e.g., blood drawing, intravenous placement, draining of abscesses, suturing, excisions, biopsies, dental work), all inmates should be considered potentially HIV-positive and all staff should take precautions as recommended by the CDC. The CDC's recommendations also should be followed in the medical management of inmates with AIDS.

IV. Education/Counseling

A. HIV/AIDS education should be provided to all staff and inmates in jails, prisons, and juvenile confinement facilities. This education should include information on modes of transmission, prevention, treatment, and disease progression. Educational programs should include culturally sensitive and scientifically accurate health information that provides clear and easily understandable explanations of practices that reduce the risk of becoming infected or transmitting HIV. It is highly recommended that information on the psychosocial implications of HIV infection as well as resources available to the infected person be included as well. When developing programs for juveniles, the recommendations of the CDC's publication entitled: "Guidelines for Effective School Health Education to Prevent The Spread of AIDS," Centers For Disease Control, MMWR Supplement, January 29, 1988, Vol. 37, No. S-2 or a subsequent revision may be used as a guide. Also, NCCHC recommends involvement of the target population in the development and provision of educational programs to encourage acceptance of the material. Staff should also receive training on confidentiality as it applies to HIV disease.

B. All HIV-positive inmates and those with AIDS should receive counseling to help them adjust to their condition and to alert them to behavioral changes that may be required to prevent future contagion of others. Additionally, such inmates should be encouraged to voluntarily contact sexual or drug use partners and advise them of their condition.

V. Prevention

A. Massive educational efforts should be undertaken to inform all inmates and all staff (correctional and medical) about HIV disease and the steps to be taken to prevent its spread. Further, while the Commission clearly does not condone illegal activity by inmates, the terminal absoluteness of this disease, coupled with the potential for

catastrophic epidemic, require (consistent with security) the unorthodox conduct of making available to inmates whatever appropriate protective devices can reduce the risk of contagion.

VI. Confidentiality

A. Recognizing that being labeled as HIV-positive may put an inmate in a correctional institution at undue risk for compromised personal safety, it is particularly important that the rules of physician/patient confidentiality regarding HIV test results and diagnoses of AIDS be followed. Further, since the legal status regarding the confidentiality of such information varies from state to state and from time to time, the facility should keep informed of any changes enacted by legislatures or determined by the courts.

VII. Special Correctional Programs

A. HIV-positive inmates and those with AIDS who otherwise meet eligibility criteria for special correctional programs (e.g., parole, medical reprieve) should be given the same consideration as are other inmates.

VIII. The HIV-Positive Correctional Health Care Worker

A. Mandatory testing of correctional HCWs for HIV infection is not recommended.

B. Correctional HCWs who are HIV-positive have a right to continue their career in the health care field in a capacity that does not pose an identifiable risk of HIV infection to their patients. HCWs who are HIV-positive should not be required to disclose their HIV status if their work does not include involvement in invasive procedures as defined by the CDC.

C. HCWs who are involved in the performance of invasive procedures should disclose their seropositive status to the appropriate institutional medical and administrative authorities in his/her facility. Decisions on HCWs ability to perform specific procedures should be decided on an individual, case by case basis.

IX. HIV Infection and Tuberculosis

A. Given the increasing incidence of tuberculosis in the country in general, and noting the particular growth in drug resistant tuberculosis in particular, please note that a high prevalence of tuberculosis in the general population may require a variation from this position statement. Especially note that large numbers of HIV infected inmates or health care workers who are particularly susceptible to tuberculosis may require a different position to protect these persons from the danger of infection.

Adopted by the National Commission on Correctional Health Care Board of Directors: November 8, 1987

Last amended: September 25, 1994

National Commission on Correctional Health Care

1300 W. Belmont Ave., Chicago, Illinois 60657-3240

(773) 880-1460

Fax: (773) 880-2424

e-mail: *ncchc@ncchc.org*

http://www.ncchc.org

Sample Clinic/Infirmary Equipment List

Appendix J

Sample Clinic/Infirmary Equipment List

The following list offers suggestions for equipment to be placed in facility clinics and infirmaries. More or less equipment may be required depending on the special needs and the level of care of a particular facility. Note also that certain equipment requires special expertise to operate and should not be purchased unless the facility has staff with the requisite training. Also, computer equipment is not included and its use should be considered for several areas.

Conference/Training Room

- Blackboard
- Chairs
- Conference table
- TV, 25"
- Videocassette recorder (VCR)

Dental Lab

- Air and natural gas outlets
- Alcohol torch
- Bunsen burner
- Cleaner, ultrasonic
- Engine, bench with handpiece
- Lathe with suction unit, dust hood, light, and safety panel glass for polishing, auto check kit
- Plaster trap
- Receptacle, waste
- Spatulas and plastic mixing bowls
- Stool, lab
- Vibrator

Dental Operatory (each)

- Air compressor, dental, and buckboost transformer and filter*
- Amalgamator (high speed)
- Autoclave*
- Cabinet, mobile, dental
- Curing light*
- Dental chair
- Dental lights with adaptors for model of unit ordered
- Dental unit with handpieces (high and low speed, with water syringe and evacuator)
- Emergency kit*
- Oxygen, portable resuscitator*
- Processor, auto (x-ray)*
- Pump, vacuum, dental*
- Receptacle, waste
- Scaler, dental ultrasonic
- Stool, dental assistant
- Stool, dentist
- Syringe and needle disposal (puncture resistant)
- Water softener*
- X-ray apron, patient*
- X-ray illuminator
- X-ray screen, mobile (depending on construction)*
- X-ray unit, dental intraoral*

* These items listed per dental clinic, not per operatory.

Emergency Room

- Ambu bag
- Autoclave, OCR
- Cabinet, treatment, lockable
- Cart, utility
- Cast cutter
- Cot, ambulance
- Crash cart
- Defibrillator/monitor
- Diagnostic set
- Emergency medication box
- Eye/face wash, wall mount
- Footstool
- Hyfrecator
- Kick bucket

Eye Examination

- Chair, ophthalmic
- Keratometer
- Lensometer
- Ophthalmoscope, giant scope 6.5V with case and transformer
- Ophthalmoscope, monocular indirect 6.5V with cradle/instrument transformer
- Photometer, reflective
- Prisms, set, plastic
- Refractor
- Retinoscope
- Slit-lamp
- Spectrophotometer
- Trial frame
- Trial lens set, full aperture
- Vision tester

Health Records

- Letter-size file drawers or special medical chart file cabinets

Infirmary Patient Rooms (each)

- Bed, adjustable
- Bedrails, safety
- Cabinet, bedside
- Call system, patient to nurse
- Screen, privacy
- Table, overbed

Laboratory

- Centrifuge, clinical
- Centrifuge, microhematocrit and tube reader, microcapillary
- Counter, lab
- Glucometer
- Hemacytometer chamber with cover glasses
- Incubator, CO_2
- Microscope, binocular
- Refrigerator
- Sedimentation apparatus
- Staining rack and tray
- Syringe destroyer, electric
- Urinometer

Laryngoscope, handle and blades

- Light, surgical
- MAST (trousers)
- Mayo stand
- Oxygen cart resuscitator
- Oxygen tank set
- Receptacle, waste
- Scale
- Screen, privacy
- Soap dispenser, wall
- Sphygmomanometer, mobile
- Stool, revolving
- Stretcher, emergency

- Stretcher, gurney
- Stretcher, scoop
- Stretcher, transport, with removable litter and cushion
- Suction, portable
- Syringe destroyer, electric
- Table, instrument, stainless steel
- Table (tilt, treatment, or surgical)
- Thermometer, electronic
- Wheelchair
- X-ray view box

Offices

All offices should include:

- Bookcase(s)
- Chair, executive/secretarial
- Chair, side
- Desk, executive/secretarial
- File cabinet(s)

Pharmacy

- Cart, medicine transfer, unit dose
- Cart, medicine, unit dose
- Heat sealer (for blister packs)
- Numbering machine
- Reference texts
- Refrigerator
- Torsion balance

Physical Therapy

- Achilles tendon reflex apparatus
- Bicycle exerciser
- Black light
- Diathermy
- Electric needle apparatus
- Emergency oxygen unit
- Exercise staircase, straight type
- Infrared lamp
- Hydrocollator, 12-pack, hot-pack mobile unit
- Parallel bars
- Table, electric needle apparatus, 3" x 72"
- Table, exercise
- Treadmill
- Ultrasound unit, with stand
- Vital capacity apparatus
- Wheel, shoulder
- Whirlpool bath, stationary (arm, foot, leg, and knee)

Radiology

- Bucky holder, upright
- Identification printer
- Film processor, auto
- Lead apron, coat type
- Lead gloves, protective
- Lead markers, left and right
- Safe light, darkroom
- Window, viewing, telescoping, lead-lined
- X-ray calipers
- X-ray film storage cabinet
- X-ray storage bin
- X-ray table, 76" horizontal
- X-ray unit, 300ma
- X-ray view box

Treatment/Examination Room (each)

- Aluminum costumer
- Aspirator with mobile stand
- Cabinets (instrument, wall, and treatment)

Cart, S utility

Diagnostic set, oto-ophthalmoscope, rechargeable

Electrocardiograph, with stand, 12 lead

Light, gooseneck exam

Light, surgical

Peak flow meter

Scale, person-weighing, 350-lb. capacity, with measuring rod

Sphygmomanometer (aneroid)

Sphygmomanometer (aneroid, mobile with base)

Sterilizer, single chamber omniclave

Table (examining, tilt, and surgical)

Table, instrument, stainless steel, 20" x 36" x 36"

Thermometer, electronic

Tonometer

X-ray view box

Other Assorted Equipment

- All emergency rooms and examination and treatment rooms as well as the lab and pharmacy should have running water with a sink and specified fixtures. A water softener system should be considered for special equipment.
- Stools (stainless, adjustable), waste buckets, towel and soap dispensers, and special equipment holders should be included in each designated room.
- Office equipment (e.g., typewriters, wastebaskets, file cabinets, and bookcases) should be included as well. If the system is computerized, terminal locations should be indicated.
- Shelving, file cabinets, etc., should be included for storage areas.
- If the health unit is to serve female inmates, an examination table with stirrups will be needed as well.

Sample Quality Improvement Policy and Guidelines

Appendix K

SAMPLE POLICY

QUALITY ASSURANCE PROGRAM - ILLINOIS DOC

04.03.125A-J

1 of 11

12/17/90

04 Programs and Services

03 Medical and Health Care

125A-J Quality Assurance Program

I. POLICY

A. Authority

Ill. Rev. Stat., Ch. 38, Para. 1003-2-2

B. Policy Statement

Each correctional facility shall be responsible for developing a comprehensive Quality Assurance Program which provides for the systematic, on-going, objective monitoring and evaluation of the quality and appropriateness of patient care. The purpose of the Quality Assurance Program is to pursue opportunities to improve patient care and resolve identified problems in an effort to achieve optimal patient care in a cost-efficient manner.

II. PROCEDURE

A. Purpose

The purpose of this directive is to establish written guidelines defining the requirements of the Quality Assurance Program:

1. To assure high quality patient care is maintained and delivered in a cost-efficient, safe, and appropriate manner.

2. To assure compliance with recognized community standards of care as well as those determined by the American Correctional Association. Compliance with the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) Standards for Ambulatory Health Care is optimal. The actual institutional accreditation process shall be determined, where applicable, by the Agency Medical Director in conjunction with Department of Corrections Administration.

3. To assure ongoing, systematic evaluation of patient care practices, professional/clinical performance and patient care services.

B. Applicability

This directive is applicable to all correctional facilities in the Adult and Juvenile Divisions.

04 Programs and Services

03 Medical and Health Care

125A-J Quality Assurance Program

C. Internal Audits

An internal audit of this directive shall be conducted at least annually.

D. Definitions

1. Quality Assurance - the process by which health care delivery is objectively and systematically monitored and evaluated to assess the quality and appropriateness of care and opportunities are pursued to improve patient care as identified problems are resolved.

2. Indicator - a measurable variable relating to the structure, process, or outcome of care.

3. Structure of Care - all inputs into care such as facilities, equipment, resources, or numbers and qualifications of staff.

4. Process of Care - those functions carried out by practitioners, including assessment, planning of treatment, indications for procedures and treatments, and management of complications.

5. Outcome of Care - positive and negative and short and long-term effects on a patient's health and functioning which are attributed to care provided.

6. Monitoring and Evaluation Process - On-going examination of care provided, identification of deficiencies in the services delivered, and improvement of the quality of care as necessary.

7. Assessment - appraisal of a problem or condition.

8. Criteria - predetermined objective elements of patient care used to measure extent, value or quality.

9. Problem - an aspect of health care services about which a question, concern, or deficiency has been identified.

04 Programs and Services

03 Medical and Health Care

125A-J Quality Assurance Program

E. Requirements

1. The Chief Administrative Officer shall designate a Quality Assurance Coordinator and shall ensure the Office of Health Services is advised of the name of the Coordinator. The Coordinator shall be the Health Care Unit Administrator, Medical Records Director, the Director of Nursing, or any person who functions in one of these capacities.

2. The Quality Assurance Coordinator shall coordinate the institutional Quality Assurance Program and function as liaison with the Office of Health Services.

3. A table of organization shall be developed at each facility which shall delineate the relationship between institutional health services and the health services governing body. The governing body includes the Chief Administrative Officer, the Office of Health Services and the health service contractor, if applicable, as reflected by the example on Attachment A. While the Chief Administrative Officer has direct, line authority over the administrative aspects of the institutional health delivery system, the Institutional Medical Director remains the sole medical authority and is clinically responsible to the Agency Medical Director. The vendor has authority as outlined in the contractual agreement.

4. The Chief Administrative Officer shall establish a Quality Assurance Committee which shall:

   a. Be responsible for annually developing and/or updating a Quality Assurance Plan based on a program which identifies problems and opens channels of communication for appropriate resolution of identified concerns.

      (1) The Plan shall include the program's objectives, organization, scope, and mechanisms for reviewing the effectiveness of the monitoring, evaluation, problem-solving activities, and a schedule of events.

      (2) The plan shall minimally be reviewed and approved by the Chief Administrative Officer and the Agency Medical Director.

04 Programs and Services

03 Medical and Health Care

125A-J Quality Assurance Program

(3) The Institutional Medical Director, Health Care Unit Administrator and Quality Assurance Coordinator shall meet no less than annually with the governing body to advise of the Quality Assurance Plan and other information pertaining to the Quality Assurance Program.

b. Be composed of at least the Institutional Medical Director, Quality Assurance Coordinator, Health Care Unit Administrator, appropriate Assistant Warden/Superintendent, and Contract Representative, where applicable.

(1) A representative from nursing, medical records, mental health, dental, pharmacy, radiology, laboratory, or other health care disciplines, or security may serve on the Committee and/or attend Committee meetings based on the agenda.

(2) Other clinical, administrative, and support staff may, at the discretion of the Institutional Medical Director or Quality Assurance Coordinator, be requested to participate in Committee activities as they relate to identified needs, problems, or other patient care issues.

c. Meet on a regular basis, but not less than monthly. However, smaller facilities (i.e. facilities with a rated capacity of less than 350) may meet every other month.

d. Determine, based on need and the potential degree of the adverse impact on patient care that can be expected if a problem remains unresolved, the frequency/priority status for monitoring activities not specified by this directive.

e. Submit a written summary in the Quality Assurance Committee minutes to the Office of Health Services indicating any changes and/or improvements in providing services as a result of the quality assurance activities. This supplement to the minutes shall be submitted on a quarterly basis for adult facilities and semi-annually for juvenile facilities.

04 Programs and Services

03 Medical and Health Care

125A-J Quality Assurance Program

5. The number of quality assurance activities, frequency of performance, and different organizational entities involved shall follow the guidelines of the Joint Commission on Accreditation of Healthcare Organizations and the Quality Assurance Manual established by the Office of Health Services pertaining to Quality Assurance with additional activity dependent upon real or perceived need.

   a. The activity shall be problem focused and evidenced by documented studies, analytical reports, or other documented, objective methods.

   b. Identified problems shall be prioritized objectively; those with the most serious effects upon patient care shall be dealt with first.

   c. Implementation of actions designed to correct problems shall be instituted through the Quality Assurance Committee with the direct involvement of the service providers and department heads.

   d. Following a reasonable period of implementation, the problem shall be monitored to see if the desired results have been obtained by comparing current outcomes to previous outcomes.

      (1) If the desired results are obtained, the cycle ends. The program area is then routinely monitored as required by this directive.

      (2) If desired results are not obtained, the cycle shall repeat itself to check problem identification, corrective actions, and implementation of corrective actions.

F. Documentation

All quality assurance activities shall be reported to the Quality Assurance Committee and documented in the meeting minutes. Documentation of the monitoring and evaluation process shall minimally include:

1. Problem identification;
2. Monitoring activities;

04 Programs and Services

03 Medical and Health Care

125A-J Quality Assurance Program

3. Assessment;

4. Plan of (corrective) action; and

5. Follow-up.

G. Confidentiality

Copies of minutes, monitoring, and evaluation activities including status reports, inmate complaints, and other related quality assurance data are to be maintained in a strictly confidential manner. The minutes of the Quality Assurance Committee shall be marked "CONFIDENTIAL."

1. Distribution of copies shall be limited to:

   a. Chief Administrative Officer;

   b. Assistant Warden/Superintendent of Programs;

   c. Agency Medical Director;

   d. Corrections Health Care Coordinators, North and South;

   e. Contract Representative, where applicable; and

   f. Health Care Unit Quality Assurance File.

2. To ensure the confidentiality of the minutes, the members and/or attendees of the Quality Assurance Committee meeting shall review the minutes maintained in the Health Care Unit Quality Assurance File and document that review by signature. Members of the health care staff should be advised of relevant quality assurance activities and findings. This may be accomplished by staff review of the minutes on file documented by signature or some other demonstrable mechanism, e.g. minutes of staff meetings, etc.

3. Copies of minutes or access by others is at the discretion of the Medical Director and/or the Health Care Unit Administrator with the approval of the Chief Administrative Officer. Any questions regarding the appropriateness of release of confidential quality assurance materials shall be directed to the Agency Medical Director and Chief of Legal Services for final resolution.

H. Guidelines - Scope of Activities

04 Programs and Services

03 Medical and Health Care

125A-J Quality Assurance Program

b. Identify important aspects of care;

c. Establish objective criteria which reflect the current knowledge and clinical experience of the providers;

d. Collect and organize data;

e. Evaluate care;

f. Develop/implement plan of action to improve care;

g. Assess the effectiveness of the corrective action;

h. Document improvements or changes; and

i. Communicate relevant information to necessary individuals and departments.

2. Quality assurance activities shall include but not be limited to the following activities:

a. Medical Records

A quarterly review of 5% of available medical records, but not less than one or more than 50, shall be monitored and evaluated to assess quality, content, and completeness of documentation.

b. Routine On-Site Patient Care Services

A quarterly review of the quality and appropriateness of 5% of each of the following services, but not less than one or more than 50 cases in each service, shall be conducted:

(1) Sick Call (CMT/LPN, RN, PA-C, MD/DO)

(2) Chronic Clinics

(3) Pharmacy Services/Medication Usage

(4) Therapeutic Diets

(5) Ancillary Services - Laboratory, X-Ray

04 Programs and Services

03 Medical and Health Care

125A-J Quality Assurance Program

(6) Dental Care

(7) Non-emergency Mental Health Services

(8) Specialty Referrals

c. Other On-Site Services

A monthly review of the quality and appropriateness of 100% of the following services shall be conducted:

(1) Emergency Mental Health Services

(2) Infirmary Care

d. Patient Satisfaction

A monthly review of 100% of complaints/grievances by inmates, family members, lawyers, etc. shall be conducted to determine client satisfaction and quality of care.

e. Infection Control

A monthly review of the quality and appropriateness of 100% of the following cases shall be conducted:

(1) Isolation Cases

(2) Communicable Disease Cases Reported to Illinois Department of Public Health

f. Mortality

A monthly review of 100% of mortality cases shall be conducted.

g. New and Delayed Diagnoses

A monthly review of 100% of new or delayed diagnoses (e.g. cancer, myocardial infarction, AIDS, etc.) shall be conducted.

04 Programs and Services

03 Medical and Health Care

125A-J Quality Assurance Program

h. Off-Site Patient Care Services

(1) A monthly review of the quality and appropriateness of care of 100% of the following cases shall be conducted:

(a) Emergency Room Visits

(b) Emergency Admissions

(c) Hospitalizations

(d) Outpatient/Same-Day Surgeries

(2) A monthly review of the quality and appropriateness of care of 5%, but not less than one or more than 50, consultations/referrals/X-rays.

i. Health Care Staff Development

An annual review of the completion of 100% of health care staff training shall be conducted, including:

(1) Pre-service Training

(2) In-service Training

(3) CPR/First-Aid Certification

j. Credentials

An annual review of 100% of all professional credentials of health care staff shall be conducted, including license and privilege sheets, if applicable. More frequent reviews shall be conducted if problems are identified.

k. Safety and Risk Management Activities

A review of the quality and appropriateness of 100% of the following shall be conducted as indicated:

(1) Injury reports for employees and inmates on a monthly basis.

04 Programs and Services

03 Medical and Health Care

125A-J Quality Assurance Program

(2) Disaster and medical emergency preparedness by the month following each drill.

(3) Deficiencies related to health care as indicated in safety and sanitation inspection reports by the month following identification of the deficiency.

(4) Radiologic safety, including radiology badge maintenance, quarterly.

(5) Quality control activities for laboratory, radiology, dental, etc. quarterly.

l. Internal/External Audit Findings

A review of 100% of all audit findings shall be conducted by the month following the receipt of the audit findings.

m. Outcome Studies

A minimum of two different outcome studies per year (one during each six month period) shall be conducted by the Quality Assurance Committee. However, smaller facilities with a rated capacity of less than 350 shall only be required to conduct one outcome study per year.

(1) These studies shall each focus on one particular clinical outcome of care and shall include the identification of a problem or issue, development of criteria describing the clinically acceptable result of treatment, comparison of the clinical data to the criteria, and correction of discrepancies or explanation of individual exceptions to the criteria.

(2) Corrective action shall be initiated as necessary based on the findings of the study. A schedule for re-evaluating the effects of the corrective actions shall be documented.

(3) Each of the steps in the study process shall be fully documented with a concise written summary

04 Programs and Services

03 Medical and Health Care

125A-J Quality Assurance Program

submitted to the Quality Assurance Committee during the month following completion of the study.

NOTE: Quarterly reviews shall be scheduled in a manner which will enable some of the quarterly reviews to be conducted each month.

Authorized by:

DIRECTOR

Supersedes:
04.03.125A-J AD 3/1/89

Chronic Illness Guidelines—Hypertension

1. Blood pressure well controlled (80% of readings in last 10 visits normal, 140/90 or less)
2. Blood pressure and pulse recorded for all encounters
3. SMAC baseline and every 6 months
4. Complete blood count and complete urinalysis annually
5. No beta-blockers if patient has diabetes, asthma, or congestive heart failure
6. Blood pressure checked at least monthly by nurse
7. Patient seen by provider (physician assistant, nurse practitioner, or physician) at least every 3 months
8. Patient seen by physician at least every 6 months
9. Flow sheet/individual treatment plan is in the record and up to date
10. Diagnosis entered on problem list

Source: Spencer, Steven S. (1999) "Standardizing chronic illness care behind bars," 6 *Journal of Correctional Health Care* 1:41-61. Reprinted with permission.

Special Needs Individual Treatment Plan—Hypertension

Hypertension Guidelines: Blood pressure (BP) controlled (80% of last 10 visits 140/90 or less). BP & pulse recorded for all encounters. SMAC baseline & q. 6 mos. CBC & complete UA annually. BP checked at least monthly by nurse. Provider visit at least q. 3 mos, physician visit at least q. 6 mos. No beta-blockers if patient has diabetes, asthma, or congestive heart failure.

Housing Needs/Restrictions:

Activity Needs/Restrictions:

Dietary Needs:

Education Needs:

Other:

Date: Signature (approving the plan):

Flow Sheet

Date: Parameter	Baseline						
BP							
SMAC							
CBC							
Complete UA							
Other							

Medications (date each entry):

Name: ID#: Facility:

Source: Spencer, Steven S. (1999) "Standardizing chronic illness care behind bars," 6 *Journal of Correctional Health Care* 1:41-61. Reprinted with permission.

CQI Auditing Tool—Hypertension

	#1			#2			#3		
Guidelines	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A
1. 8 of last 10 blood pressures (BPs) 140/90 or less									
2. BP & pulse on all visits									
3. SMAC baseline & q. 6 mos									
4. Complete blood count & complete urinalysis annually									
5. No beta-blockers if patient has diabetes, asthma, or congestive heart failure									
6. BP checked monthly									
7. Provider visit q. 3 mos									
8. Physician visit q. 6 mos									
9. Flow sheet/ITP current									
10. Diagnosis on problem list									
	#4			**#5**			**#6**		
Guidelines	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A
1. 8 of last 10 BPs 140/90 or less									
2. BP & pulse on all visits									
3. SMAC baseline & q. 6 mos									
4. Complete blood count & complete urinalysis annually									
5. No beta-blockers if patient has diabetes, asthma, or congestive heart failure									
6. BP checked monthly									
7. Provider visit q. 3 mos									
8. Physician visit q. 6 mos									
9. Flow sheet/individual treatment plan current									
10. Diagnosis on problem list									

Audited by: **Date:**

Source: Spencer, Steven S. (1999) "Standardizing chronic illness care behind bars," 6 *Journal of Correctional Health Care* 1:41-61. Reprinted with permission.

Cost-Comparison Tables

Appendix L

EXHIBIT L–1.
Variance in Timeframes of Fiscal Years, by State (*N* = 41)

Fiscal Year	Code	State
7/1/97–6/30/98	A	Arizona California Colorado Connecticut Delaware Florida Georgia Illinois Iowa Kansas Maryland Massachusetts Minnesota Missouri Montana Nebraska Nevada New Hampshire North Carolina North Dakota Ohio Oregon Rhode Island South Carolina South Dakota Tennessee Utah Virginia Washington West Virginia Wisconsin Wyoming
9/1/97–8/31/98	B	Texas
10/1/97–9/30/98	C	BOP Idaho Michigan
1/1/98–12/31/98	D	Vermont
4/1/98–3/31/99	E	New York
7/1/98–6/30/99	F	Hawaii New Mexico Oklahoma

Note: Includes the federal Bureau of Prisons (BOP).

EXHIBIT L–2.
Comparison of 1998 Total DOC Expenditures in Rank Order, by State (*N* = 41)

State	Fiscal Year	Total DOC Expenditure	Total Health Care Expenditure	DOC Expenditure Devoted to Health Care	Health Care Cost per Inmate		Average Daily Population of DOC	Total Inmate Days
					Per Year	Per Day		
CA	A	**$3,744,267,000**	$483,410,000	12.9%	$3,089	$8.46	156,515	57,127,975*
BOP	C	**2,769,478,690**	354,707,105	12.8	3,032	8.31	116,979	42,697,442
TX	B	**2,120,299,040**	288,077,674	13.6	2,222	6.09	129,620	47,311,300*
NY	D	**1,533,929,965**	170,363,271	11.1	2,429	6.65	70,147	25,603,655*
FL	A	**1,322,414,310**	230,451,478	17.4	3,389	9.28	68,000	24,820,000*
MI	C	**1,300,000,000**	188,836,558	14.5	4,205	11.52	44,907	16,391,055*
OH	A	**1,233,336,437**	145,445,752	11.8	3,023	8.28	48,108	17,559,420*
NC	A	**868,239,240**	103,000,000	11.9	3,219	8.82	32,000	11,680,000*
GA	A	**738,115,028**	93,644,676	12.7	2,540	6.96	36,870	13,457,550*
MD	A	**697,019,021**	47,225,539	6.8	2,099	5.75	22,500	8,212,500*
WI	A	**680,980,395**	34,354,944	5.0	2,383	6.53	14,414	5,261,110*
IL	A	**679,410,100**	68,100,000	10.0	1,752	4.80	38,862	14,184,630*
OR	A	**567,745,230**	20,704,656	3.6	2,624	7.19	7,890	2,879,850*
VA	A	**546,990,257**	57,791,759	10.6	2,257	6.18	25,605	9,345,825*
MO	A	**496,000,000**	39,737,653	8.0	1,681	4.61	23,640	8,628,600*
AZ	A	**475,081,082**	54,081,082	11.4	2,394	6.56	22,593	8,246,445*
WA	A	**434,163,790**	43,465,327	10.0	3,411	9.35	12,742	4,650,830*
TN	A	**400,337,800**	44,037,714	11.0	2,100	5.75	20,971	7,654,415*
CT	A	**392,136,175**	49,344,093	12.6	3,131	8.58	15,758	5,751,649
MN	A	**347,300,000**	21,500,000	6.2	3,884	10.64	5,536	2,020,640*
OK	F	**<338,891,460>**	18,836,110	5.6	1,157	3.17	20,318	5,941,919
MA	A	**333,131,044**	46,438,767	13.9	4,258	11.67	10,905	3,980,325*
SC	A	**330,857,437**	46,822,601	14.2	2,267	6.21	20,656	7,539,440*
CO	A	**292,931,731**	32,108,039	11.0	2,425	6.64	13,242	4,833,330*
KS	A	**203,876,261**	20,654,285	10.1	2,614	7.16	7,902	2,884,230*
IA	A	**196,992,907**	14,166,128	7.2	2,037	5.58	6,953	2,537,845*
NM	F	**163,711,000**	19,572,000	12.0	3,827	10.49	5,114	1,866,610*
NV	A	**156,588,151**	28,769,405	18.4	3,324	9.11	8,654	3,158,710*
UT	A	**155,366,148**	13,654,080	8.8	2,695	7.38	5,067	1,849,455*
RI	A	**128,833,380**	12,196,323	9.5	3,593	9.85	3,394	1,238,810*
HI	F	**122,949,845**	10,675,452	8.7	2,613	7.16	4,086	1,491,390*
DE	A	**109,107,000**	10,664,000	9.8	1,984	5.44	5,374	1,961,829
ID	C	**87,879,500**	7,492,670	8.5	1,959	5.37	3,825	1,396,125*
MT	A	**80,000,000**	6,983,050	8.7	2,581	7.07	2,706	987,690*
NE	A	**76,935,492**	8,861,083	11.5	2,647	7.25	3,347	1,221,655*
WV	A	**57,084,400**	6,500,000	11.4	2,281	6.25	2,850	1,040,250*
VT	D	**50,000,000**	4,550,000	9.1	3,640	9.97	1,250	456,250*
NH	A	**49,887,043**	4,517,106	9.1	2,104	5.76	2,147	783,655*
SD	A	**44,685,905**	4,223,899	9.5	1,889	5.18	2,266	816,140
WY	A	**24,093,140**	3,255,048	13.5	2,356	6.46	1,382	504,237
ND	A	**18,497,121**	826,405	4.5	1,007	2.76	821	299,665*
Average		**$594,379,086**	**$69,757,213**	**11.7%**	**$2,734**	**$7.49**	**25,510**	**9,274,987**

Notes: Includes the federal Bureau of Prisons (BOP). No data available for Alabama, Alaska, Arkansas, Indiana, Kentucky, Louisiana, Maine, Mississippi, New Jersey, Pennsylvania, or Washington, DC.

A = 7/1/97–6/30/98 B = 9/1/97–8/31/98 C = 10/1/97–9/30/98
D = 1/1/98–12/31/98 E = 4/1/98–3/31/99 F = 7/1/98–6/30/99 < > = Median *Estimated

EXHIBIT L–3.
Comparison of 1998 Total Prison Health Care Expenditures in Rank Order, by State (*N* = 41)

State	Fiscal Year	Total Health Care Expenditure	Total DOC Expenditure	DOC Expenditure Devoted to Health Care	Health Care Cost per Inmate		Average Daily Population of DOC	Total Inmate Days
					Per Year	Per Day		
CA	A	**$483,410,000**	$3,744,267,000	12.9%	$3,088	$8.46	156,515	57,127,975*
BOP	C	**354,707,105**	2,769,478,690	12.8	3,032	8.31	116,979	42,697,442
TX	B	**288,077,674**	2,120,299,040	13.6	2,222	6.09	129,620	47,311,300*
FL	A	**230,451,478**	1,322,414,310	17.4	3,389	9.28	68,000	24,820,000*
MI	C	**188,836,558**	1,300,000,000	14.5	4,205	11.52	44,907	16,391,055*
NY	D	**170,363,271**	1,533,929,965	11.1	2,429	6.65	70,147	25,603,655*
OH	A	**145,445,752**	1,233,336,437	11.8	3,023	8.28	48,108	17,559,420*
NC	A	**103,000,000**	868,239,240	11.9	3,219	8.82	32,000	11,680,000*
GA	A	**93,644,676**	738,115,028	12.7	2,540	6.96	36,870	13,457,550*
IL	A	**68,100,000**	679,410,100	10.0	1,752	4.80	38,862	14,184,630
VA	A	**57,791,759**	546,990,257	10.6	2,257	6.18	25,605	9,345,825*
AZ	A	**54,081,082**	475,081,082	11.4	2,394	6.56	22,593	8,246,445*
CT	A	**49,344,093**	392,136,175	12.6	3,131	8.58	15,758	5,751,649*
MD	A	**47,225,539**	697,019,021	6.8	2,099	5.75	22,500	8,212,500*
SC	A	**46,822,601**	330,857,437	14.2	2,267	6.21	20,656	7,539,440*
MA	A	**46,438,767**	333,131,044	13.9	4,258	11.67	10,905	3,980,325*
TN	A	**44,037,714**	400,337,800	11.0	2,100	5.75	20,971	7,654,415*
WA	A	**43,465,327**	434,163,790	10.0	3,411	9.35	12,742	4,650,830*
MO	A	**39,737,653**	496,000,000	8.0	1,681	4.61	23,640	8,628,600*
WI	A	**34,354,944**	680,980,395	5.0	2,383	6.53	14,414	5,261,110*
CO	A	**<32,108,039>**	292,931,731	11.0	2,425	6.64	13,242	4,833,330*
NV	A	**28,769,405**	156,588,151	18.4	3,324	9.11	8,654	3,158,710*
MN	A	**21,500,000**	347,300,000	6.2	3,884	10.64	5,536	2,020,640*
OR	A	**20,704,656**	567,745,230	3.6	2,624	7.19	7,890	2,879,850*
KS	A	**20,654,285**	203,876,261	10.1	2,614	7.16	7,902	2,884,230*
NM	F	**19,572,000**	163,711,000	12.0	3,827	10.49	5,114	1,866,610*
OK	F	**18,836,110**	338,891,460	5.6	1,157	3.17	20,318	5,941,919
IA	A	**14,166,128**	196,992,907	7.2	2,037	5.58	6,953	2,537,845*
UT	A	**13,654,080**	155,366,148	8.8	2,695	7.38	5,067	1,849,455*
RI	A	**12,196,323**	128,833,380	9.5	3,593	9.85	3,394	1,238,810*
HI	F	**10,675,452**	122,949,845	8.7	2,613	7.16	4,086	1,491,390*
DE	A	**10,664,000**	109,107,000	9.8	1,984	5.44	5,374	1,961,829
NE	A	**8,861,083**	76,935,492	11.5	2,647	7.25	3,347	1,221,655*
ID	C	**7,492,670**	87,879,500	8.5	1,959	5.37	3,825	1,396,125*
MT	A	**6,983,050**	80,000,000	8.7	2,581	7.07	2,706	987,690*
WV	A	**6,500,000**	57,084,400	11.4	2,281	6.25	2,850	1,040,250*
VT	D	**4,550,000**	50,000,000	9.1	3,640	9.97	1,250	456,250*
NH	A	**4,517,106**	49,887,043	9.1	2,104	5.76	2,147	783,655*
SD	A	**4,223,899**	44,685,905	9.5	1,889	5.18	2,266	816,140
WY	A	**3,255,048**	24,093,140	13.5	2,356	6.46	1,382	504,237
ND	A	**826,405**	18,497,121	4.5	1,007	2.76	821	299,665*
Average		**$69,757,213**	**$594,379,086**	**11.7%**	**$2,734**	**$7.49**	**25,510**	**9,274,987**

Notes: Includes the federal Bureau of Prisons (BOP). No data available for Alabama, Alaska, Arkansas, Indiana, Kentucky, Louisiana, Maine, Mississippi, New Jersey, Pennsylvania, or Washington, DC.

A = 7/1/97–6/30/98 B = 9/1/97–8/31/98 C = 10/1/97–9/30/98
D = 1/1/98–12/31/98 E = 4/1/98–3/31/99 F = 7/1/98–6/30/99 < > = Median *Estimated

EXHIBIT L–4.
Comparison of Percentage of 1998 Total Prison Expenditures Devoted to Health Care in Rank Order, by State (*N* = 41)

State	Fiscal Year	DOC Expenditure Devoted to Health Care	Total DOC Expenditure	Total Health Care Expenditure	Health Care Cost per Inmate		Average Daily Population of DOC	Total Inmate Days
					Per Year	Per Day		
NV	A	**18.4%**	$156,588,151	$28,769,405	$3,325	$9.11	8,654	3,158,710*
FL	A	**17.4**	1,322,414,310	230,451,478	3,389	9.28	68,000	24,820,000*
MI	C	**14.5**	1,300,000,000	188,836,558	4,205	11.52	44,907	16,391,055*
SC	A	**14.2**	330,857,437	46,822,601	2,267	6.21	20,656	7,539,440*
MA	A	**13.9**	333,131,044	46,438,767	4,258	11.67	10,905	3,980,325*
TX	B	**13.6**	2,120,299,040	288,077,674	2,222	6.09	129,620	47,311,300*
WY	A	**13.5**	24,093,140	3,255,048	2,356	6.46	1,382	504,237*
CA	A	**12.9**	3,744,267,000	483,410,000	3,089	8.46	156,515	57,127,975*
BOP	C	**12.8**	2,769,478,690	354,707,105	3,032	8.31	116,979	42,697,442
GA	A	**12.7**	738,115,028	93,644,676	2,540	6.96	36,870	13,457,550*
CT	A	**12.6**	392,136,175	49,344,093	3,131	8.58	15,758	5,751,649
NM	F	**12.0**	163,711,000	19,572,000	3,827	10.49	5,114	1,866,610*
NC	A	**11.9**	868,239,240	103,000,000	3,219	8.82	32,000	11,680,000*
OH	A	**11.8**	1,233,336,437	145,445,752	3,023	8.28	48,108	17,559,420*
NE	A	**11.5**	76,935,492	8,861,083	2,647	7.25	3,347	1,221,655*
WV	A	**11.4**	57,084,400	6,500,000	2,281	6.25	2,850	1,040,250*
AZ	A	**11.4**	475,081,082	54,081,082	2,394	6.56	22,593	8,246,445*
NY	D	**11.1**	1,533,929,965	170,363,271	2,429	6.65	70,147	25,603,655*
TN	A	**11.0**	400,337,800	44,037,714	2,100	5.75	20,971	7,654,415*
CO	A	**11.0**	292,931,731	32,108,039	2,425	6.64	13,242	4,833,330*
VA	A	**<10.6>**	546,990,257	57,791,759	2,257	6.18	25,605	9,345,825*
KS	A	**10.1**	203,876,261	20,654,285	2,614	7.16	7,902	2,884,230*
IL	A	**10.0**	679,410,100	68,100,000	1,752	4.80	38,862	14,184,630*
WA	A	**10.0**	434,163,790	43,465,327	3,411	9.35	12,742	4,650,830*
DE	A	**9.8**	109,107,000	10,664,000	1,984	5.44	5,374	1,961,829
RI	A	**9.5**	128,833,380	12,196,323	3,593	9.85	3,394	1,238,810*
SD	A	**9.5**	44,685,905	4,223,899	1,889	5.18	2,266	816,140
VT	D	**9.1**	50,000,000	4,550,000	3,640	9.97	1,250	456,250*
NH	A	**9.1**	49,887,043	4,517,106	2,104	5.76	2,147	783,655*
UT	A	**8.8**	155,366,148	13,654,080	2,695	7.38	5,067	1,849,455*
MT	A	**8.7**	80,000,000	6,983,050	2,581	7.07	2,706	987,690*
HI	F	**8.7**	122,949,845	10,675,452	2,613	7.16	4,086	1,491,390*
ID	C	**8.5**	87,879,500	7,492,670	1,959	5.37	3,825	1,396,125*
MO	A	**8.0**	496,000,000	39,737,653	1,681	4.61	23,640	8,628,600*
IA	A	**7.2**	196,992,907	14,166,128	2,037	5.58	6,953	2,537,845*
MD	A	**6.8**	697,019,021	47,225,539	2,099	5.75	22,500	8,212,500*
MN	A	**6.2**	347,300,000	21,500,000	3,884	10.64	5,536	2,020,640*
OK	F	**5.6**	338,891,460	18,836,110	1,157	3.17	20,318	5,941,919
WI	A	**5.0**	680,980,395	34,354,944	2,383	6.53	14,414	5,261,110*
ND	A	**4.5**	18,497,121	826,405	1,007	2.76	821	299,665*
OR	A	**3.6**	567,745,230	20,704,656	2,624	7.19	7,890	2,879,850*
Average		**11.7%**	**$594,379,086**	**$69,757,213**	**$2,734**	**$7.49**	**25,510**	**9,274,987**

Notes: Includes the federal Bureau of Prisons (BOP). No data available for Alabama, Alaska, Arkansas, Indiana, Kentucky, Louisiana, Maine, Mississippi, New Jersey, Pennsylvania, or Washington, DC.

A = 7/1/97–6/30/98 B = 9/1/97–8/31/98 C = 10/1/97–9/30/98
D = 1/1/98–12/31/98 E = 4/1/98–3/31/99 F = 7/1/98–6/30/99 < > = Median *Estimated

EXHIBIT L–5.
Comparison of 1998 Annual Health Care Care Cost per Inmate in Rank Order, by State (*N* = 41)

State	Fiscal Year	Health Care Cost per Inmate per Year	Total DOC Expenditure	Total Health Care Expenditure	DOC Expenditure Devoted to Health Care	Health Care Cost per Inmate per Day	Average Daily Population of DOC	Total Inmate Days
MA	A	**$4,258**	$333,131,044	$46,438,767	13.9%	$11.67	10,905	3,980,325*
MI	C	**4,205**	1,300,000,000	188,836,558	14.5	11.52	44,907	16,391,055*
MN	A	**3,884**	347,300,000	21,500,000	6.2	10.64	5,536	2,020,640*
NM	F	**3,827**	163,711,000	19,572,000	12.0	10.49	5,114	1,866,610*
VT	D	**3,640**	50,000,000	4,550,000	9.1	9.97	1,250	456,250*
RI	A	**3,593**	128,833,380	12,196,323	9.5	9.85	3,394	1,238,810*
WA	A	**3,411**	434,163,790	43,465,327	10.0	9.35	12,742	4,650,830*
FL	A	**3,389**	1,322,414,310	230,451,478	17.4	9.28	68,000	24,820,000*
NV	A	**3,324**	156,588,151	28,769,405	18.4	9.11	8,654	3,158,710*
NC	A	**3,219**	868,239,240	103,000,000	11.9	8.82	32,000	11,680,000*
CT	A	**3,131**	392,136,175	49,344,093	12.6	8.58	15,758	5,751,649
CA	A	**3,089**	3,744,267,000	483,410,000	12.9	8.46	156,515	57,127,975*
BOP	C	**3,032**	2,769,478,690	354,707,105	12.8	8.31	116,979	42,697,442
OH	A	**3,023**	1,233,336,437	145,445,752	11.8	8.28	48,108	17,559,420*
UT	A	**2,695**	155,366,148	13,654,080	8.8	7.38	5,067	1,849,455*
NE	A	**2,647**	76,935,492	8,861,083	11.5	7.25	3,347	1,221,655*
OR	A	**2,624**	567,745,230	20,704,656	3.6	7.19	7,890	2,879,850*
KS	A	**2,614**	203,876,261	20,654,285	10.1	7.16	7,902	2,884,230*
HI	F	**2,613**	122,949,845	10,675,452	8.7	7.16	4,086	1,491,390*
MT	A	**2,581**	80,000,000	6,983,050	8.7	7.07	2,706	987,690*
GA	A	**<2,540>**	738,115,028	93,644,676	12.7	6.96	36,870	13,457,550*
NY	D	**2,429**	1,533,929,965	170,363,271	11.1	6.65	70,147	25,603,655*
CO	A	**2,425**	292,931,731	32,108,039	11.0	6.64	13,242	4,833,330*
AZ	A	**2,394**	475,081,082	54,081,082	11.4	6.56	22,593	8,246,445*
WI	A	**2,383**	680,980,395	34,354,944	5.0	6.53	14,414	5,261,110*
WY	A	**2,356**	24,093,140	3,255,048	13.5	6.46	1,382	504,237
WV	A	**2,281**	57,084,400	6,500,000	11.4	6.25	2,850	1,040,250*
SC	A	**2,267**	330,857,437	46,822,601	14.1	6.21	20,656	7,539,440*
VA	A	**2,257**	546,990,257	57,791,759	10.6	6.18	25,605	9,345,825*
TX	B	**2,222**	2,120,299,040	288,077,674	13.6	6.09	129,620	47,311,300*
NH	A	**2,104**	49,887,043	4,517,106	9.1	5.76	2,147	783,655*
TN	A	**2,100**	400,337,800	44,037,714	11.0	5.75	20,971	7,654,415*
MD	A	**2,099**	697,019,021	47,225,539	6.8	5.75	22,500	8,212,500*
IA	A	**2,037**	196,992,907	14,166,128	7.2	5.58	6,953	2,537,845*
DE	A	**1,984**	109,107,000	10,664,000	9.8	5.44	5,374	1,961,829
ID	C	**1,959**	87,879,500	7,492,670	8.5	5.37	3,825	1,396,125*
SD	A	**1,889**	44,685,905	4,223,899	9.5	5.18	2,266	816,140
IL	A	**1,752**	679,410,100	68,100,000	10.0	4.80	38,862	14,184,630*
MO	A	**1,681**	496,000,000	39,737,653	8.0	4.61	23,640	8,628,600*
OK	F	**1,157**	338,891,460	18,836,110	5.6	3.17	20,318	5,941,919
ND	A	**1,007**	18,497,121	826,405	4.5	2.76	821	299,665*
Average		**$2,734**	**$594,379,086**	**$69,757,213**	**11.7%**	**$7.49**	**25,510**	**9,274,987**

Notes: Includes the federal Bureau of Prisons (BOP). No data available for Alabama, Alaska, Arkansas, Indiana, Kentucky, Louisiana, Maine, Mississippi, New Jersey, Pennsylvania, or Washington, DC.

A = 7/1/97–6/30/98 B = 9/1/97–8/31/98 C = 10/1/97–9/30/98
D = 1/1/98–12/31/98 E = 4/1/98–3/31/99 F = 7/1/98–6/30/99 < > = Median *Estimated

EXHIBIT L–6.
Comparison of 1998 Daily Health Care Cost per Inmate in Rank Order, by State (*N* = 41)

State	Fiscal Year	Health Care Cost per Inmate per Day	Total DOC Expenditure	Total Health Care Expenditure	DOC Expenditure Devoted to Health Care	Health Care Cost per Inmate per Year	Average Daily Population of DOC	Total Inmate Days
MA	A	**$11.67**	$333,131,044	$46,438,767	13.9%	$4,258	10,905	3,980,325*
MI	C	**11.52**	1,300,000,000	188,836,558	14.5	4,205	44,907	16,391,055*
MN	A	**10.64**	347,300,000	21,500,000	6.2	3,884	5,536	2,020,640*
NM	F	**10.49**	163,711,000	19,572,000	12.0	3,827	5,114	1,866,610*
VT	D	**9.97**	50,000,000	4,550,000	9.1	3,640	1,250	456,250*
RI	A	**9.85**	128,833,380	12,196,323	9.5	3,593	3,394	1,238,810*
WA	A	**9.35**	434,163,790	43,465,327	10.0	3,411	12,742	4,650,830*
FL	A	**9.28**	1,322,414,310	230,451,478	17.4	3,389	68,000	24,820,000*
NV	A	**9.11**	156,588,151	28,769,405	18.4	3,324	8,654	3,158,710*
NC	A	**8.82**	868,239,240	103,000,000	11.9	3,219	32,000	11,680,000*
CT	A	**8.58**	392,136,175	49,344,093	12.6	3,131	15,758	5,751,649
CA	A	**8.46**	3,744,267,000	483,410,000	12.9	3,089	156,515	57,127,975*
BOP	C	**8.31**	2,769,478,690	354,707,105	12.8	3,032	116,979	42,697,442
OH	A	**8.28**	1,233,336,437	145,445,752	11.8	3,023	48,108	17,559,420*
UT	A	**7.38**	155,366,148	13,654,080	8.8	2,695	5,067	1,849,455*
NE	A	**7.25**	76,935,492	8,861,083	11.5	2,647	3,347	1,221,655*
OR	A	**7.19**	567,745,230	20,704,656	3.6	2,624	7,890	2,879,850*
KS	A	**7.16**	203,876,261	20,654,285	10.1	2,614	7,902	2,884,230*
HI	F	**7.16**	122,949,845	10,675,452	8.7	2,613	4,086	1,491,390*
MT	A	**7.07**	80,000,000	6,983,050	8.7	2,581	2,706	987,690*
GA	A	**<6.96>**	738,115,028	93,644,676	12.7	2,540	36,870	13,457,550*
NY	D	**6.65**	1,533,929,965	170,363,271	11.1	2,429	70,147	25,603,655*
CO	A	**6.64**	292,931,731	32,108,039	11.0	2,425	13,242	4,833,330*
AZ	A	**6.56**	475,081,082	54,081,082	11.4	2,394	22,593	8,246,445*
WI	A	**6.53**	680,980,395	34,354,944	5.0	2,383	14,414	5,261,110*
WY	A	**6.46**	24,093,140	3,255,048	13.5	2,356	1,382	504,237
WV	A	**6.25**	57,084,400	6,500,000	11.4	2,281	2,850	1,040,250*
SC	A	**6.21**	330,857,437	46,822,601	14.2	2,267	20,656	7,539,440*
VA	A	**6.18**	546,990,257	57,791,759	10.6	2,257	25,605	9,345,825*
TX	B	**6.09**	2,120,299,040	288,077,674	13.6	2,222	129,620	47,311,300*
NH	A	**5.76**	49,887,043	4,517,106	9.1	2,104	2,147	783,655*
TN	A	**5.75**	400,337,800	44,037,714	11.0	2,100	20,971	7,654,415*
MD	A	**5.75**	697,019,021	47,225,539	6.8	2,099	22,500	8,212,500*
IA	A	**5.58**	196,992,907	14,166,128	7.2	2,037	6,953	2,537,845*
DE	A	**5.44**	109,107,000	10,664,000	9.8	1,984	5,374	1,961,829
ID	C	**5.37**	87,879,500	7,492,670	8.5	1,959	3,825	1,396,125*
SD	A	**5.18**	44,685,905	4,223,899	9.5	1,889	2,266	816,140
IL	A	**4.80**	679,410,100	68,100,000	10.0	1,752	38,862	14,184,630*
MO	A	**4.61**	496,000,000	39,737,653	8.0	1,681	23,640	8,628,600*
OK	F	**3.17**	338,891,460	18,836,110	5.6	1,157	20,318	5,941,919
ND	A	**2.76**	18,497,121	826,405	4.5	1,007	821	299,665*
Average		**$7.49**	**$594,379,086**	**$69,757,213**	**11.7%**	**$2,734**	**25,510**	**9,274,987**

Notes: Includes the federal Bureau of Prisons (BOP). No data available for Alabama, Alaska, Arkansas, Indiana, Kentucky, Louisiana, Maine, Mississippi, New Jersey, Pennsylvania, or Washington, DC.

A = 7/1/97–6/30/98 B = 9/1/97–8/31/98 C = 10/1/97–9/30/98
D = 1/1/98–12/31/98 E = 4/1/98–3/31/99 F = 7/1/98–6/30/99 < > = Median *Estimated

EXHIBIT L–7.
Comparison of 1982 Correctional Health Care Costs, by State (*N* = 36)

State	Fiscal Year	Total DOC Expenditure	Total Health Care Expenditure	DOC Expenditure Devoted to Health Care	Health Care Cost per Inmate per Year	Average Daily Population of DOC
AK	1982	$32,483,584	$1,448,239	4.5%	$1,202	1,205
AL	FY81–82	54,840,532	6,206,750	11.3	1,053	5,892
AR	1982	26,900,538	3,423,720	12.7	968	3,536
AZ	FY81–82	95,028,400	10,532,100	11.1	2,141	4,919
BOP	1982	378,007,204	34,856,000	9.2	1,214	28,700
CA	FY82–83	548,000,000	39,108,000	7.1	1,171	33,386
CO	1982	47,000,000	3,622,729	7.7	1,249	2,900
CT	1982	N/A	3,000,000	N/A	591	5,075
DE	1982	29,361,400	1,606,600	5.5	857	1,875
GA	FY81–82	N/A	10,023,822	N/A	919	10,911
HI	FY82	20,693,921	934,638	4.5	704	1,328
ID	1982	9,743,800	1,005,985	10.3	984	,022
KS	1982	33,456,926	1,954,041	5.8	706	2,768
LA	FY81–82	81,839,187	5,627,100	6.9	588	9,570
ME	FY82	20,942,716	1,051,045	5.0	1,095	960
MD	FY82	80,814,994	6,307,837	7.8	683	9,233
MN	FY82	37,848,489	2,098,653	5.5	947	2,215
MS	FY82	36,853,531	2,403,251	6.5	513	4,685
MO	FY81	40,000,000	2,800,000	7.0	473	5,918
MT	FY82	18,217,352	532,718	2.9	710	750
NC	FY82	158,064,686	14,867,249	9.4	886	16,789
ND	1982	8,600,000	105,620	1.2	311	340
NE	1982	N/A	1,800,000	N/A	1,216	1,480
NH	1982	5,500,000	741,635	13.5	1,648	450
NM	FY81–82	46,300,000	2,120,000	4.6	1,247	1,700
OK	FY82	82,391,609	4,670,927	5.7	935	4,996
OR	FY81	36,244,529	3,003,718	8.3	1,017	2,953
PA	FY81–82	108,453,000	7,942,000	7.3	836	9,505
RI	FY82	23,376,931	1,664,830	7.1	1,682	990
SC	FY82	54,318,609	5,104,866	9.4	593	8,602
SD	1982	6,422,632	358,147	5.6	532	673
TN	FY81–82	64,535,361	5,044,587	7.8	737	6,842
TX	FY81–82	264,974,355	12,791,735	4.8	395	32,424
WA	1982	103,864,322	4,875,758	4.7	845	5,771
WI	1982	117,010,700	4,206,253	3.6	919	4,575
WY	1982	12,892,875	382,094	3.0	479	797
Average		**$81,363,096***	**$5,783,962†**	**7.2%‡**	**$883§**	**6,548‖**

Notes: Includes federal Bureau of Prisons (BOP). No data available for Florida, Illinois, Indiana, Iowa, Kentucky, Massachusetts, Michigan, Nevada, New Jersey, New York, Ohio, Utah, Vermont, Virginia, or West Virginia. This table was derived from data published by the Contact Center, Inc., in VIII Corrections Compendium 2:5-11 (August 1983).

N/A = Not available.

*Average based on the 33 areas with data.

†Average based on all 36 jurisdictions reporting.

‡Average based on 33 jurisdictions with data in columns 3 and 4.

§Weighted average based on all 36 jurisdictions reporting.

‖Average based on all 36 jurisdictions.

EXHIBIT L–8.
Comparison of 1985 Correctional Health Care Costs, by State (*N* = 46)

State	Fiscal Year*	Total DOC Expenditure	Total Health Care Expenditure	DOC Expenditure Devoted to Health Care	Health Care Cost per Inmate per Year	Average Daily Population of DOC
AK	FY1985	$72,972,973	$5,400,000	7.4%	$2,423	2,229
AL	1985	102,105,263	9,700,000	9.5	1,239	7,829
AR	1985	38,281,250	4,900,000	12.8	1,072	4,571
AZ	1985	140,909,091	9,300,000	6.6	1,269	7,329
BOP	1985	519,318,182	45,700,000	8.8	1,456	31,387
CA	1985	N/A	89,000,000	N/A	1,893	47,015
CO	1985	60,317,460	3,800,000	6.3	1,317	2,885
CT	1985	97,727,273	4,300,000	4.4	757	5,680
DE	1985	43,478,261	2,000,000	4.6	1,150	1,739
FL	FY84	343,902,439	28,200,000	8.2	1,004	28,088
GA	1985	191,208,791	17,400,000	9.1	1,259	13,820
HI	1985	29,850,746	2,000,000	6.7	982	2,037
IA	1985	75,675,676	2,800,000	3.7	576	4,861
ID	FY86	16,853,933	1,500,000	8.9	1,150	1,304
IL	FY84–85	289,705,882	19,700,000	6.8	1,257	15,672
IN	1985	147,619,048	15,500,000	10.5	1,476	10,501
KY	FY83–84	60,465,116	2,600,000	4.3	575	4,522
LA	FY85–86	110,975,610	9,100,000	8.2	801	11,361
MA	1985	132,926,829	10,900,000	8.2	1,725	6,319
ME	1985	N/A	1,300,000	N/A	1,161	1,120
MD	1985	170,129,870	13,100,000	7.7	1,019	12,856
MN	FY86	65,822,785	5,200,000	7.9	2,039	2,550
MS	FY86	48,571,429	3,400,000	7.0	609	5,583
MT	1985	13,515,436	743,349	5.5	772	963
NC	1985	216,666,667	23,400,000	10.8	1,398	16,738
ND	1985	5,296,552	307,200	5.8	700	439
NE	1985	40,000,000	2,200,000	5.5	1,300	1,692
NH	1985	15,153,846	985,000	6.5	1,449	680
NJ	1985	N/A	10,000,000	N/A	800	12,500
NM	1985	N/A	5,500,000	N/A	2,600	2,115
NY	1985	635,416,667	30,500,000	4.8	901	33,851
NV	1985	N/A	3,900,000	N/A	1,040	3,750

Continued on next page

EXHIBIT L–8 *(Continued)*.
Comparison of 1985 Correctional Health Care Costs, by State (*N* = 46)

State	Fiscal Year*	Total DOC Expenditure	Total Health Care Expenditure	DOC Expenditure Devoted to Health Care	Health Care Cost per Inmate per Year	Average Daily Population of DOC
OH	1985	N/A	$11,100,000	N/A	$555	20,000
OK	FY84	$71,084,337	5,900,000	8.3%	968	6,095
OR	1985	46,575,342	3,400,000	7.3	1,173	2,899
PA	1985	160,869,565	14,800,000	9.2	1,184	12,500
RI	FY84–85	27,500,000	2,200,000	8.0	1,761	1,249
SC	1985	97,500,000	3,900,000	4.0	717	5,439
SD	1985	13,157,895	1,000,000	7.6	1,040	962
TN	1985	175,000,000	10,500,000	6.0	1,300	8,077
TX	1985	1,000,000,000	51,000,000	5.1	1,700	30,000
VT	1985	16,486,486	610,000	3.7	1,010	604
WA	FY1985	152,631,579	2,900,000	1.9	461	6,291
WI	1985	N/A	5,400,000	N/A	1,019	5,299
WV	1985	18,750,000	1,500,000	8.0	1,014	1,479
WY	1985	14,057,563	674,763	4.8	800	843
Average		**$140,473,842**†	**$10,852,615**‡	**6.8%**§	**$1,230**‖	**8,820**#

Notes: Includes federal Bureau of Prisons (BOP). No data available for Kansas, Michigan, Missouri, Utah, or Virginia.
This table was derived from data published by the Contact Center, Inc., in Corrections Compendium 1:7,13-14 (July 1986).

N/A = Not available.

*Figures are for 1985 calendar year unless otherwise noted by fiscal year.

†Average based on the 39 areas with data.

‡Average based on all 46 jurisdictions reporting.

§Average based on 39 jurisdictions with data in columns 3 and 4.

‖Weighted average based on all 46 jurisdictions reporting; this figure differs from the one reported by the Contact Center, Inc. because here a weighted average was used.

#Average based on all 46 jurisdictions.

EXHIBIT L–9.
Comparison of 1989 Correctional Health Care Costs, by State (*N* = 47)

State	Fiscal Year	Total DOC Expenditure	Total Health Care Expenditure	DOC Expenditure Devoted to Health Care	Health Care Cost per Inmate per Year	Average Daily Population of DOC
AK	C	$94,500,000	$8,643,000	9.1%	$3,381	2,556
AL	A	134,888,444	9,493,748	7.0	792	11,990
AR	D	55,782,785	9,495,347	17.0	1,595	5,954
AZ	C	221,675,400	24,551,201	11.1	1,913	12,836
BOP	A	960,490,600	114,345,162	11.9	2,392	47,804
CA	C	1,593,256,000	149,660,000	9.4	1,953	76,633
CO	C	99,203,000	7,277,599	7.3	1,154	6,306
CT	D	195,896,302	18,643,344	9.5	2,108	8,845
DE	C	74,326,900	4,781,100	6.4	1,524	3,138
FL	C	694,287,968	95,766,619	13.8	2,706	35,386
GA	C	320,763,218	27,404,345	8.5	1,648	16,631
IA	C	60,845,599	4,982,875	8.2	1,618	3,079
ID	D	29,797,400	2,847,504	9.6	1,560	1,825
IL	C	437,700,000	34,100,000	7.8	1,570	21,714
KS	C	210,000,000	9,916,000	4.7	1,640	6,048
KY	C	117,000,000	7,500,000	6.4	1,210	6,200
LA	C	205,342,717	10,395,142	5.1	831	12,505
MA	D	226,450,000	21,175,000	9.4	2,379	8,900
ME	C	11,999,372	2,235,135	18.6	1,870	1,195
MD	C	245,514,787	16,713,211	6.8	1,226	13,630
MI	A	689,449,480	75,000,687	10.9	2,636	28,451
MN	C	115,339,305	6,254,049	5.4	2,157	2,900
MO	C	166,050,089	11,409,617	6.9	907	12,573
MT	C	22,287,160	1,717,927	7.7	1,665	1,032
NC	C	319,888,293	34,747,160	10.9	1,973	17,610
NE	C	44,504,585	4,212,439	9.5	1,795	2,347
NH	C	22,237,822	1,746,660	7.9	1,941	900
NJ	C	391,574,000	37,364,000	9.5	2,016	18,538
NM	D	92,303,300	8,236,800	8.9	2,900	2,840
NY	E	1,094,159,100	111,799,700	10.2	2,249	49,711
NV	C	52,696,523	8,621,933	16.4	1,764	4,887
OH	C	688,400,000	39,600,000	5.8	1,366	29,000
OK	C	142,289,266	9,093,988	6.4	909	10,000
OR	D	128,689,876	10,245,482	8.0	1,868	5,484
PA	C	269,913,000	25,235,000	9.3	1,429	17,662
RI	C	48,130,805	3,399,953	7.1	1,711	1,987
SC	C	183,732,201	19,479,068	10.6	1,387	14,049
SD	C	36,123,357	1,013,393	2.8	787	1,287
TN	C	229,628,000	14,427,500	6.3	1,962	7,354
TX	B	508,000,136	95,838,477	18.9	2,262	42,365
UT	C	61,677,566	2,331,752	3.8	1,174	1,986
VT	D	26,000,000	1,387,000	5.3	1,558	890
VA	C	384,733,767	19,500,000	5.1	1,500	13,000
WA	D	213,542,450	18,648,840	8.7	2,664	7,000
WI	C	158,201,700	10,800,000	6.8	1,695	6,373
WV	C	21,308,964	1,603,512	7.5	1,035	1,550
WY	C	13,961,191	1,122,205	8.0	1,264	888
Average		**$257,756,222**	**$24,569,436**	**9.5%**	**$1,906**	**12,890**

Notes: Includes federal Bureau of Prisons (BOP). No data available for Hawaii, Indiana, Mississippi, or North Dakota. This table was taken from Anno, B. Jaye. Prison Health Care: Guidelines for the Management of an Adequate Delivery System. Chicago: National Commission on Correctional Health Care, 1991:246.

A = 10/1/88–9/30/89 B = 9/1/88–8/31/89 C = 7/1/88–6/30/89 D = 7/1/89–6/30/90 E = 4/1/89–3/31/90

EXHIBIT L–10.
Variance in Timeframes of Fiscal Years, by County (*N* = 17)

Fiscal Year	Code	County
7/1/97–6/30/98	A	Los Angeles County, CA Maricopa County, AZ Orange County, CA Philadelphia Prison System, PA Sacramento County, CA San Bernardino County, CA
10/1/97–9/30/98	B	Washington, DC Metro-Dade County, FL
12/1/97–9/30/98	C	Wayne County, MI
12/1/97–11/30/98	D	Cook County, IL
1/1/98–12/31/98	E	Bexar County, TX Broward County, FL Hamilton County, OH Hudson County, NJ King County, WA Milwaukee County, WI
3/1/98–02/28/99	F	Harris County, TX

Note: Includes Washington, DC.

EXHIBIT L–11.
Comparison of 1998 Total Jail Expenditures in Rank Order, by County (*N* = 17)

County	Fiscal Year	Total Jail Expenditure	Total Health Care Expenditure	Jail Expenditure Devoted to Health Care	Health Care Cost per Inmate		Average Daily Population of Jail	Total Inmate Days
					Per Year	Per Day		
Los Angeles County, CA	A	**$360,922,000**	$52,325,000	14.5%	$2,476	$6.78	21,136	7,719,924
Metro-Dade County, FL	B	**197,468,006**	17,057,112	8.6	2,357	6.46	7,237	219,330
Philadelphia Prison System, PA	A	**157,448,000**	17,254,538	11.0	2,999	8.22	5,753	2,099,845
Cook County, IL	D	**151,222,509**	30,868,090	20.4	3,333	9.13	9,260	4,299,396
Maricopa County, AZ	A	**104,206,589**	13,182,658	12.7	1,937	5.31	6,804	2,603,709
Harris County, TX	F	**104,000,000**	19,500,000	18.8	2,499	6.85	7,802	2,847,730
Broward County, FL	E	**93,340,357**	11,154,079	11.9	2,660	7.29	4,193	1,530,445
King County, WA	E	**80,319,542**	12,250,000	15.3	4,446	12.18	2,755	1,005,303
		<78,864,147>						
Orange County, CA	A	**77,408,752**	20,646,355	26.7	3,875	10.62	5,328	1,944,720
San Bernardino County, CA	A	**51,492,169**	5,678,836	11.0	1,159	3.18	4,900	1,788,500
Hudson County, NJ	E	**45,000,001**	6,000,000	13.3	3,000	8.22	2,000	730,000
Washington, DC	B	**45,000,000**	11,221,000	24.9	6,821	18.69	1,645	600,425
Wayne County, MI	C	**40,432,740**	13,983,215	34.6	5,077	13.91	2,754	1,005,210
Bexar County, TX	E	**32,254,909**	4,902,148	15.2	1,445	3.96	3,392	1,268,926
Milwaukee County, WI	E	**27,724,137**	6,504,630	23.5	2,242	6.14	2,901	1,058,865
Hamilton County, OH	E	**27,400,510**	2,139,547	7.8	1,097	3.00	1,951	712,116
Sacramento County, CA	A	**N/A**	14,136,528	N/A	3,734	10.23	3,786	1,381,890
Average		**$99,727,514***	**$15,223,749**	**15.3%***	**$2,765†**	**$7.89†**	**5,506**	**1,930,373**

Note: Includes Washington, DC.

A = 7/1/97–6/30/98 B = 10/1/97–9/30/98 C = 12/1/97–9/30/98
D = 12/1/97–11/30/98 E = 1/1/98–12/31/98 F = 3/1/98–2/28/99

N/A = Not available.

< > = Median.

*Based on 16 counties with data.

†Weighted average.

EXHIBIT L–12.
Comparison of 1998 Total Jail Health Care Expenditures in Rank Order, by County (*N* = 17)

County	Fiscal Year	Total Health Care Expenditure	Total Jail Expenditure	Jail Expenditure Devoted to Health Care	Health Care Cost per Inmate		Average Daily Population of Jail	Total Inmate Days
					Per Year	Per Day		
Los Angeles County, CA	A	**$52,325,000**	$360,922,000	14.5%	$2,476	$6.78	21,136	7,719,924
Cook County, IL	D	**30,868,090**	151,222,509	20.4	3,333	9.13	9,260	4,299,396
Orange County, CA	A	**20,646,355**	77,408,752	26.7	3,875	10.62	5,328	1,944,720
Harris County, TX	F	**19,500,000**	104,000,000	18.8	2,499	6.85	7,802	2,847,730
Philadelphia Prison System, PA	A	**17,254,538**	157,448,000	11.0	2,999	8.22	5,753	2,099,845
Metro-Dade County, FL	B	**17,057,112**	197,468,006	8.6	2,357	6.46	7,237	219,330
Sacramento County, CA	A	**14,136,528**	N/A	N/A	3,734	10.23	3,786	1,381,890
Wayne County, MI	C	**13,983,215**	40,432,740	34.6	5,077	13.91	2,754	1,005,210
Maricopa County, AZ	A	**<13,182,658>**	104,206,589	12.7	1,937	5.31	6,804	2,603,709
King County, WA	E	**12,250,000**	80,319,542	15.3	4,446	12.18	2,755	1,005,303
Washington, DC	B	**11,221,000**	45,000,000	24.9	6,821	18.69	1,645	600,425
Broward County, FL	E	**11,154,079**	93,340,357	11.9	2,660	7.29	4,193	1,530,445
Milwaukee County, WI	E	**6,504,630**	27,724,137	23.5	2,242	6.14	2,901	1,058,865
Hudson County, NJ	E	**6,000,000**	45,000,001	13.3	3,000	8.22	2,000	730,000
San Bernardino County, CA	A	**5,678,836**	51,492,169	11.0	1,159	3.18	4,900	1,788,500
Bexar County, TX	E	**4,902,148**	32,254,909	15.2	1,445	3.96	3,392	1,268,926
Hamilton County, OH	E	**2,139,547**	27,400,510	7.8	1,097	3.00	1,951	712,116
Average		**$15,223,749**	**$99,727,514***	**15.3%***	**$2,765†**	**$7.89†**	**5,506**	**1,930,373**

Note: Includes Washington, DC.

A = 7/1/97–6/30/98 B = 10/1/97–9/30/98 C = 12/1/97–9/30/98
D = 12/1/97–11/30/98 E = 1/1/98–12/31/98 F = 3/1/98–2/28/99

N/A = Not available.

< > = Median.

*Based on 16 counties with data.

†Weighted average.

EXHIBIT L–13.
Comparison of Percentage of 1998 Total Jail Expenditures Devoted to Health Care in Rank Order, by County (*N* = 17)

County	Fiscal Year	Jail Expenditure Devoted to Health Care	Total Jail Expenditure	Total Health Care Expenditure	Health Care Cost per Inmate		Average Daily Population of Jail	Total Inmate Days
					Per Year	Per Day		
Wayne County, MI	C	**34.6%**	$40,432,740	$13,983,215	$5,077	$13.91	2,754	1,005,210
Orange County, CA	A	**26.7**	77,408,752	20,646,355	3,875	10.62	5,328	1,944,720
Washington, DC	B	**24.9**	45,000,000	11,221,000	6,821	18.69	1,645	600,425
Milwaukee County, WI	E	**23.5**	27,724,137	6,504,630	2,242	6.14	2,901	1,058,865
Cook County, IL	D	**20.4**	151,222,509	30,868,090	3,333	9.13	9,260	4,299,396
Harris County, TX	F	**18.8**	104,000,000	19,500,000	2,499	6.85	7,802	2,847,730
King County, WA	E	**15.3**	80,319,542	12,250,000	4,446	12.18	2,755	1,005,303
Bexar County, TX	E	**15.2**	32,254,909	4,902,148	1,445	3.96	3,392	1,268,926
		<14.9>						
Los Angeles County, CA	A	**14.5**	360,922,000	52,325,000	2,476	6.78	21,136	7,719,924
Hudson County, NJ	E	**13.3**	45,000,001	6,000,000	3,000	8.22	2,000	730,000
Maricopa County, AZ	A	**12.7**	104,206,589	13,182,658	1,937	5.31	6,804	2,603,709
Broward County, FL	E	**11.9**	93,340,357	11,154,079	2,660	7.29	4,193	1,530,445
San Bernardino County, CA	A	**11.0**	51,492,169	5,678,836	1,159	3.18	4,900	1,788,500
Philadelphia Prison System, PA	A	**11.0**	157,448,000	17,254,538	2,999	8.22	5,753	2,099,845
Metro-Dade County, FL	B	**8.6**	197,468,006	17,057,112	2,357	6.46	7,237	219,330
Hamilton County, OH	E	**7.8**	27,400,510	2,139,547	1,097	3.00	1,951	712,116
Sacramento County, CA	A	**N/A**	N/A	14,136,528	3,734	10.23	3,786	1,381,890
Average		**15.3%***	**$99,727,514***	**$15,223,749**	**$2,765†**	**$7.89†**	**5,506**	**1,930,373**

Note: Includes Washington, DC.

A = 7/1/97–6/30/98 B = 10/1/97–9/30/98 C = 12/1/97–9/30/98
D = 12/1/97–11/30/98 E = 1/1/98–12/31/98 F = 3/1/98–2/28/99

N/A = Not available.

< > = Median.

*Based on 16 counties with data.

†Weighted average.

EXHIBIT L–14.
Comparison of 1998 Annual Health Care Cost per Inmate in Rank Order, by County (*N* = 17)

County	Fiscal Year	Health Care Cost per Inmate per Year	Total Jail Expenditure	Total Health Care Expenditure	Jail Expenditure Devoted to Health Care	Health Care Cost per Inmate per Day	Average Daily Population of Jail	Total Inmate Days
Washington, DC	B	**$6,821**	$45,000,000	$11,221,000	24.9%	$18.69	1,645	600,425
Wayne County, MI	C	**5,077**	40,432,740	13,983,215	34.6	13.91	2,754	1,005,210
King County, WA	E	**4,446**	80,319,542	12,250,000	15.3	12.18	2,755	1,005,303
Orange County, CA	A	**3,875**	77,408,752	20,646,355	26.7	10.62	5,328	1,944,720
Sacramento County, CA	A	**3,734**	N/A	14,136,528	N/A	10.23	3,786	1,381,890
Cook County, IL	D	**3,333**	151,222,509	30,868,090	20.4	9.13	9,260	4,299,396
Hudson County, NJ	E	**3,000**	45,000,001	6,000,000	13.3	8.22	2,000	730,000
Philadelphia Prison System, PA	A	**2,999**	157,448,000	17,254,538	11.0	8.22	5,753	2,099,845
Broward County, FL	E	**<2,660>**	93,340,357	11,154,079	11.9	7.29	4,193	1,530,445
Harris County, TX	F	**2,499**	104,000,000	19,500,000	18.8	6.85	7,802	2,847,730
Los Angeles County, CA	A	**2,476**	360,922,000	52,325,000	14.5	6.78	21,136	7,719,924
Metro-Dade County, FL	B	**2,357**	197,468,006	17,057,112	8.6	6.46	7,237	219,330
Milwaukee County, WI	E	**2,242**	27,724,137	6,504,630	23.5	6.14	2,901	1,058,865
Maricopa County, AZ	A	**1,937**	104,206,589	13,182,658	12.7	5.31	6,804	2,603,709
Bexar County, TX	E	**1,445**	32,254,909	4,902,148	15.2	3.96	3,392	1,268,926
San Bernardino County, CA	A	**1,159**	51,492,169	5,678,836	11.0	3.18	4,900	1,788,500
Hamilton County, OH	E	**1,097**	27,400,510	2,139,547	7.8	3.00	1,951	712,116
Average		**$2,765***	**$99,727,514†**	**$15,223,749**	**15.3%†**	**$7.89***	**5,506**	**1,930,373**

Note: Includes Washington, DC.

A = 7/1/97–6/30/98 B = 10/1/97–9/30/98 C = 12/1/97–9/30/98
D = 12/1/97–11/30/98 E = 1/1/98–12/31/98 F = 3/1/98–2/28/99

N/A = Not available.

< > = Median.

*Weighted average.

†Based on 16 counties with data.

EXHIBIT L–15.
Comparison of 1998 Daily Health Care Cost per Inmate in Rank Order, by County (*N* = 17)

County	Fiscal Year	Health Care Cost per Inmate per Day	Total Jail Expenditure	Total Health Care Expenditure	Jail Expenditure Devoted to Health Care	Health Care Cost per Inmate per Year	Average Daily Population of Jail	Total Inmate Days
Washington, DC	B	**$18.69**	$45,000,000	$11,221,000	24.9%	$6,821	1,645	600,425
Wayne County, MI	C	**13.91**	40,432,740	13,983,215	34.6	5,077	2,754	1,005,210
King County, WA	E	**12.18**	80,319,542	12,250,000	15.3	4,446	2,755	1,005,303
Orange County, CA	A	**10.62**	77,408,752	20,646,355	26.7	3,875	5,328	1,944,720
Sacramento County, CA	A	**10.23**	N/A	14,136,528	N/A	3,734	3,786	1,381,890
Cook County, IL	D	**9.13**	151,222,509	30,868,090	20.4	3,333	9,260	4,299,396
Hudson County, NJ	E	**8.22**	45,000,001	6,000,000	13.3	3,000	2,000	730,000
Philadelphia Prison System, PA	A	**8.22**	157,448,000	17,254,538	11.0	2,999	5,753	2,099,845
Broward County, FL	E	**<7.29>**	93,340,357	11,154,079	11.9	2,660	4,193	1,530,445
Harris County, TX	F	**6.85**	104,000,000	19,500,000	18.8	2,499	7,802	2,847,730
Los Angeles County, CA	A	**6.78**	360,922,000	52,325,000	14.5	2,476	21,136	7,719,924
Metro-Dade County, FL	B	**6.46**	197,468,006	17,057,112	8.6	2,357	7,237	219,330
Milwaukee County, WI	E	**6.14**	27,724,137	6,504,630	23.5	2,242	2,901	1,058,865
Maricopa County, AZ	A	**5.31**	104,206,589	13,182,658	12.7	1,937	6,804	2,603,709
Bexar County, TX	E	**3.96**	32,254,909	4,902,148	15.2	1,445	3,392	1,268,926
San Bernardino County, CA	A	**3.18**	51,492,169	5,678,836	11.0	1,159	4,900	1,788,500
Hamilton County, OH	E	**3.00**	27,400,510	2,139,547	7.8	1,097	1,951	712,116
Average		**$7.89***	**$99,727,514†**	**$15,223,749**	**15.3%†**	**$2,765***	**5,506**	**1,930,373**

Note: Includes Washington, DC.

A = 7/1/97–6/30/98 B = 10/1/97–9/30/98 C = 12/1/97–9/30/98
D = 12/1/97–11/30/98 E = 1/1/98–12/31/98 F = 3/1/98–2/28/99

N/A = Not available.

< > = Median.

*Weighted average.

†Based on 16 counties with data.

About the National Commission on Correctional Health Care

Appendix M

About the National Commission on Correctional Health Care

The National Commission on Correctional Health Care (NCCHC) is a not-for-profit 501(c)(3) organization committed to improving the quality of care in our nation's jails, prisons, and juvenile detention and confinement facilities. NCCHC is supported by national organizations representing the fields of health, law, and corrections (see note 78 in chapter II).

In the early 1970s, the American Medical Association (AMA) studied the conditions in jails. Finding inadequate, disorganized health services and a lack of national standards to guide correctional institutions, the AMA, in collaboration with other organizations, established a program that in the early 1980s became NCCHC. NCCHC's early mission was to evaluate needs, formulate policy, and develop programs for a floundering area clearly in need of assistance.

Today, NCCHC's leadership in setting standards for health services and improving health care in correctional facilities is widely recognized. NCCHC's Standards for Health Services are published in separate volumes for prisons, jails, and juvenile confinement facilities. The standards represent NCCHC's recommended requirements for the management of a correctional health services system, covering the general areas of care and treatment, health records, administration, personnel, and medical-legal issues. The standards have helped the nation's correctional and detention facilities improve the health of their inmates, their staff, and the communities to which they return; increase the efficiency of their health services delivery; strengthen their organizational effectiveness; and reduce their risk of adverse legal judgments.

In addition to establishing standards, each year NCCHC sponsors educational and scientific conferences on correctional health care. Each fall, the National Conference on Correctional Health Care attracts physicians, nurses, psychologists, scientists, and other health care providers and researchers who want to learn about contemporary practices and issues in the field of correctional health care. Each spring, the Clinical Updates conference provides the latest information on infectious and chronic disease research and treatments, as well as other timely clinical issues in correctional health care.

NCCHC also provides technical assistance and quality improvement reviews on correctional health care management and policy issues and develops and publishes research on the correctional health care field. In addition, NCCHC operates the national certification program for correctional health professionals, manages various cooperative agreements with federal agencies, sponsors other educational and training programs, and publishes numerous support texts.

Visit the NCCHC Web site *(http://www.ncchc.org)* for more information about the organization and its services, such as accreditation, technical assistance, certification, publications, educational programs and conferences, and position statements.

NATIONAL COMMISSION ON CORRECTIONAL HEALTH CARE

1300 W. Belmont Avenue Chicago, Illinois 60657-3240 (773) 880-1460 FAX: (773) 880-2424

http://www.ncchc.org

Index

Index

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Z