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Access to Quality Health Services

Co-Lead Agencies: Agency for Healthcare Research and Quality
Health Resources and Services Administration

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Goal

Improve access to comprehensive, high-quality health care services.

Overview

Access to quality care is important to eliminate health disparities and increase the quality and years of healthy life for all persons in the United States. This chapter focuses on four components of the health care system: clinical preventive care, primary care, emergency services, and long-term and rehabilitative care. Together with health care delivered by specialists and care received in hospital settings, these elements represent major components of the continuum of care. The public health system is important in each of these areas because it educates people about prevention and addresses the need to eliminate disparities by easing access to preventive services for people less able to use existing health services. It ensures the availability of primary care through direct funding of clinics and providers or by providing public insurance. It coordinates emergency services systems and oversees long-term and rehabilitative care. Tertiary services (for example, hospital and specialty care) currently are not included among the Healthy People 2010 objectives. The Agency for Healthcare Research and Quality (AHRQ), formerly the Agency for Health Care Policy and Research, is working in conjunction with the Centers for Disease Control and Prevention (CDC) and other agencies of the U.S. Department of Health and Human Services to develop a *National Report on Healthcare Quality*, which will report annually on a broader array of quality measures that will complement Healthy People 2010.

Issues

Access to high-quality health care across each of the components in the continuum of care must be improved to realize the full potential of prevention. For example, success in reducing the burden of heart disease and narrowing the gap in heart disease outcomes between different racial groups will depend on several factors. These factors include ensuring access to clinical preventive services, such as blood pressure and cholesterol screening; effective primary care to educate people about modifiable risk factors, such as smoking, and to manage effectively chronic conditions like hypertension; high-quality emergency services to improve outcomes of acute cardiac events; and access to rehabilitative and long-term care for heart disease patients.

Major changes in the structure of the U.S. health care system, including the increasing influence of market forces, changes in payment and delivery systems, and welfare reform, have significant implications for vulnerable and at-risk populations. In light of these systems changes, Federal, State, and local public health

agencies must redouble their efforts to address access barriers and reduce disparities for these populations. It is increasingly important that health care communication and services be provided in a culturally and linguistically sensitive manner. Adequate access to health care and related services can increase appropriate patient use of the health care system and, ultimately, improve health outcomes. Consequently, measures of access across a continuum of care are an important way to evaluate the quality of the Nation's health care system.

Clinical preventive care. Clinical preventive services have a substantial impact on many of the leading causes of disease and death. People must have access to clinical preventive services that are effective in preventing disease (primary prevention) or in detecting asymptomatic disease or risk factors at early, treatable stages (secondary prevention). As in Healthy People 2000, the recommendations of the U.S. Preventive Services Task Force¹ serve as a guide to quality preventive health care. The task force was reconvened in 1998 and, in conjunction with AHRQ's Evidence-Based Practice Centers (EPCs), will provide additional information regarding the effectiveness and cost-effectiveness of individual clinical preventive services.

Improving access to appropriate preventive care requires addressing many barriers, including those that involve the patient, provider, and system of care.^{2,3} Patient barriers include lack of knowledge, skepticism about the effectiveness of prevention, lack of a usual source of primary care, and lack of money to pay for preventive care. Although patient awareness and acceptance of some interventions are high (such as screening for breast cancer) other interventions (for example, colorectal cancer screening and sexually transmitted disease [STD] screening) are less uniformly accepted. A small but significant number of patients remain skeptical of even widely accepted preventive measures, such as immunizations. Having health insurance, a high income, and a primary care provider are strong predictors that a person will receive appropriate preventive care. Although reimbursement for common screening tests, such as mammograms and Pap tests, is provided by most health insurance plans (and is required by law in some States), reimbursement for effective counseling interventions, such as smoking cessation, is less common.⁴

Health provider barriers include limited time, lack of training in prevention, lack of perceived effectiveness of selected preventive services, and practice environments that fail to facilitate prevention. Although consensus is growing regarding the value of a range of preventive services, providers identify lack of time and reimbursement as specific barriers to more consistent delivery of counseling about behavioral risk factors such as diet and exercise.⁵ Computerized or manual tracking systems, patient and clinician reminders, guidelines, and patient information materials can help providers improve delivery of necessary preventive care.⁶

System barriers can include lack of resources or attention devoted to prevention, lack of coverage or inadequate reimbursement for services, and lack of systems to track the quality of care.³ Systems interventions that can increase delivery of

health care include offering clinical preventive services among standard covered benefits, providing feedback on performance to providers and practices, offering incentives for improved performance, and developing and implementing systems to identify and provide outreach to patients in need of services.²

Measuring and reporting how well preventive care is provided under different systems are essential first steps in motivating those systems that are not performing well to develop the information, tools, and incentives to improve care.⁷ Significant progress in the delivery of clinical preventive services (CPS) is unlikely without appropriate data systems to allow providers and administrators to identify those services and populations most in need of better delivery. To be effective, preventive care also must be linked to systems to ensure appropriate followup services or counseling for patients identified through risk assessment or screening. Comprehensive national data to track what systems of care are doing to monitor and improve the delivery of CPS will not be available in the first half of the decade. Thus, this issue is not addressed in this focus area's objectives but represents an important agenda for research and data collection for the coming decade.

Primary care. Improving primary care across the Nation depends in part on ensuring that people have a usual source of care. Having a primary care provider as the usual source of care is especially important because of the beneficial attributes of primary care. These benefits include the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community.⁸ Increasing the number and proportion of members of underrepresented racial and ethnic groups who are primary care providers also is important because they are more likely to practice in areas where health services are in short supply and in areas with high percentages of underrepresented racial and ethnic populations.

Emergency services. Prehospital emergency medical services (EMS), poison control centers (PCCs), and hospital-based emergency departments (EDs) are the most commonly sought sources of emergency care. Each year, they provide prompt first-contact care for millions of people regardless of their socioeconomic status, age, or special need. For many severely ill and injured persons, these settings are a crucial link in the chain of survival between the onset of symptoms and treatment in a hospital. For persons whose health problems are less pressing but who believe they need urgent medical attention, emergency services are a gateway to additional health care.

In addition to their central role in secondary and tertiary prevention, emergency services are increasingly contributing to primary prevention by providing immunizations and other preventive care in association with treatment for acute health problems.

Within the current health care delivery system, EDs are the only institutional providers required by Federal law to evaluate anyone seeking care.⁹ They are ex-

pected at least to stabilize the most severely ill and injured patients, and they provide walk-in care for vast numbers of persons who face financial or other barriers to receiving care elsewhere.

Long-term care and rehabilitative services. People with physical or mental conditions that limit their capacity for self-care need long-term care and rehabilitative services. This population covers persons of all ages, from those who were born with physical or mental limitations or who developed such limitations later on in life, including those injured at any age, to those with diminishing functioning at older ages.¹⁰ About 40 percent of the people in this population are under age 65 years.¹¹ The long-term care population includes individuals who need help or supervision to perform activities of daily living or instrumental activities of daily living.

The goals of long-term care services are to improve functioning, maintain existing functioning, or slow deterioration in functioning while delivering care in the least restrictive environment. Rehabilitative services, a critical component of long-term care, strive to return individuals to their optimal level of functioning. People in the long-term care population need access to a range of services, including nursing home care, home health care, adult day care, assisted living, and hospice care.

Trends

A significant measure of the access problem is the proportion of people who have health insurance. Following declines in the proportion of people with health insurance during the 1980s, the proportion has remained essentially level, at about 85 percent from 1989 to 1997 for persons under age 65 years.¹² Approximately 44.3 million persons lacked health insurance in 1998,¹³ continuing an increase in the number of uninsured persons. At the same time, the proportion of adults with a usual source of care—an important predictor of access to needed services—fell from 83 percent to 78 percent between 1987 and 1992 before rising to 85 percent in 1998.¹⁴ Although the lack of health insurance is clearly a major factor impeding access to care, having health insurance does not guarantee that health care will be accessible or affordable. Significant numbers of privately insured persons lack a usual source of care or report delays or difficulties in accessing needed care due to affordability or insurance problems.¹⁵

As a result of growing scientific evidence on the effectiveness of certain preventive services, 82 percent of employer-sponsored insurance plans include childhood immunizations, and 90 percent include Pap tests and mammograms. Nonetheless, gaps persist in coverage for effective preventive services, especially counseling.⁴

Concerns increasingly are focused on access to quality emergency services, long-term care, and rehabilitative services. Although emergency services are widely available in the United States, the range of services varies in accessibility and quality from region to region and, often, from neighborhood to neighborhood, raising additional concerns about care for vulnerable underserved populations. As

the proportion of older people in the total U.S. population increases, the demand for quality long-term care services and facilities also will increase. Quality rehabilitative care needs are evident across all populations, and access to rehabilitative care is a significant problem for people who lack health insurance or who are underinsured and are unable to pay for the type and quality of health care they need.

During the 1990s and into the 21st century, increased attention has been paid at all levels of government as well as by the private sector to improving health care quality. The National Committee for Quality Assurance (NCQA), a managed care accreditation group, led a collaborative effort to develop the Health Plan Employer Data and Information Set (HEDIS), a widely used tool for evaluating health plan performance.¹⁶ The Joint Commission for the Accreditation of Healthcare Organizations (JCAHO) also has developed performance measures. AHRQ has developed the Consumer Assessment of Health Plans Survey (CAHPS), an instrument to assess consumer experiences with health plans. AHRQ also has developed the Healthcare Cost and Utilization Project (HCUP), which makes available State and nationwide estimates of hospital use. These data can be used with the HCUP Quality Indicators to provide measures of ambulatory-care sensitive conditions, which can uncover potential problems in access to primary care services. Quality monitoring systems tend to emphasize measures that focus on delivery rates for clinical preventive services because access to and use of these services are an important indicator of the quality of health care providers and of delivery systems. The complementary *National Report on Healthcare Quality* will explore methods for integrating the data from these quality-monitoring systems with population-based data collected by the public sector.

The Federal Advisory Commission on Consumer Protection and Quality in the Health Care Industry was established in 1997 to study changes occurring in the health care system and recommend ways to ensure consumer protection and quality health care. The Commission's report¹⁷ provides a foundation for the emerging issues of the next decade in monitoring and reporting on quality of health care. It also includes a "Consumer Bill of Rights and Responsibilities,"¹⁸ which is designed to strengthen consumer confidence in the health care system while holding participants in the system accountable for improving quality.

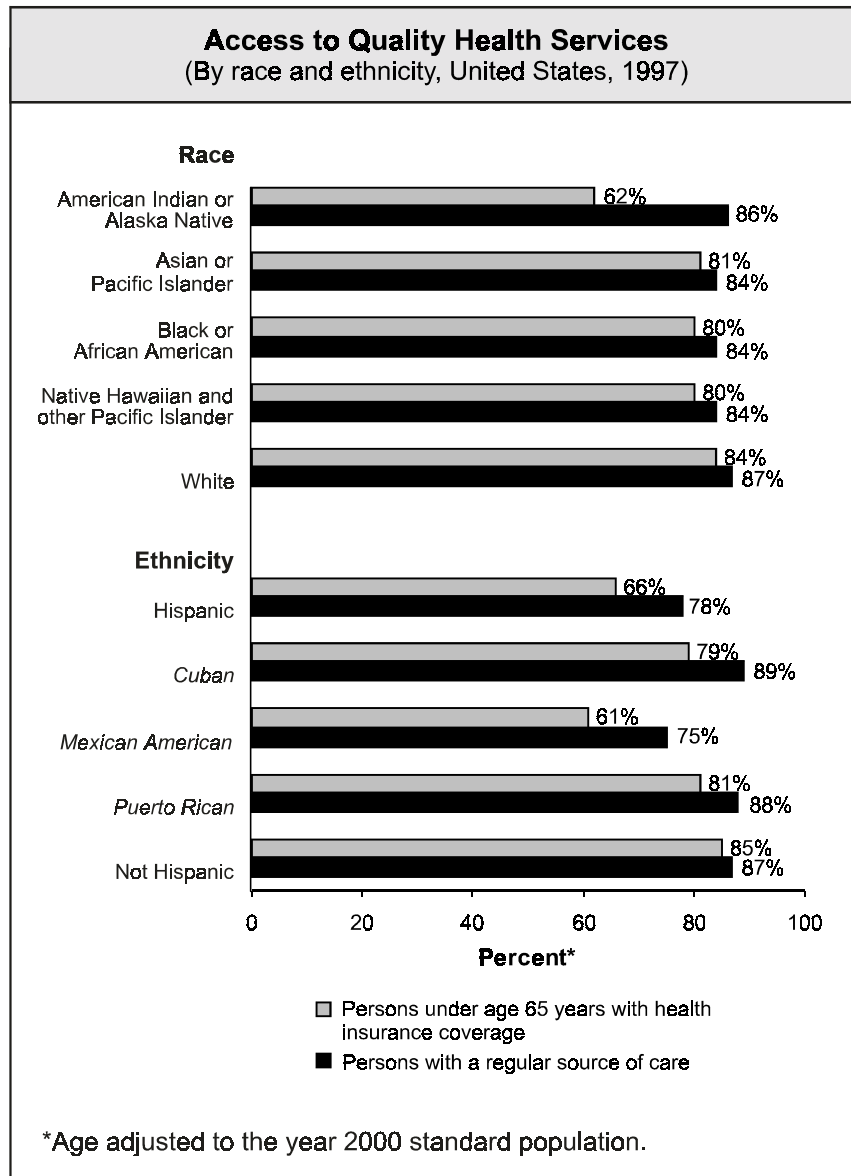
One essential step to improving quality is to reduce errors. The Institute of Medicine issued a report in December 1999 documenting the magnitude of medical errors in U.S. hospitals. The report recommended strategies to reduce such errors, including better reporting of errors.¹⁹

Disparities

Limitations in access to care extend beyond basic causes, such as a shortage of health care providers or a lack of facilities. Individuals also may lack a usual source of care or may face other barriers to receiving services, such as financial barriers (having no health insurance or being underinsured), structural barriers (no facilities or health care professionals nearby), and personal barriers (sexual orien-

tation, cultural differences, language differences, not knowing what to do, or environmental challenges for people with disabilities). Patients with disabilities may face additional barriers arising from facilities that are not physically accessible or from the attitudes of clinicians. Hispanics, young adults, and uninsured persons are least likely to have a usual source of care.¹² Hispanic persons and those with less than 12 years of education are least likely to have a usual primary care provider.²⁰ Certain people, such as those who are disabled, elderly, chronically ill, or HIV-infected, require access to health care providers who have the knowledge and skills to address their special needs.²¹

Substantial disparities remain in health insurance coverage for certain populations. Among the nonelderly population, approximately 33 percent of Hispanic persons lacked coverage in 1998, a rate that is more than double the national average.



Source: CDC, NCHS. National Health Interview Survey (NHIS), 1997.

Mexican Americans had one of the highest uninsured rates at 40 percent. For adults under age 65 years, 34 percent of those below the poverty level were uninsured. Similar disparities exist in access to a specific source of ongoing care. An average of 85 percent of adults identified a specific source of ongoing care in 1998, but the proportions dropped to 76 percent for Hispanics and 77 percent for those below the poverty level.¹²

Opportunities

Increasing recognition of the critical role of preventive services across the continuum of care and the need for providers to incorporate preventive services into patient visits has led to the development of tools and projects designed to help providers and patients shift to a prevention-oriented health care system. HEDIS reports on the delivery of many clinical preventive services provided by participating health maintenance organizations (HMOs). The 1999 reporting set for HEDIS contained several measures of clinical preventive services, including childhood immunizations, adolescent immunizations, smoking cessation advice, influenza vaccinations for older adults, breast cancer screening, cervical cancer screening, and prenatal care in the first trimester. A CDC grant to the State of Massachusetts for a health assessment partnership has resulted in a collaborative effort in New England to increase HMO participation in HEDIS. The specific tools developed include the increased use of electronic birth certificates, which have assisted outreach programs to teach new mothers the value of periodic checkups for their infants.

One of the earliest and most recognized tool kits is the *Clinician's Handbook of Preventive Services*,⁶ developed as part of the *Put Prevention Into Practice* initiative by the Office of Disease Prevention and Health Promotion and now the responsibility of AHRQ. It was produced as a companion to *Healthy People 2000* and the U.S. Preventive Services Task Force *Guide to Clinical Preventive Services*.¹ Under development is the *CDC Guide to Community Preventive Services*, due to be released in 2001.²² The guide will assess the effectiveness of preventive services and interventions in community settings and at the clinical systems level. It will cover 15 topics in three areas: changing risk behaviors, such as eliminating tobacco use and increasing physical activity; reducing specific diseases and injuries, such as cancer and injuries from motor vehicle crashes; and addressing environmental challenges, such as changing the sociocultural environment.

Continued progress in the delivery of clinical preventive services will require better collection and reporting of data on the delivery of recommended services by providers and health plans. This information will allow providers and administrators to identify the services and groups of people where the biggest gaps exist in receiving needed health care services. The best information systems allow both cross-sectional comparisons of performance by providers, plans, systems, and localities as well as long-term analyses of the health and health care of individuals. These systems can facilitate interventions such as reminders for patients and

providers, audit, and feedback, which have been shown to improve rates of immunization and screening.^{23, 24}

In centralized health systems with stable populations (people who stay with one provider or health plan, for example), tracking of individuals has been used effectively for a limited number of services, primarily immunizations and cancer screenings. Expanding effective data collection efforts to cover additional services and to include more providers and health care systems is the current challenge. Measuring how well preventive care is provided under different systems is an essential first step in motivating those systems that are not performing well to develop the information, tools, and incentives to improve care.

Into the next decade, Healthy People and its partners will continue to promote communitywide efforts to provide clinical preventive services, using local leadership and insights to tailor and increase the accessibility of these services. Efforts will continue to promote the development of local prevention coalitions that include health departments, businesses, community institutions, and individuals from each community. Healthy People also will work to strengthen the capacity of States and localities to collect health data and conduct community health assessments for small geographic areas.

Advances in the use of genetic information may improve both clinical and preventive care by helping to identify high-risk individuals and populations who will benefit most from preventive services and other clinical interventions. It will be essential to develop policies that will ensure appropriate evaluation of new genetic services, quality assurance of available genetic technology, and access to genetic services of proven benefit.

Overcoming technological, financial, or organizational barriers that can slow or block access to emergency services and improving emergency care accessibility and quality will require the combined effort of health care providers, health plans, and health care consumers as well as government agencies at the Federal, Tribal, State, and local levels.

Interim Progress Toward Year 2000 Objectives

The proportion of adults under age 65 years without health care coverage has remained essentially the same, while the total number of uninsured persons has continued to increase. The proportion of the adult population with a specific source of primary care has increased, although Hispanic and African American adults and other subgroups continue to be less likely to have a specific source of primary care. Compared to 1991 and 1992 baseline data, the proportion of adults in 1995

who received selected recommended clinical preventive services (including tetanus boosters and routine mammograms) has increased. Progress also has been made in improving racial and ethnic representation in the health professions.

Note: Unless otherwise noted, data are from the Centers for Disease Control and Prevention, National Center for Health Statistics, *Healthy People 2000 Review, 1998–99*.

Healthy People 2010—Summary of Objectives

Access to Quality Health Services

Goal: Improve access to comprehensive, high-quality health care services.

Number	Objective Short Title
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Clinical Preventive Care	
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- | | |
|-----|--|
| 1-1 | Persons with health insurance |
| 1-2 | Health insurance coverage for clinical preventive services |
| 1-3 | Counseling about health behaviors |

Primary Care	
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- | | |
|-----|--|
| 1-4 | Source of ongoing care |
| 1-5 | Usual primary care provider |
| 1-6 | Difficulties or delays in obtaining needed health care |
| 1-7 | Core competencies in health provider training |
| 1-8 | Racial and ethnic representation in health professions |
| 1-9 | Hospitalization for ambulatory-care-sensitive conditions |

Emergency Services	
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- | | |
|------|--|
| 1-10 | Delay or difficulty in getting emergency care |
| 1-11 | Rapid prehospital emergency care |
| 1-12 | Single toll-free number for poison control centers |
| 1-13 | Trauma care systems |
| 1-14 | Special needs of children |

Long-Term Care and Rehabilitative Services	
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- | | |
|------|--|
| 1-15 | Long-term care services |
| 1-16 | Pressure ulcers among nursing home residents |

Healthy People 2010 Objectives

Clinical Preventive Care

1-1. Increase the proportion of persons with health insurance.

Target: 100 percent.

Baseline: 83 percent of persons under age 65 years were covered by health insurance in 1997 (age adjusted to the year 2000 standard population).

Target setting method: Total coverage.

Data source: National Health Interview Survey (NHIS), CDC, NCHS.

NOTE: THE TABLE BELOW MAY CONTINUE TO THE FOLLOWING PAGE.

Persons Under Age 65 Years, 1997	Health Insurance
	Percent
TOTAL	83
Race and ethnicity	
American Indian or Alaska Native	62
Asian or Pacific Islander	81
Asian	81
Native Hawaiian and other Pacific Islander	80
Black or African American	80
White	84
Hispanic or Latino	66
Cuban	79
Mexican American	61
Puerto Rican	81
Not Hispanic or Latino	85
Black or African American	80
White	86
Gender	
Female	84
Male	81

Persons Under Age 65 Years, 1997	Health Insurance
	Percent
Family income level	
Poor	66
Near poor	69
Middle/high income	91
Geographic location	
Within MSA	83
Outside MSA	80
Disability status	
Persons with disabilities	83
Persons without disabilities	83
Sexual orientation	DNC
Select populations	
Age groups	
10 to 24 years	DNA
10 to 14 years	DNA
15 to 19 years	DNA
20 to 24 years	DNA

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable. MSA = Metropolitan statistical area.

Note: Age adjusted to the year 2000 standard population.

NOTE: THE TABLE ABOVE MAY HAVE CONTINUED FROM THE PREVIOUS PAGE.

Access to health services—including preventive care, primary care, and tertiary care—often depends on whether a person has health insurance.^{25, 26, 27} Uninsured people are less than half as likely as people with health insurance to have a primary care provider; to have received appropriate preventive care, such as recent mammograms or Pap tests; or to have had any recent medical visits. Lack of insurance also affects access to care for relatively serious medical conditions. Evidence suggests that lack of insurance over an extended period significantly increases the risk of premature death and that death rates among hospitalized patients without health insurance are significantly higher than among patients with insurance.²⁸ As demonstrated by a study of data from the National Health Interview Survey (NHIS), Medicaid expansions that increase the proportion of a State's population eligible for Medicaid lead to increases in enrollment, enhanced utilization of medical services, and lower child death rates.²⁹ Another study showed that, among those without insurance, chronically ill persons are even less likely than those with acute conditions to get health care services they need.³⁰

1-2. (Developmental) Increase the proportion of insured persons with coverage for clinical preventive services.

Potential data source: Medical Expenditure Panel Survey (MEPS), AHRQ.

Insurance coverage for clinical preventive services improved substantially during the 1990s, but significant variations remain in the services covered, depending on the plan and type of insurance. In 1988, among employers who offer health insurance, only 26 percent of their employees were covered for adult physical examinations, 35 percent for well-child care (including immunizations), and 43 percent for preventive screening tests.³¹ In contrast, a 1997 national survey of over 3,000 employers found that 88 percent of employer-sponsored plans covered well-baby care, 89 percent covered adult physical examinations, 92 percent covered gynecologic examinations, and 89 and 91 percent covered Pap tests and mammograms, respectively. Coverage was highest in HMO plans and lowest in indemnity insurance plans.⁴

Including effective clinical preventive services among the services routinely covered by insurance is an effective way to emphasize the importance of clinical preventive services as an integral part of health care.³² The Balanced Budget Act of 1997 (Public Law 105-33) added colorectal cancer screening among other new preventive benefits under the Medicare program and expanded Medicare coverage of mammography and cervical cancer screening. Although health insurance coverage by itself is not sufficient to eliminate existing gaps in the delivery of preventive services, it is an important factor influencing who gets recommended services.^{33, 34}

Selected clinical preventive services have a positive influence on personal health, and many are cost-effective in comparison with the treatment of disease.^{1, 35} Insurance coverage is especially problematic for counseling services, in part, because of the difficulty in proving the benefits of some counseling interventions. For example, only 22 percent of employer-sponsored plans cover medications or counseling for smoking cessation.⁴ The effectiveness of smoking cessation counseling, however, is supported by strong evidence, with more intensive interventions having the greatest impact and most favorable cost-effectiveness ratios.³⁶

1-3. Increase the proportion of persons appropriately counseled about health behaviors.

Target and baseline:

Objective	Increase in Counseling on Health Behaviors Among Persons at Risk With a Physician Visit in the Past Year	1995 Baseline	2010 Target
		<i>Percent</i>	
1-3a.	Physical activity or exercise (adults aged 18 years and older)		Developmental
1-3b.	Diet and nutrition (adults aged 18 years and older)		Developmental

1-3c.	Smoking cessation (adult smokers aged 18 years and older)	Developmental
1-3d.	Reduced alcohol consumption (adults aged 18 years and older with excessive alcohol consumption)	Developmental
1-3e.	Childhood injury prevention: vehicle restraints and bicycle helmets (children aged 17 years and under)	Developmental
1-3f.	Unintended pregnancy (females aged 15 to 44 years)	19 50
1-3g.	Prevention of sexually transmitted diseases (males aged 15 to 49 years; females aged 15 to 44 years)	Developmental
1-3h.	Management of menopause (females aged 46 to 56 years)	Developmental

Target setting method: Better than the best.

Data sources: National Survey on Family Growth (NSFG), CDC, NCHS; National Health Interview Survey (NHIS), CDC, NCHS.

NOTE: THE TABLE BELOW MAY CONTINUE TO THE FOLLOWING PAGE.

Females Aged 15 to 44 Years With a Physician Visit in the Past Year, 1995	1-3f. COUNSELED ABOUT UNINTENDED PREGNANCY
	Percent
TOTAL	19
Race and ethnicity	
American Indian or Alaska Native	DSU
Asian or Pacific Islander	DSU
Asian	DNC
Native Hawaiian and other Pacific Islander	DNC
Black or African American	24
White	19
Hispanic or Latino	20
Not Hispanic or Latino	DNA
Black or African American	24
White	19

Females Aged 15 to 44 Years With a Physician Visit in the Past Year, 1995	1-3f. Counseled About Unintended Pregnancy
	Percent
Education level (females aged 22 to 44 years)	
Less than high school	15
High school graduate	20
At least some college	19
Sexual orientation	DNC
Select populations	
Age groups	
15 to 24 years	22
25 to 34 years	23
35 to 44 years	10

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

NOTE: THE TABLE ABOVE MAY HAVE CONTINUED FROM THE PREVIOUS PAGE.

Substantial gaps remain in the delivery of appropriate screening and counseling services related to health behaviors. Unhealthy diets, smoking, physical inactivity, and alcohol use account for a majority of preventable deaths in the United States.³⁷ Data indicate that risk assessment and counseling interventions are delivered less frequently than other preventive interventions (for example, cancer screenings).¹² In addition, the attention physicians give to specific health-risk behaviors appears to be influenced by the socioeconomic status of their patients.³⁸ Although time is an important constraint in the primary care setting, evidence demonstrates that brief clinician counseling is effective in getting patients to stop smoking and reduce problem drinking.^{1,39} In addition, more intensive dietary counseling can lead to reduced dietary fat and cholesterol intake and increased fruit and vegetable consumption.¹ Effective primary care-based interventions to increase physical activity among patients have been more difficult to identify.^{1,40}

Some evidence shows that provider counseling can increase the use of seat belts, child safety seats, and bicycle helmets, especially when directed to parents of infants and young children.¹ Brief counseling interventions aimed at high-risk individuals can increase condom use and prevent the spread of sexually transmitted diseases.⁴¹

Clinician counseling should be tailored to the individual risk factors, needs, preferences, and abilities of each patient.¹ For some preventive interventions, such as hormone therapy in postmenopausal women, the optimal strategy depends on how individual women value potential benefits and risks. Counseling of perimeno-

pausal and postmenopausal women should encourage shared decisionmaking based on individual risk factors and patient preferences.¹

Primary Care

1-4. Increase the proportion of persons who have a specific source of ongoing care.

Target and baseline:

Objective	Increase in Persons With Specific Source of Ongoing Care	1998 Baseline*	2010 Target
		<i>Percent</i>	
1-4a.	All ages	87	96
1-4b.	Children and youth aged 17 years and under	93	97
1-4c.	Adults aged 18 years and older	85	96

*Age adjusted to the year 2000 standard population.

Target setting method: Better than the best.

Data source: National Health Interview Survey (NHIS), CDC, NCHS.

NOTE: THE TABLE BELOW MAY CONTINUE TO THE FOLLOWING PAGE.

Population by Age Group, 1998 (unless noted)	Specific Source of Ongoing Care		
	1-4a. All Ages	1-4b. Aged 17 Years and Under	1-4c. Aged 18 Years and Older
	Percent		
TOTAL	87	93	85
Race and ethnicity			
American Indian or Alaska Native	82	89	79
Asian or Pacific Islander	84	89	81
Asian	84	89	82
Native Hawaiian and other Pacific Islander	83	90	82
Black or African American	86	91	84
White	88	95	86

Population by Age Group, 1998 (unless noted)	Specific Source of Ongoing Care		
	1-4a. All Ages	1-4b. Aged 17 Years and Under	1-4c. Aged 18 Years and Older
	Percent		
Hispanic or Latino	79	86	76
Cuban	86	95	82
Mexican American	75	83	72
Puerto Rican	86	90	85
Not Hispanic or Latino	89	95	87
Black or African American	86	91	85
White	89	96	87
Gender			
Female	91	93	90
Male	84	94	81
Family income level			
Poor	80	88	77
Near poor	82	90	79
Middle/high income	91	97	88
Geographic location			
Urban	87	93	85
Rural	89	95	87
Disability status			
Persons with disabilities	89 (1997)	95 (1997)	86 (1997)
Persons without disabilities	86 (1997)	93 (1997)	84 (1997)
Sexual orientation	DNC	DNC	DNC
Select populations			
Age groups			
10 to 24 years	DNA	NA	NA
10 to 17 years	91 (1997)	NA	NA
18 to 24 years	72 (1997)	NA	NA

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable. NA = Not applicable.

Note: Age adjusted to the year 2000 standard population.

NOTE: THE TABLE ABOVE MAY HAVE CONTINUED FROM THE PREVIOUS PAGE.

Access to care depends in part on access to an ongoing source of care. People with a usual source of health care are more likely than those without a usual source of care to receive a variety of preventive health care services.^{42, 43} An estimated 15 percent of adults in the United States lack a usual source of care. Thus, more than 40 million persons have no particular doctor's office, clinic, health center, or other place where they go for health care advice. The National Health Interview Survey (NHIS) does not count emergency departments as a usual source of care.¹²

An estimated 93 percent of children aged 17 years and under have a specific source of ongoing care. The implementation of the Children's Health Insurance Program in 1999 provides a mechanism for increasing the proportion of children with an ongoing source of care.¹²

The usual source of care can vary among groups according to their age, race and ethnicity, and health insurance coverage. Young children and elderly adults aged 65 years and older are most likely to have a usual source of care, and adults aged 18 to 64 years are least likely. Young adults aged 18 to 24 years are the least likely of any age group to have a usual source of care. Among racial and ethnic groups, Hispanic persons are the least likely to have a usual source of care. Some 24 percent of the adult Hispanic population (and 28 percent of the Mexican American population) lack a usual source of care, compared to 15 percent of African Americans and 15 percent of the total adult population.¹²

Some 88 percent of persons with a usual source use an office-based provider, and 11 percent use a hospital outpatient department or clinic. African Americans and Hispanics are more likely to use hospital-based providers (including hospital clinics and outpatient departments) as their usual source of care.¹⁵

Uninsured persons under age 65 years are more likely to lack a usual source of care (38 percent) than those who have either public or private insurance. When compared with their counterparts who have private health insurance, uninsured people under age 65 years are 2.6 times more likely to lack a usual source of care.¹⁵

1-5. Increase the proportion of persons with a usual primary care provider.

Target: 85 percent.

Baseline: 77 percent of the population had a usual primary care provider in 1996.

Target setting method: Better than the best.

Data source: Medical Expenditure Panel Survey (MEPS), AHRQ.

Total Population, 1996	1-5. Have a Usual Pri- mary Care Provider	Provider Has Office Hours at Night or on Week- ends*	Provider Usu- ally Asks About Prescription Medications and Treat- ments by Other Doc- tors*
	Percent		
TOTAL	77	37	59
Race and ethnicity			
American Indian or Alaska Native	79	37	64
Asian or Pacific Islander	72	36	57
Asian	DNC	DNC	DNC
Native Hawaiian and other Pacific Islander	DNC	DNC	DNC
Black or African American	74	34	60
White	77	37	59
Hispanic or Latino			
Hispanic or Latino	64	32	52
Not Hispanic or Latino	78	37	60
Black or African American	74	34	60
White	79	38	60
Gender			
Female	80	37	61
Male	73	36	57
Education level (aged 18 years and older)			
Less than high school	69	24	53
High school graduate	74	32	58
At least some college	74	34	59
Geographic location			
Within MSA	76	39	59
Outside MSA	78	29	60
Disability status			
Persons with activity limitations	DNA	DNA	DNA
Persons without activity limitations	DNA	DNA	DNA

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.
MSA = Metropolitan statistical area.

*Data for office hours, prescription medications, and treatments are displayed to further characterize the practices of primary care providers.

A usual source of primary care helps people clarify the nature of their health problems and can direct them to appropriate health services, including specialty care.⁴⁴ Primary care also emphasizes continuity, which implies that individuals use their primary source of care over time for most of their health care needs. More after-hours care, shorter travel time to a practice site, and shorter office waits have been associated with patients' beginning an acute episode of care with primary care physicians. Greater continuity has been observed for individuals with shorter appointment waits, insurance, and access to more after-hours care.⁴⁵ Other advantages of primary care are that a primary care provider deals with all common health needs (comprehensiveness) and coordinates health care services, such as referrals to specialists. Evidence suggests that first contact care provided by an individual's primary care provider leads to less costly medical care.⁴⁶

1-6. Reduce the proportion of families that experience difficulties or delays in obtaining health care or do not receive needed care for one or more family members.

Target: 7 percent.

Baseline: 12 percent of families experienced difficulties or delays in obtaining health care or did not receive needed care in 1996.

Target setting method: Better than the best.

Data source: Medical Expenditure Panel Survey (MEPS), AHRQ.

NOTE: THE TABLE BELOW MAY CONTINUE TO THE FOLLOWING PAGE.

Families, 1996	Experienced Difficulty or Delay in Receiving Health Care or Received No Health Care
	Percent
TOTAL	12
Race and ethnicity (head of household)	
American Indian or Alaska Native	15
Asian or Pacific Islander	14
Asian	DNC
Native Hawaiian and other Pacific Islander	DNC
Black or African American	10
White	12
Hispanic or Latino	15
Not Hispanic or Latino	11
Black or African American	10

Families, 1996	Experienced Difficulty or Delay in Receiving Health Care or Received No Health Care
	Percent
White	11
Gender (head of household)	
Female	DNA
Male	DNA
Family income level	
Below poverty	17
Near poverty	17
Middle/high income	9
Geographic location	
Within MSA	12
Outside MSA	12
Health insurance status of family	
All members private insurance	7
All members public insurance	12
All members uninsured	27
Disability status	
Persons with activity limitations	DNA
Persons without activity limitations	DNA

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable. MSA = Metropolitan statistical area.

NOTE: THE TABLE ABOVE MAY HAVE CONTINUED FROM THE PREVIOUS PAGE.

In 1996, according to the Medical Expenditure Panel Survey (MEPS), 12.8 million families (11.6 percent) for a variety of reasons experienced difficulty or delay in obtaining care or did not receive health care services they thought they needed. In addition to a lack of insurance or underinsurance, barriers include a lack of appropriate referrals, travel distance to the provider, lack of transportation, and unavailability of specialists. Families experience barriers to care for a variety of reasons: inability to afford health care (60 percent); insurance-related causes (20 percent), including (1) the insurance company not approving, covering, or paying for care, (2) preexisting conditions for which insurance coverage often is restricted, (3) lack of access to required referrals, and (4) clinicians refusing to accept the family's insurance plan; and other problems (21 percent), such as transportation, physical barriers, communication problems, child care limitations, lack of time or information, or refusal of services.¹⁵

An additional source of information on obtaining services is the Robert Wood Johnson National Access to Care Survey. Results of the 1994 National Access to Care Survey suggest that some studies have missed substantial components of unmet needs by failing to include specific questions about supplementary health care services, such as prescription drugs, eyeglasses, dental care, and mental health care or counseling.⁴⁷ When specific questions were added about these services, the findings showed that 16.1 percent of respondents (approximately 41 million) were unable to obtain at least one service they believed they needed. The highest reported unmet need was for dental care. This problem can be attributed partly to insufficient provider reimbursement, which discourages participation in plans even when the service is covered.

1-7. (Developmental) Increase the proportion of schools of medicine, schools of nursing, and other health professional training schools whose basic curriculum for health care providers includes the core competencies in health promotion and disease prevention.

Potential data source: Adaptation of the Prevention Self-Assessment Analysis, Association of Teachers of Preventive Medicine (ATPM).

Significant changes in the health care system and in the expectations of consumers are influencing the education of health care providers in the United States. For example, many medical schools are assessing the content of their predoctoral and postgraduate curricula.⁴⁸ Medical educators and medical schools are recognizing that physicians will need to be prepared to provide population-based preventive health care as well as high-quality medical care to their patients.⁴⁹ This challenge exists for other health professionals, including nurses, nurse practitioners, physician assistants, and allied health personnel. This link between medicine and public health is essential to provide the highest quality health care possible to the U.S. population.

A core set of competencies for medical students in health promotion and disease prevention was developed by a task force established by the Association of Teachers of Preventive Medicine (ATPM) and the U.S. Department of Health and Human Services' Health Resources and Services Administration. The competencies, derived from the ATPM *Inventory of Knowledge and Skills Relating to Health Promotion and Disease Prevention*,⁵⁰ cover four categories: clinical prevention, quantitative skills, health services organization and delivery, and community dimensions of medical practice. Together, they address a wide spectrum of topics, including environmental health hazards and asthma management. This set of competencies will provide medical educators with measurable education outcomes in prevention education. The core competencies will be evaluated for potential adaptability to health provider education curricula in schools of nursing and health professional schools. The core competencies also will be reviewed for potential expansion to cover emerging issues and competencies in evaluating and responding to environmental health concerns and natural and man-made disasters.

Because health care providers will have to address new health issues, policies, technologies, and practice guidelines over their careers, continuing education programs also need to be updated periodically.

1-8. In the health professions, allied and associated health profession fields, and the nursing field, increase the proportion of all degrees awarded to members of under-represented racial and ethnic groups.

Target and baseline:

Objective	Increase in Degrees Awarded to Underrepresented Populations	1996-97 Baseline (unless noted)	2010 Target
		<i>Percent</i>	
	Health professions, allied and associated health professions fields (For the baselines, health professions include medicine, dentistry, pharmacy, and public health.)		
1-8a.	American Indian or Alaska Native	0.6	1.0
1-8b.	Asian or Pacific Islander	16.2	4.0*
1-8c.	Black or African American	6.7	13.0
1-8d.	Hispanic or Latino	4.0	12.0
	Nursing		
1-8e.	American Indian or Alaska Native	0.7 (1995–96)	1.0
1-8f.	Asian or Pacific Islander	3.2 (1995–96)	4.0
1-8g.	Black or African American	6.9 (1995–96)	13.0
1-8h.	Hispanic or Latino	3.4 (1995–96)	12.0
	Medicine		
1-8i.	American Indian or Alaska Native	0.6	1.0
1-8j.	Asian or Pacific Islander	15.9	4.0*
1-8k.	Black or African American	7.3	13.0
1-8l.	Hispanic or Latino	4.6	12.0
	Dentistry		
1-8m.	American Indian or Alaska Native	0.5	1.0
1-8n.	Asian or Pacific Islander	19.5	4.0*
1-8o.	Black or African American	5.1	13.0
1-8p.	Hispanic or Latino	4.7	12.0
	Pharmacy		
1-8q.	American Indian or Alaska Native	0.4	1.0
1-8r.	Asian or Pacific Islander	17.5	4.0*

1-8s.	Black or African American	5.7	13.0
1-8t.	Hispanic or Latino	2.8	12.0

*The Asian or Pacific Islander population group has exceeded its target, which represents the minimum target based on this group's estimated proportion of the population.

Target setting method: Targets based on U.S. Bureau of the Census projections of the proportions of racial and ethnic groups in the population for the year 2000.

Data sources: Survey of Predoctoral Dental Educational Institutions, American Dental Association; Profile of Pharmacy Students, American Association of Colleges of Pharmacy; AAMC Data Book: Statistical Information Related to Medical Schools and Teaching Hospitals, Association of American Medical Colleges; Annual Data Report, American Association of Schools of Public Health; Annual Survey of RN (Registered Nurse) Programs, National League for Nursing, Center for Research in Nursing Education and Community Health.

Certain racial and ethnic groups and low-income communities lag behind the overall U.S. population on virtually all health status indicators, including life expectancy and infant death. Furthermore, access to health care is a problem, and these groups often lack a specific source of care. Increasing the number of health professionals from certain racial and ethnic groups is viewed as an integral part of the solution to improving access to care.

Members of underrepresented racial or ethnic groups make up about 25 percent of the U.S. population. Their representation among health professionals, however, is in the range of 10 percent. Several studies have shown that minority health professionals are more likely to serve areas with high proportions of underrepresented racial and ethnic groups and to practice in or near designated health care shortage areas.^{51, 52}

Despite considerable efforts to increase the number of representatives of racial or ethnic groups in health profession schools (medicine, dentistry, nursing, pharmacy, and allied and associated health professions), the percentage of such entrants, enrollees, and graduates has not advanced significantly and in some cases has not advanced at all since 1990. The targets set for Healthy People 2000 for such enrollment and graduation were not achieved, and achieving the revised targets by 2010 presents a significant challenge. Additional attention will need to be given to such efforts as providing financial assistance for underrepresented racial and ethnic group students to pursue health care degrees, encouraging mentor relationships, promoting the early recruiting of students from racial and ethnic groups before they graduate from high school, and increasing the number of racial and ethnic group faculty and administrative staff members in schools that train health care professionals. Other suggested approaches to improving culturally appropriate care for ethnic and minority populations include increasing cultural competency among all health workers and increasing the number of lay health workers from underrepresented racial and ethnic groups.

1-9. Reduce hospitalization rates for three ambulatory-care-sensitive conditions—pediatric asthma, uncontrolled diabetes, and immunization-preventable pneumonia and influenza.

Target and baseline:

Objective	Reduction in Hospitalizations for Ambulatory-Care-Sensitive Conditions	1996 Baseline	2010 Target
<i>Admissions per 10,000 Population</i>			
1-9a.	Pediatric asthma—persons under age 18 years	23.0	17.3
1-9b.	Uncontrolled diabetes—persons aged 18 to 64 years	7.2	5.4
1-9c.	Immunization-preventable pneumonia or influenza—persons aged 65 years and older	10.6	8.0

Target setting method: 25 percent improvement.

Data source: Healthcare Cost and Utilization Project (HCUP), AHRQ.

NOTE: THE TABLE BELOW MAY CONTINUE TO THE FOLLOWING PAGE.

Persons With Ambulatory-Care-Sensitive Conditions by Age Group, 1996	Hospitalizations		
	1-9a. Persons Under Age 18 Years With Asthma	1-9b. Persons Aged 18 to 64 Years With Diabetes	1-9c. Persons Aged 65 Years and Older With Preventable Pneumonia or Influenza
	Admissions per 10,000		
TOTAL	23.0	7.2	10.6
Race and ethnicity			
American Indian or Alaska Native	DNC	DNC	DNC
Asian or Pacific Islander	DNC	DNC	DNC
Asian	DNC	DNC	DNC
Native Hawaiian and other Pacific Islander	DNC	DNC	DNC
Black or African American	DNC	DNC	DNC
White	DNC	DNC	DNC

Persons With Ambulatory-Care-Sensitive Conditions by Age Group, 1996	Hospitalizations		
	1-9a. Persons Under Age 18 Years With Asthma	1-9b. Persons Aged 18 to 64 Years With Diabetes	1-9c. Persons Aged 65 Years and Older With Preventable Pneumonia or Influenza
	Admissions per 10,000		
Hispanic or Latino	DNC	DNC	DNC
Not Hispanic or Latino	DNC	DNC	DNC
Black or African American	DNC	DNC	DNC
White	DNC	DNC	DNC
Gender			
Female	18.2	7.0	9.1
Male	27.6	7.4	12.6
ZIP Code income level *			
\$25,000 or less	52.0	18.8	21.1
\$25,001 to \$35,000	22.3	6.7	9.2
More than \$35,000	10.6	2.9	6.0
Health insurance status			
Private	15.7	3.7	DNA
Medicaid	45.9	23.5	DNA
Uninsured	8.3	6.3	NA

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable. NA = Not applicable.

*Income of patient is the median income for the postal ZIP Code of residence.

NOTE: THE TABLE ABOVE MAY HAVE CONTINUED FROM THE PREVIOUS PAGE.

Comprehensive primary care services can reduce the severity of certain illnesses. Hospital admission rates for “ambulatory-care-sensitive conditions” serve as an indicator for both limited access to primary care and evidence of low-quality primary care. Disparities in hospital admission rates for racial and ethnic groups and low-income populations have been well documented.^{53, 54}

The three indicators selected here represent common problems encountered in primary care and allow monitoring of hospitalization rates for children (asthma), working-age adults (diabetes), and elderly persons (pneumonia and influenza). For each of these conditions, interventions can reduce hospitalization rates. Advances in the management of asthma have reduced its adverse health effects. Primary care can prevent both acute problems and long-term consequences of diabetes. Illness and death from preventable pneumonia and influenza among elderly persons can

be avoided through the use of pneumococcal and influenza vaccines. These three conditions have been chosen because coordination of community preventive services, public health interventions, clinical preventive services, and primary care can reduce levels of these illnesses. To be effective, these services must be culturally competent and linguistically appropriate.⁵⁵

This objective can be achieved by targeting high-risk populations. Because multiple factors besides access and quality contribute to the admission rates for ambulatory-care-sensitive conditions, each State will need to examine its rates and interpret them in the context of its population, health system, and community characteristics and will need to implement corresponding strategies. The objective is to improve primary care and preventive services and thereby reduce the need for hospital admission and the extended illness and costs associated with hospitalization.^{56, 57, 58, 59}

It should be noted that persons who are privately insured have admission rates that are half those of the national average, indicating what is potentially achievable. Because of data limitations and potential access barriers to hospital admission among the uninsured, the Medicaid rate is artificially high and the uninsured rate is artificially low. (See *Tracking Healthy People 2010* for more information.) Data by race are not included because these data are reported at the State level. State-level hospital discharge databases can provide accurate estimates of racial and ethnic disparities in hospital admission rates at the State level. There are substantial disparities in hospital admission rates for pediatric asthma and uncontrolled diabetes by race and ethnicity. The magnitude of this disparity also fluctuates by State, suggesting that access to care and quality may play a role. Specifically, among seven States for which rates were determined, the age- and gender-adjusted relative risk of hospitalization for pediatric asthma ranged from 2.3 to 5.8 for African Americans and 1.3 to 2.6 for Hispanics compared to non-Hispanic whites. For uncontrolled diabetes, the relative risk of hospitalization ranged from 3.0 to 4.4 for African Americans and 1.2 to 2.0 for Latinos compared to non-Hispanic whites.⁶⁰ AHRQ is developing a “minority national inpatient sample” as part of HCUP that will provide national estimates of disparities in avoidable hospitalization rates by race and ethnicity.

Emergency Services

1-10. (Developmental) Reduce the proportion of persons who delay or have difficulty in getting emergency medical care.

Potential data source: National Health Interview Survey (NHIS), CDC, NCHS.

Emergency services are a vital part of access to health care in the United States. All population groups, regardless of their socioeconomic, health, or insurance status, want to know that emergency services will be available and will function quickly and effectively when needed.⁶¹ This broadly shared social expectation was reinforced by landmark Federal legislation, the Emergency Medical Treatment and

Active Labor Act (EMTALA) of 1986. EMTALA stipulates that anyone seeking care at a hospital emergency department (ED) must receive a medical screening examination for an emergency medical condition and appropriate stabilizing measures.⁶²

For many people, however, a variety of barriers continue to block access to emergency departments when the need for emergency medical care arises.⁹ Among these barriers are psychological and cultural factors that may keep some people, even if insured, from seeking care promptly; financial constraints that may inhibit some people, even if insured, from seeking care promptly; and shortcomings in the number, location, or capability of EDs in a specified geographic area.

A significant component of this objective is to reduce the proportion of people whose access to emergency services is blocked by their health insurance coverage or payment policies. These policies affect access to hospital emergency departments and, in some instances, use of prehospital emergency services.⁶³ Typically, these policies stipulate that unless an enrollee's condition is life threatening, the enrollee or the ED must obtain authorization before an ED visit or risk that a claim for services will be denied. In some cases, claims for ED visits can be denied retroactively if they are deemed medically unnecessary. The rationale for these coverage and payment policies is clear: to manage care and contain costs. These policies, however, discourage some enrollees from receiving emergency treatment when and where it is warranted.⁶⁴

Concerns about access barriers have prompted Federal, State, and organizational groups to seek assurances that health coverage or payment policies will provide payment when people go to an ED with acute symptoms of sufficient severity—including severe pain—such that a prudent layperson could reasonably expect that the lack of medical attention could result in serious jeopardy, serious impairment to bodily functions, or serious dysfunction of any bodily organ or part.

1-11. (Developmental) Increase the proportion of persons who have access to rapidly responding prehospital emergency medical services.

Potential data source: Annual Survey of EMS Operations, International Association of Fire Fighters.

The outcome of many medical emergencies depends on the prompt availability of appropriately trained and properly equipped prehospital emergency medical care providers. In urban areas, this capability is defined by an interval of less than 5 minutes from the time an emergency call is placed to arrival on the scene for at least 90 percent of first-responder emergency medical services and less than 8 minutes for at least 90 percent of transporting EMS. In rural areas, this capability is defined as an interval of less than 10 minutes from the time an emergency call is placed to arrival on the scene for at least 80 percent of EMS responses.

Assuring a prompt response requires a well-coordinated system of care involving a variety of organizations and agencies, some of which are outside the traditional health care arena. The components include public awareness of how and whom to call for emergency assistance and public education concerning initial lifesaving emergency care procedures to be followed until the arrival of EMS providers. They also include access via a 911 or enhanced 911 system or, in rural areas, a uniform addressing system that allows emergency responders to locate the person requesting emergency assistance quickly; the availability of well-trained and appropriately certified response personnel, who are frequently from law enforcement or fire services; transportation (ground, air, or water ambulance); medical direction and oversight; and destination hospitals that are well-equipped and appropriately staffed.

1-12. Establish a single toll-free telephone number for access to poison control centers on a 24-hour basis throughout the United States.

Target: 100 percent.

Baseline: 15 percent of poison control centers shared a single toll-free number in 1999.

Target setting method: Total coverage.

Data source: American Association of Poison Control Centers Survey, U.S. Poison Control Centers.

Poison control centers (PCCs) are staffed on a 24-hour basis by toxicologists and specialists in poison information who respond to requests from the general public and health care professionals for immediate information and treatment advice about poisonings and toxic exposures. Local or toll-free telephone calls to PCC hotline numbers provide primary access to these services. Each year more than 2 million callers seek telephone assistance from PCCs throughout the United States.⁶⁵ When a caller reports a poisoning or toxic exposure, a PCC toxicologist or specialist in poison information assesses the severity of the incident, advises the caller about treatment, and makes referrals for further medical attention when necessary. PCCs respond to inquiries in languages other than English by using language-translation services, interpreters, or bilingual staff members. PCCs manage most incidents by providing telephone advice to a caregiver at home, avoiding the need for more costly care at a hospital emergency department or another health care facility.

Linking all PCCs in the United States through a single toll-free telephone number and consolidating several key PCC functions can make contacting PCCs easier and more cost-effective.^{66, 67} When PCCs are linked through a common telephone number, callers can be routed automatically to the nearest PCC based on their area code, telephone exchange number, and ZIP Code. Educational efforts could focus on a single easy-to-remember emergency number that permits callers to access PCCs quickly. Incorporating all PCCs under the umbrella of a toll-free nationwide

telephone number will help ensure access to poison control services when and where they are needed.

1-13. Increase the number of Tribes, States, and the District of Columbia with trauma care systems that maximize survival and functional outcomes of trauma patients and help prevent injuries from occurring.

Target: All Tribes, States, and the District of Columbia.

Baseline: 5 States had trauma care systems in 1998.

Target setting method: Total coverage. (Tribal trauma systems are measured differently because they frequently are regional and often are linked to a State EMS.)

Data sources: State EMS Directors Survey, National Association of State EMS Directors; IHS (Tribal data are developmental).

A trauma care system is an organized and coordinated effort in a defined geographic area to deliver the full spectrum of care to injured patients. The main goals of the system are to match the available trauma care resources in a community, region, or State with the needs of individual patients and to ensure that patients have rapid access to the acute care facility and rehabilitation services they need. In a trauma care system, prehospital, acute care, and rehabilitation services are integrated and administered by a public agency that provides leadership, coordinates service delivery, establishes minimum standards of care, designates trauma centers (which offer 24-hour specialized treatment for the most severely injured patients), and fosters ongoing system evaluation and quality improvement.

Trauma care systems traditionally have focused on preventing adverse outcomes in the event of injury. Many trauma care professionals and people in the public health field believe that trauma care systems also should contribute to the prevention of injuries.⁶⁸ Trauma care professionals are in a good position to provide leadership in injury surveillance, clinical preventive services, and communitywide injury prevention programs. Recent Federal initiatives in trauma care have resulted in the design of a model system that incorporates public information, education, and prevention of injuries as key features.⁶⁹

Results of a national survey conducted in 1993 indicated that only 5 States had complete trauma systems, but 19 other States and the District of Columbia had at least some trauma system components in place.⁷⁰ A survey of all 50 States and the District of Columbia in 1998 again indicated that only 5 States satisfied all trauma care system criteria.⁷¹ However, results from this survey also showed that 37 other States and the District of Columbia had at least some trauma system components in place.

1-14. Increase the number of States and the District of Columbia that have implemented guidelines for prehospital and hospital pediatric care.

1-14a. Increase the number of States and the District of Columbia that have implemented statewide pediatric protocols for online medical direction.

Target: All States and the District of Columbia.

Baseline: 18 States had implemented statewide pediatric protocols for online medical direction in 1997.

Target setting method: Total coverage.

Data source: Emergency Medical Services for Children Annual Grantees Survey, HRSA.

Emergency medical service systems try to bring essential prehospital medical treatment to patients as quickly as possible. Emergency care of children presents a particular challenge because prehospital providers often treat fewer children and have limited pediatric experience and assessment skills. It can be more difficult to assess the severity of illness or injury because characteristic changes in vital signs that signal deterioration in adults may not occur in children. Important anatomic, physiologic, and developmental differences exist between children and adults that affect their responses to medical care and their risk of injury and illness.⁷² Most EMS systems operate independently of hospitals or other facilities and typically have few physicians to ensure appropriateness of care.

Experienced providers can offer medical direction in two ways, either online or offline. Online direction involves direct communication (for example, voice) between EMS medical directors (for example, at hospitals) and emergency medical technicians (EMTs) and paramedics to authorize and guide the care of patients at the scene and during transport. Offline medical direction includes the development of guidelines, protocols, procedures, and policies, as well as planning for, training in, and evaluation of their use.

1-14b. Increase the number of States and the District of Columbia that have adopted and disseminated pediatric guidelines that categorize acute care facilities with the equipment, drugs, trained personnel, and other resources necessary to provide varying levels of pediatric emergency and critical care.

Target: All States and the District of Columbia.

Baseline: 11 States had adopted and disseminated pediatric guidelines that categorize acute care facilities with the equipment, drugs, trained personnel, and other resources necessary to provide varying levels of pediatric emergency and critical care in 1997.

Target setting method: Total coverage.

Data source: Emergency Medical Services for Children Annual Grantees Survey, HRSA.

Emergency care for life-threatening pediatric illness and injury requires specialized resources, medical direction, equipment, drugs, trained personnel, and properly staffed and equipped hospitals.⁷² Children, however, receive emergency care in a variety of settings—from rural community hospitals to large urban medical centers. Hospitals vary in terms of their readiness to treat children’s emergencies. If the hospitals are properly equipped and staffed, children frequently can receive the care that they need at local hospitals, but some children require the advanced care available only at regional specialty centers. Categorization is essentially an effort to identify the readiness and capability of a hospital and its staff to provide optimal emergency care.⁷³ Compliance can be voluntary or assigned by official agencies.

Long-Term Care and Rehabilitative Services

1-15. (Developmental) Increase the proportion of persons with long-term care needs who have access to the continuum of long-term care services.

Potential data sources: National Long-Term Care Survey, Medicare Current Beneficiary Survey, HCFA; National Health Interview Survey (NHIS), CDC, NCHS; Medical Expenditure Panel Survey (MEPS), AHRQ.

The long-term care population needs access to a range of services, including nursing home care, home health care, adult day care, assisted living, and hospice care.⁷⁴ Persons with long-term care needs require the help of other persons to perform activities of daily living (personal care activities) and instrumental activities of daily living (routine needs). Access problems are viewed as a need for specified long-term care services that were not received in the past 12 months.

Long-term care crosses the boundaries of different types of care—from health to social—and intensity of services—from periodic home health and homemaker visits to round-the-clock subacute care. Access to the full range of long-term care services continues to be a problem because of financial barriers and the limited availability of specific services.^{11, 75} Although people in the long-term care population and their caregivers prefer long-term care to be delivered in the least restrictive environment, limited access and limited knowledge about care options can result in a long-term care population that is more dependent than necessary. The long-term care services selected cover key services in institutions, in the home, and in the community. Access to this range of services in rural areas is often difficult.

1-16. Reduce the proportion of nursing home residents with a current diagnosis of pressure ulcers.

Target: 8 diagnoses per 1,000 residents.

Baseline: 16 diagnoses of pressure ulcers per 1,000 nursing home residents were made in 1997.

Target setting method: Better than the best.

Data source: National Nursing Home Survey (NNHS), CDC, NCHS.

NOTE: THE TABLE BELOW MAY CONTINUE TO THE FOLLOWING PAGE.

Nursing Home Residents, 1997	Pressure Ulcers
	Diagnoses per 1,000
TOTAL	16
Race and ethnicity	
American Indian or Alaska Native	DSU
Asian or Pacific Islander	DSU
Asian	DSU
Native Hawaiian and other Pacific Islander	DSU
Black or African American	DSU
White	14
Hispanic or Latino	DSU
Not Hispanic or Latino	15
Black or African American	DSU
White	13
Gender	
Female	14
Male	20
Education level	
Less than high school	DNC
High school graduate	DNC
At least some college	DNC

Nursing Home Residents, 1997	Pressure Ulcers
	Diagnoses per 1,000
Geographic location	
Within MSA	17
Outside MSA	12
Disability status	
Persons with disabilities	16
Persons without disabilities	DSU

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable. MSA = Metropolitan statistical area.

NOTE: THE TABLE ABOVE MAY HAVE CONTINUED FROM THE PREVIOUS PAGE.

Pressure ulcers in all settings are sufficiently common to warrant concern, particularly as a quality-of-care issue. A significant number of people are at risk for pressure ulcers in nursing homes. Older adults are particularly prone to pressure ulcers as a result of decreased mobility, multiple contributing diagnoses, loss of muscle mass, and poor nutrition. About 24 percent of the Nation's 1.4 million nursing home residents require the assistance of another person to transfer from bed to chair.

According to studies of the treatment of pressure ulcers, it is difficult to determine the exact extent of the problem, including the number of new cases and the number of people who have pressure ulcers. Pressure ulcers have long been recognized as a serious quality-of-care problem in both acute care facilities and nursing homes.^{76, 77} The prevention of pressure ulcers depends on close observation, appropriate nutrition, and effective nursing care. The number of new cases of pressure ulcers could indicate the overall quality of care provided to nursing home residents. Evidence-based guidelines have been issued on the prevention and treatment of pressure ulcers.⁷⁸

Related Objectives From Other Focus Areas

2. Arthritis, Osteoporosis, and Chronic Back Conditions

- 2-2. Activity limitations due to arthritis
- 2-3. Personal care limitations
- 2-6. Racial differences in total knee replacement
- 2-7. Seeing a health care provider
- 2-11. Activity limitations due to chronic back conditions

3. Cancer

- 3-10. Provider counseling about cancer prevention
- 3-11. Pap tests
- 3-12. Colorectal cancer screening
- 3-13. Mammograms

- 5. Diabetes**
 - 5-1. Diabetes education
 - 5-4. Diagnosis of diabetes
 - 5-11. Annual urinary microalbumin measurement
 - 5-12. Annual glycosylated hemoglobin measurement
 - 5-13. Annual dilated eye examinations
 - 5-14. Annual foot examinations
 - 5-16. Aspirin therapy
- 6. Disability and Secondary Conditions**
 - 6-7. Congregate care of children and adults with disabilities
 - 6-10. Accessibility of health and wellness programs
- 7. Educational and Community-Based Programs**
 - 7-2. School health education
 - 7-3. Health-risk behavior information for college and university students
 - 7-5. Worksite health promotion programs
 - 7-7. Patient and family education
 - 7-8. Satisfaction with patient education
 - 7-12. Older adult participation in community health promotion activities
- 9. Family Planning**
 - 9-1. Intended pregnancy
 - 9-2. Birth spacing
 - 9-3. Contraceptive use
 - 9-5. Emergency contraception
 - 9-6. Male involvement in pregnancy prevention
 - 9-10. Pregnancy prevention and sexually transmitted disease (STD) protection
 - 9-11. Pregnancy prevention education
 - 9-13. Insurance coverage for contraceptive supplies and services
- 11. Health Communication**
 - 11-2. Health literacy
 - 11-6. Satisfaction with health care providers' communication skills
- 12. Heart Disease and Stroke**
 - 12-1. Coronary heart disease (CHD) deaths
 - 12-15. Blood cholesterol screening
- 13. HIV**
 - 13-6. Condom use
 - 13-8. HIV counseling and education for persons in substance abuse treatment
 - 13-9. HIV/AIDS, STD, and TB education in State prisons
 - 13-10. HIV counseling and testing in State prisons
- 14. Immunization and Infectious Diseases**
 - 14-5. Invasive pneumococcal infections
 - 14-22. Universally recommended vaccination of children aged 19 to 35 months
 - 14-23. Vaccination coverage for children in day care, kindergarten, and first grade
 - 14-24. Fully immunized young children and adolescents
 - 14-25. Providers who measure childhood vaccination coverage levels
 - 14-26. Children participating in population-based immunization registries
 - 14-27. Vaccination coverage among adolescents
 - 14-28. Hepatitis B vaccination among high-risk groups
 - 14-29. Influenza and pneumococcal vaccination of high-risk adults

15. Injury and Violence Prevention

- 15-7. Nonfatal poisonings
- 15-8. Deaths from poisoning
- 15-10. Emergency department surveillance systems
- 15-12. Emergency department visits
- 15-19. Safety belts
- 15-20. Child restraints
- 15-21. Motorcycle helmet use
- 15-23. Bicycle helmet use
- 15-24. Bicycle helmet laws

16. Maternal, Infant, and Child Health

- 16-1. Fetal and infant deaths
- 16-2. Child deaths
- 16-3. Adolescent and young adult deaths
- 16-17. Prenatal substance exposure
- 16-18. Fetal alcohol syndrome
- 16-20. Newborn bloodspot screening
- 16-22. Medical homes for children with special health care needs
- 16-23. Service systems for children with special health care needs

17. Medical Product Safety

- 17-3. Provider review of medications taken by patients
- 17-5. Receipt of oral counseling about medications from prescribers and dispensers

18. Mental Health and Mental Disorders

- 18-6. Primary care screening and assessment
- 18-7. Treatment for children with mental health problems
- 18-8. Juvenile justice facility screening
- 18-9. Treatment for adults with mental disorders
- 18-10. Treatment for co-occurring disorders
- 18-11. Adult jail diversion programs
- 18-12. State tracking of consumer satisfaction
- 18-13. State plans addressing cultural competence
- 18-14. State plans addressing elderly persons

19. Nutrition and Overweight

- 19-1. Healthy weight in adults
- 19-2. Obesity in adults
- 19-3. Overweight or obesity in children and adolescents
- 19-4. Growth retardation in children
- 19-17. Nutrition counseling for medical conditions
- 19-18. Food security

21. Oral Health

- 21-7. Annual examinations for oral and pharyngeal cancers
- 21-10. Use of oral health care system
- 21-11. Use of oral health care system by residents in long-term care facilities
- 21-13. School-based health centers with oral health component
- 21-14. Health centers with oral health service components
- 21-15. Referral for cleft lip or palate
- 21-16. Oral and craniofacial State-based surveillance system
- 21-17. Tribal, State, and local dental programs

22. Physical Activity and Fitness

- 22-12. School physical activity facilities
- 22-13. Worksite physical activity and fitness
- 22-14. Community walking
- 22-15. Community bicycling

23. Public Health Infrastructure

- 23-1. Public health employee access to the Internet
- 23-2. Public access to information and surveillance data
- 23-3. Use of geocoding in health data systems
- 23-8. Competencies for public health workers
- 23-9. Training in essential public health services
- 23-10. Continuing education and training by public health agencies
- 23-12. Health improvement plans
- 23-13. Access to public health laboratory services
- 23-14. Access to epidemiology services

24. Respiratory Diseases

- 24-6. Patient education
- 24-7. Appropriate asthma care
- 24-11. Medical evaluation and followup

25. Sexually Transmitted Diseases

- 25-11. Responsible adolescent sexual behavior
- 25-13. Hepatitis B vaccine services in STD clinics
- 25-14. Screening in youth detention facilities and jails
- 25-15. Contracts to treat nonplan partners of STD patients
- 25-16. Annual screening for genital chlamydia
- 25-17. Screening of pregnant women
- 25-18. Compliance with recognized STD treatment standards
- 25-19. Provider referral services for sex partners

26. Substance Abuse

- 26-18. Treatment gap for illicit drugs
- 26-20. Treatment of injection drug use
- 26-21. Treatment gap for problem alcohol use
- 26-22. Hospital emergency department referrals

27. Tobacco Use

- 27-5. Smoking cessation by adults
- 27-7. Smoking cessation by adolescents
- 27-8. Insurance coverage of cessation treatment

28. Vision and Hearing

- 28-1. Dilated eye examinations
- 28-2. Vision screening for children
- 28-10. Vision rehabilitation services and devices
- 28-11. Newborn hearing screening, evaluation, and intervention
- 28-13. Rehabilitation for hearing impairment
- 28-14. Hearing examination
- 28-15. Evaluation and treatment referrals

Terminology

(A listing of abbreviations and acronyms used in this publication appears in Appendix H.)

Access: According to the Institute of Medicine, “The timely use of personal health services to achieve the best possible health outcomes.”⁷⁹ This definition includes both the use and effectiveness of health services. The concept of access also encompasses physical accessibility of facilities.

Activities of daily living (ADL): Personal care activities, such as bathing, dressing, eating, and getting around (with special equipment, if needed) inside the home.

Acute care facility: A health facility that provides care on a short-term basis. Included are community hospitals with an average length of stay of less than 30 days for all patients.

Ambulatory care: Health care that does not require the patient to stay in a hospital or other facility, such as care provided on an outpatient basis.

Ambulatory-care-sensitive conditions: Conditions resulting in hospitalization that could potentially have been prevented if the person had improved access to high-quality primary care services outside the hospital setting.

Asymptomatic: Without symptoms. This term may apply either to healthy persons or to persons with preclinical (prior to clinical diagnosis) disease in whom symptoms are not yet apparent.

Clinical care: The provision of health care services to individual patients by trained health care professionals.

Clinical preventive services (CPS): Common screening tests, immunizations, risk assessment, counseling about health risk behaviors, and other preventive services routinely delivered in the clinical setting for the primary prevention of disease or for the early detection of disease in persons with no symptoms of illness.

Continuum of care: The array of health services and care settings that address health promotion, disease prevention, and the diagnosis, treatment, management, and rehabilitation of disease, injury, and disability. Included are primary care and specialized clinical services provided in community and primary care settings, hospitals, trauma centers, and rehabilitation and long-term care facilities.

Core competencies: A defined set of skills and knowledge considered necessary in the educational curricula for training health care providers. Examples of core competencies include skills in prevention education; skills in using sources of health data to identify what clinical preventive services should be delivered to the individual patient based on that person’s age, gender, and risk factor status; an understanding of the U.S. public health system (local and State health departments) and its role in monitoring and maintaining the health of the community; and skills to evaluate and translate medical and scientific research reports into clinical practice.

Emergency services: Health care services that are or appear to be needed immediately because of injury or sudden illness that threatens serious impairment of any bodily function or serious dysfunction of any bodily part or organ.¹⁸

Functional assessment: A health care provider’s review of a patient for the ability to perform activities of daily living (personal care activities) and instrumental activities (routine needs) of daily living. (See also *Persons with long-term care needs*.)

Health insurance: Any type of third party payment, reimbursement, or financial coverage for an agreed-upon set of health care services. Includes private insurance obtained through employment or purchased directly by the consumer, or health insurance provided through publicly funded programs, including Medicare, Medicaid, CHAMPUS/CHAMPVA, or other public hospital or physician programs.

Health intervention: Any measure taken to improve or promote health or to prevent, diagnose, treat, or manage disease, injury, or disability.

Health outcomes: The results or consequences of a process of care. Health outcomes may include satisfaction with care as well as the use of health care resources. Included are clinical outcomes, such as changes in health status and changes in the length and quality of life as a result of detecting or treating disease.

Instrumental activities for daily living: Routine activities, such as everyday household chores, shopping, or getting around for other purposes, that enable a person to live independently in the community.

Long-term care (LTC): A broad range of health and social services delivered in institutions, in the community, and at home. Long-term care services include institutional services, such as those delivered in nursing homes, rehabilitation hospitals, subacute care facilities, hospice facilities, and assisted living facilities; services delivered in the home, such as home health and personal care, hospice, homemaker, and meals; and community-based services, such as adult day care, social services, congregate meals, transportation and escort services, legal protective services, and counseling for clients as well as their caregivers.¹⁰

Managed care: According to the Institute of Medicine, “a set of techniques used by or on behalf of purchasers of health care benefits to manage health care costs by influencing patient care decisionmaking through case-by-case assessments of the appropriateness of care prior to its provision.”⁸⁰

Patient barriers: Any mental, physical, or psychosocial condition that prevents an individual from accessing needed health care. Examples include attitudes or biases, mental disorders or illnesses, behavioral disorders, physical limitations, cultural or linguistic factors, sexual orientation, and financial constraints.

Persons with long-term care needs: Persons who need the help of other persons to perform activities of daily living (personal care activities) and instrumental activities of daily living (routine needs).

Primary care: According to the Institute of Medicine, “The provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community.”⁸

Primary care provider: A physician who specializes in general and family practice, general internal medicine, or general pediatrics, or a nonphysician health care provider, such as a nurse practitioner, physician assistant, or certified nurse midwife.

Primary prevention: Health care services, medical tests, counseling, and health education and other actions designed to prevent the onset of a targeted condition. Routine immunization of healthy individuals is an example of primary prevention.¹

Provider barriers: Any mental, physical, psychosocial, or environmental condition that prevents or discourages health care providers from offering preventive services. Examples of provider barriers include a poor practice environment, lack of knowledge, and lack of efficacy studies.

Quality: According to the Institute of Medicine, “The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.”⁷⁹ Simply stated, it is doing the right thing, for the right patient, at the right time, with the right outcome.

Rehabilitative services: Services to restore specific skills, including overall physical mobility and functional abilities.

Secondary prevention: Measures such as health care services designed to identify or treat individuals who have a disease or risk factors for a disease but who are not yet ex-

periencing symptoms of the disease. Pap tests and high blood pressure screening are examples of secondary prevention.¹

System barriers: Conditions within a health care system that prevent people from accessing needed services or prevent health care providers from delivering those services. System barriers include physical, cultural, linguistic, and financial barriers as well as the availability of health care facilities or providers with special skills, such as eye, ear, nose, and throat specialists.

Tertiary prevention: Preventive health care measures or services that are part of the treatment and management of persons with clinical illnesses. Examples of tertiary prevention include cholesterol reduction in patients with coronary heart disease and insulin therapy to prevent complications of diabetes.¹

Usual source of care: A particular doctor's office, clinic, health center, or other health care facility to which an individual usually would go to obtain health care services. Having a usual source of care is associated with improved access to preventive services and followup care.

Vulnerable and at-risk populations: High-risk groups of people who have multiple health and social needs. Examples include pregnant women, people with human immunodeficiency virus infection, substance abusers, migrant farm workers, homeless people, poor people, infants and children, elderly people, people with disabilities, people with mental illness or mental health problems or disorders, and people from certain ethnic or racial groups who do not have the same access to quality health care services as other populations.

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