REPORT TO CONGRESS

ON THE

PREVENTION AND TREATMENT OF CO-OCCURRING SUBSTANCE ABUSE DISORDERS

AND

MENTAL DISORDERS

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Substance Abuse and Mental Health Services Administration

Foreword

The human, social, and economic costs of co-occurring substance abuse disorders and the continuum of mental disorders take a toll on the individual experiencing them, the family, the school, the workplace, the community, the State and, ultimately, the Nation as a whole. Co-occurring disorders – defined as, "where an individual has at least one mental disorder as well as an alcohol or drug use disorder" (Center for Substance Abuse Treatment (CSAT), in press) – affect millions of Americ ans each year.

Congress has called on the Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services, as the lead Federal mental health and substance abuse services agency, to prepare a report outlining the scope of the problem, current treatment approaches, best practice models, and prevention efforts. This report, required under Section 3406 of the Children's Health Act of 2000 (Public Law 106-310), Section 503A of the Public Health Service Act (see Appendix I) is mandated to include:

- a summary of the manner in which individuals with co-occurring disorders are receiving treatment, including the most up-to-date information available on the number of children and adults with co-occurring disorders, and the manner in which Federal Block Grant funds are used to serve these individuals;
- a summary of practices for preventing substance abuse disorders among individuals who have a mental illness and are at risk of having or acquiring a substance abuse disorder:
- a summary of evidence-based practices for treating individuals with co-occurring disorders and recommendations for implementing such practices; and
- a summary of improvements necessary to ensure that individuals with co-occurring disorders receive the services they need.

Underlying Principles

Services and programs focused on substance abuse disorders and mental disorders – whether experienced as co-occurring disorders or not – are driven by a number of key principles or precepts. First and foremost is the simple fact that people of all ages who have co-occurring disorders are people first, fully deserving of respect.

At the same time, consumers, recovering persons and their families need to be involved in all aspects of their treatment and recovery.

People with co-occurring disorders can and do recover. Everyone must be optimistic about their prospects for achieving stability and recovery, and provide the long-term support they need to maintain their progress.

People with co-occurring disorders deserve access to the services they need to recover. To put these beliefs into practice, the development of this report has been guided by the following principles:

- Ensure development of a system in which "any door is the right door" to receive treatment for co-occurring disorders. This means that people with co-occurring disorders can enter any appropriate agency in the service system and be provided or referred to appropriate services.
- Develop client-centered, individualized treatment plans based on an accurate assessment of the person's condition and the degree of service coordination he or she requires. Family members must be involved in treatment, where appropriate.
- Ensure the maximum feasible degree of integration for individuals with the most serious substance abuse disorders and mental disorders.
- Provide prevention and treatment services that are culturally competent, age, sexuality and gender appropriate and that reflect the diversity in the community.
- Promote the expansion and enhancement of service providers' capabilities to treat individuals of all ages who have co-occurring substance abuse disorders and mental disorders.

Finally, this report is not recommending the creation of a separate system of care for people who have co-occurring substance abuse disorders and mental disorders. Indeed, people with co-occurring disorders must be able to receive their treatment in mainstream systems of care that are well-prepared to support their recovery, consistent with the expectations established by President Bush through the New Freedom Initiative.

The formation of partnerships should be developed at all levels, from the national to the community and the neighborhood, for developing/enhancing seamless systems of care that allow people to move freely between and among the entire constellation of services they require.

Preparing the Report

To guide the development of this report to Congress, the SAMHSA National Advisory Council's Subcommittee on Co-Occurring Disorders convened a panel of distinguished experts representing national, State, tribal, and local consumers/recovering persons, providers, State mental health and substance abuse authorities, researchers, and advocates to offer research, data, and editorial comments. Guidance and opinion was solicited from experts in related fields, including homelessness, housing, criminal justice, social services, education, aging, primary care, public and private hospitals, and health plans.

An internal SAMHSA Work Group, with representatives from each of SAMHSA's three Centers – the Center for Mental Health Services (CMHS), the Center for Substance Abuse Treatment (CSAT), and the Center for Substance Abuse Prevention (CSAP) – and the Office of Policy, Program, and Budget (OPPB), helped guide the writing process leading to this report. A list of panel members, the members of SAMHSA's Subcommittee on Co-Occurring Disorders, and the members of the internal SAMHSA Work Group are found at Appendix VII.

Constituents were invited to attend one of four meetings at which verbal input was gathered (SAMHSA, 2002b). These were held as follows:

- Constituent meetings on March 11 and March 12, 2002, which gathered representatives of State substance abuse and mental health authorities and their national membership organizations; national, State, tribal, and local provider, advocacy and consumer/recovering person groups; researchers; private and public payers; and representatives from national and State primary healthcare, housing, criminal justice, education and other key non-behavioral health organizations.
- Federal Partners meeting on April 15, 2002, which gathered administrators and researchers within other agencies of the U.S. Department of Health and Human Services (HHS), including the National Institutes of Health (NIH), the Centers for Medicare and Medicaid Services (CMS), the Administration on Aging; and other Federal departments, such as the Departments of Education, Justice, and Veterans Affairs.
- Co-occurring Consumers, Recovering Persons, and Their Families meeting on May 1, 2002, which gathered individuals with histories of co-occurring disorders to enhance input from the March 11 and March 12 meetings.

In addition, a notice was published in the *Federal Register* on March 6, 2002 that invited the public to comment on issues related to the prevention, identification, and treatment of co-occurring substance abuse disorders and mental disorders. (See Appendix VI for a copy of the notice.)

Finally, the best and most current research was surveyed, investigators were interviewed, and the input was analyzed. Most important, the vast amount of input SAMHSA received enhanced the dialogue about co-occurring disorders to guide this work. The message this Agency received and continues to receive is clear and consistent: *Improving the Nation's public health demands prompt attention to the problem of co-occurring disorders*.

The report's "Blueprint for Action" is SAMHSA's five-year action plan for addressing co-occurring disorders and all the attendant issues and barriers to care faced by individuals with these disorders. It will guide specific actions to be taken by Federal, State and local officials in establishing and strengthening treatment and prevention services for people with co-occurring substance abuse disorders and mental disorders and seeing to their recovery. Consistent with the

President's New Freedom Initiative, the Blueprint will help to ensure that those with cooccurring disorders have the supports they need to reside in, and have a meaningful life as part of, their communities.

As SAMHSA Administrator, I am firmly committed to helping people with co-occurring substance abuse disorders and mental disorders achieve recovery and full participation in American society.

Finally, a personal note regarding a tireless advocate on behalf of individuals with cooccurring substance abuse disorders and mental disorders; Max Schneier, J.D., passed away on
June 17, 2002. He was appointed to the first SAMHSA National Advisory Council and served
with dedication as the Council's first chair of the Subcommittee on Co-Occurring Disorders.
Shortly after his death, the current Council passed a resolution acknowledging his important
work in view of the enormous toll that co-occurring disorders are taking on the lives of
individual Americans, their families, and their communities. I join our National Advisory
Council in praising the life of this determined, steadfast and effective advocate for people with
co-occurring disorders.

Charles G. Curie, M.A., A.C.S.W. Administrator

Table of Contents

Foreword

Executive Su	ımmary	i
	•	
Chapter 1:	Characteristics and Needs of the Population	1
Chapter 1.	Understanding Co-Occurring Disorders	
	Barriers to Providing Treatment for Co-Occurring Disorders	
	The NASMHPD/NASADAD Conceptual Framework	
	Summary	
Chapter 2:	The States Respond: The Impact of Federal Block Grants	20
	Background	
	The Substance Abuse Prevention and Treatment Block Grant	23
	The Community Mental Health Services Block Grant	24
	State Program Activities	
	Summary	38
Chapter 3:	Prevention of Co-Occurring Disorders	39
-	Understanding Prevention	
	Prevention Can Be Cost-Effective	
	Prevention for Children and Adolescents	44
	Prevention for Adults	49
	Prevention for Older Adults	50
	SAMHSA's Leadership in Prevention	52
	Summary	
Chapter 4:	Evidence-Based Practices for Co-Occurring Disorders	55
	Understanding Evidence-Based Practices	
	Program Structures and Settings	57
	The Evolution of Treatment for Co-Occurring Disorders	60
	Interventions for Adults with Co-Occurring Disorders	65
	Interventions for Children and Adolescents with Co-Occurring Disorders	77
	Interventions for Older Adults with Co-Occurring Disorders	
	High-Risk Populations	83
	System-Level Approaches	
	SAMHSA's Leadership in Evidence-Based Practices	102
	Summary	108

Chapter 5:	Five-Year Blueprint for Action	109
•	Accountability	
	Capacity	
	Effectiveness	118
	Summary	119
References .		120

Appendices:

- I. Legislative Requirement for the Report to Congress on Co-Occurring Disorders
- II. NASADAD Reports: SAPT Block Grant Expenditures in Support of Cooccurring Substance Abuse and Mental Health Treatment Services
- III. NASMHPD/NASADAD Task Force Report on Co-Occurring Mental Health and Substance Use Disorders: Exemplary Methods of Financing Integrated Service Programs for Persons with Co-Occurring Mental Health and Substance Use Disorders Report on Financing Integrated Services
- IV. Substance Abuse Treatment Programs Targeted to those with Co-Occurring Substance Abuse and Mental Health Disorders Receiving Funding from the State AOD Agency, and Numbers of Clients Admitted
- V. Overview of Mental Health Block Grant Data Collected on Mental Health and Substance Abuse Co-Occurrence
- VI. Federal Register Notice: Request for Comments Regarding the Prevention, Identification, and Treatment of Co-Occurring Disorders
- VII. Co-Occurring Subcommittee and Ad Hoc Representatives and SAMHSA Co-Occurring Writers, Facilitator and Workgroup

Executive Summary

Seven to 10 million individuals in the United States "have at least one mental disorder¹ as well as an alcohol or drug use disorder" (U.S. DHHS, 1999; SAMHSA National Advisory Council, 1998). Further, as indicated by the U.S. Surgeon General in the 1999 report on mental health: "Forty-one to 65 percent of individuals with a lifetime substance abuse disorder also have a lifetime history of at least one mental disorder, and about 51 percent of those with one or more lifetime mental disorders also have a lifetime history of at least one substance abuse disorder" (U.S. DHHS, 1999). Individuals experiencing these disorders simultaneously – in this report, referred to as co-occurring disorders – have particular difficulty seeking and receiving diagnostic and treatment services, even though, separately, these disorders often are as treatable as other chronic illnesses. Clearly, co-occurring substance abuse disorders and mental disorders present significant challenges to the Nation's public health and to health policy makers as well.

In part, the stigma that still is associated with substance abuse disorders and mental disorders stands between many people with co-occurring disorders and successful treatment and recovery. Further, the difficulty is compounded by the existence of two separate service systems, one for mental health services and another for substance abuse treatment. Too often, when individuals with co-occurring disorders do enter specialty care, they are likely to bounce back and forth between the mental health and substance abuse service systems, receiving treatment for the co-occurring disorders serially at best. It is not surprising that high rates of co-occurring substance abuse disorders and mental disorders are seen in primary care settings. With training and other supports, these settings will be well prepared to undertake diagnosis and treatment of these complex, chronic and interrelated disorders.

If one of the co-occurring disorders goes untreated, both usually get worse and additional complications often arise. The combination of disorders can result in poor response to traditional treatments and increases the risk for other serious medical problems (e.g., HIV, Hepatitis B and C, cardiac and pulmonary diseases), suicide, criminalization, unemployment, homelessness, and separation from families and communities. As a result, individuals with co-occurring disorders often require high-cost services such as inpatient and emergency room care.

The clinical reality of co-occurring disorders challenges the Nation's traditional mental health and substance abuse service and treatment systems. However, an increasing number of evidence-based interventions and programs demonstrate that treatment can be improved with integrated services and treatments. As defined in this report, integrated treatment refers broadly to "any mechanism by which treatment interventions for co-occurring disorders are combined within the context of a primary treatment relationship or service setting" (CSAT, in press). This report acknowledges that effective treatment includes time sensitive screening, comprehensive assessment and program-oriented and specific clinical interventions of medications and psychosocial treatments.

i

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¹ For the purposes of this report "mental disorders" represent the continuum of psychiatric severity from less to more severe.

This report has been prepared by the Substance Abuse and Mental Health Services Administration (SAMHSA), within the U.S. Department of Health and Human Services (HHS), under the mandate of Section 3406 of the Children's Health Act of 2000 (Public Law 106-310), Section 503A of the Public Health Service Act. SAMHSA – with its Center for Mental Health Services (CMHS), Center for Substance Abuse Treatment (CSAT), and Center for Substance Abuse Prevention (CSAP) – is in a unique position not only to identify and describe the current status of services for people with co-occurring substance abuse disorders and mental disorders, but also to facilitate the coordination and appropriate integration of treatment services to meet the special needs of these millions of Americans. This report includes both underlying guiding principles and a plan for SAMHSA to guide action at the National, State and local levels to redress current weaknesses and enhance strengths in accountability, capacity, and effectiveness of treatment and prevention services for people with co-occurring substance abuse disorders and mental disorders. These principles are consistent with the President's New Freedom Initiative, which will help those with co-occurring disorders gain the supports they need to reside in, and have a meaningful life as part of, their communities.

The content of this report includes a response to each of four statutory requirements:

- A summary of the manner in which individuals with co-occurring disorders are receiving treatment;
- A summary of practices for preventing substance abuse disorders among individuals who have a mental illness and are at risk of having or acquiring a substance abuse disorder;
- A summary of evidence-based practices for treating individuals with co-occurring mental illness and substance abuse disorders and recommendations for implementing such practices; and
- A summary of improvements necessary to ensure that individuals with co-occurring disorders receive the services they need.

Members of SAMHSA's National Advisory Council Subcommittee on Co-Occurring Disorders, as well as a distinguished panel of experts and representatives from a broad range of substance abuse and mental health constituencies, joined with SAMHSA staff to consult and to develop this report to Congress. The report responds not only to the congressional mandate, but also to the imperative for action demanded by SAMHSA's citizen-centered, results-driven approach to services.

The extensive input provided by SAMHSA constituencies (including consumers and recovering persons; family members; advocates; service providers; researchers; national provider, consumer and family organizations; State, tribal, and local government representatives; and other research and services experts in the field) highlighted current impediments to serving individuals with co-occurring disorders and identified a host of recommendations for change

(SAMHSA, 2002b). At the same time, SAMHSA sought out investigators working at the cutting edge of services research into best ways of reaching, assessing and providing treatment and other services for persons with co-occurring disorders. As a result, the report reflects the current state-of-the-science in evidence-based approaches that appear to be most successful. It also identifies areas in which additional investigation is warranted.

One of the most productive and beneficial results of the process leading to submission of the report has been the broadened and deepened dialogue about co-occurring disorders which will help direct SAMHSA's ongoing work in this area. The theme of the dialogue was both consistent and persistent: *Improving the Nation's public health demands prompt attention to the problem of co-occurring disorders*.

I. What is Known about People with Co-Occurring Disorders, about the Disorders Themselves, and about Treatment

People with co-occurring disorders are people first.

People with co-occurring disorders have lives and families, hopes and dreams, responsibilities and needs. They can be mothers, fathers, grandparents, students, teachers, plumbers, or pianists. They may also have HIV/AIDS, be victims of physical or sexual abuse, be homeless, or be involved with the criminal justice system. Too often, these individuals pay a high price for having co-occurring disorders: lost dreams, lost families, and, in some cases, lost lives. Knowledge of interventions and programs that work is increasing; the best are both person-centered and results-driven. That new knowledge must be shared and used.

Co-occurring disorders are both common and complex.

Co-occurring disorders are common; they affect from 7 to 10 million adults in the U.S. each year (U.S. DHHS, 1999; SAMHSA National Advisory Council, 1998). Children, youth, and older adults also may experience co-occurring substance abuse disorders and mental disorders. For youths, one study revealed that nearly 43 percent of youth receiving mental health services in the United States have been diagnosed with a co-occurring disorder (CMHS, 2001). Further, the SAMHSA annual National Household Survey on Drug Abuse (NHSDA) for the first time, in 2001, included questions for youths and adults that measure serious mental illness (SMI)². The Survey found a strong relationship between substance abuse and mental problems, as described below (SAMHSA, 2002e).

According to the 2001 NHSDA, there were an estimated 14.8 million adults age 18 or older with serious mental illness. This represents 7.3 percent of all adults. Of those with SMI, 6.9 million received mental health treatment in the 12 months prior to the interview. Among adults with SMI, 20.3 percent were dependent on or abused alcohol or illicit drugs; the rate

iii

² Serious mental illness is defined as having a mental disorder that resulted in functional impairment within the past 12 months.

among adults without SMI was 6.3 percent. An estimated 3 million adults had both SMI and substance abuse disorders or dependence problems during the year.

Although limited information is available on the prevalence of co-occurring disorders in older adults, it is known that, like children and youth, older adults with mental disorders may be especially prone to the adverse effects of drugs or alcohol. The presence of severe mental illness may create additional biological vulnerabilities such that even small amounts of psychoactive substances may have adverse consequences for individuals with schizophrenia or other brain disorders (Drake et al., 1998).

Both substance abuse disorders and mental disorders have biological, psychological, and social components. Part of the complexity of treating these disorders when they co-occur is that both primarily affect the same part of the body – the brain – a factor that complicates treatment, including the use of medications.

Screening and assessment, the very first steps in the process of identifying and treating individuals with co-occurring substance abuse disorders and mental disorders, are similarly complicated. Oftentimes these individuals minimize or deny the existence of their disorders in the first place; they do not enter the door to services willingly or often. When they do enter the service system, mental disorders may be masked by substance abuse; conversely, what appear to be mental disorders may be the product of substance abuse complicating evaluation and assessment.

Difficulty arises even when evaluation and assessment identify co-occurring disorders. Individuals with co-occurring disorders may be excluded from mental health programs due to their substance abuse disorder, and from substance abuse treatment programs because of their mental disorder.

What makes the issue important is the fact that individuals with co-occurring disorders should be the expectation, not the exception in the substance abuse and mental health treatment systems. From studies and first-hand experience, many researchers and clinicians believe that both disorders must be addressed as primary and treated as such (Drake et al., 1991). A further reality is that an individual with a mental disorder is at increased risk for developing a substance abuse disorder and, conversely, that a person with a substance abuse disorder is at increased risk for developing a mental disorder.

Differences exist between mental health and substance abuse systems in serving individuals with co-occurring disorders.

As with both substance abuse disorders and mental disorders separately, no one kind of co-occurring disorder defines all people who experience it. Co-occurring disorders vary by severity, chronicity, symptomatology, degree of impairment, and motivation to address the problem.

The public mental health service system tends to address individuals with severe and chronic mental illnesses such as schizophrenia, bipolar disorder, borderline personality disorder, and major depression. Typically, it is not equipped to address the treatment of concurrent substance abuse disorders. The substance abuse treatment system addresses all types of substance abuse disorders at all levels of severity; when necessary, many providers in this system are able to respond to mild to moderate forms of mood, anxiety, and personality disorders. The public substance abuse and mental health service systems differ markedly with respect to staffing resources, philosophy of treatment, funding sources, community political factors, regulations, prior training of staff, credentials of staff, treatment approaches, medical staff resources, assertive community outreach capabilities, and routine types of evaluations and testing procedures performed.

Many of the barriers to effectively treating co-occurring disorders are known.

Numerous barriers have limited the capacity of both the substance abuse and mental health treatment systems to meet the needs of persons with co-occurring disorders. Federal, State, and local infrastructures generally are organized to respond to single, not co-occurring, disorders. Mental health and substance abuse service systems often vie for the same limited resources. Funding mechanisms do not encourage flexible, creative financing across the substance abuse and mental health systems to foster better service capacity for people with co-occurring substance abuse disorders and mental disorders.

In addition, staff licensure requirements vary according to treatment setting; treatment models themselves vary by setting. Clinicians in the two different systems frequently have different credentials, training, and treatment philosophies. Salaries, too, vary widely – an important factor affecting workforce recruitment and retention.

Thus, to receive needed treatment, individuals with co-occurring substance abuse disorders and mental disorders must negotiate what today are separate systems that are not always best able to meet the full range of their needs. Insufficient coordination has been criticized on both clinical and practical grounds. Youth with co-occurring substance abuse disorders and mental disorders and their families infrequently get the kind of help they need at the time they need it. Services and supports are fragmented, isolated, and often rigid (Federation of Families, 2000). As one observer noted, "Our consumers do not have the opportunity to separate their addiction from their mental illness, so why should we do so administratively and programmatically?" (Osher, 2001).

Data show a significant gap between the need for treatment and the receipt of care. One study found that while 7 to 9 percent of all Medicare/Medicaid enrollees surveyed had evidence of either a substance abuse disorder or a mental disorder or both, treatment rates were only from 0.2 to 0.9 percent for people experiencing co-occurring disorders. Further, preliminary results from a follow-up study to the 1996 National Comorbidity Survey Replication find that of those with co-occurring disorders, only 19 percent of those studied receive treatment for both disorders; 29 percent do not receive treatment for either disorder (see Chapter 1).

Despite the barriers, evidence-based services and supports are being developed and provided to people with co-occurring disorders.

Substance abuse and mental health treatment providers well recognize that individuals with co-occurring disorders present complicated, chronic, interrelated conditions that often require solutions that are personalized to the specific set of symptoms, level of severity, and other psychosocial and environmental factors. Thus, treatment plans must be individualized to address each person's specific needs using staged interventions and motivational enhancement to support recovery. To ensure individuals with co-occurring disorders receive needed services, many State and local substance abuse and mental health authorities are planning, implementing, and/or enhancing systems change approaches to address co-occurring disorders, including such options as aggregating Federal, State and local funds.

Not surprisingly then, the provision of integrated treatment ranges across a continuum spanning single cross-referral and linkage; through cooperation, consultation, and collaboration; to integration in a single setting or treatment model (CSAT, in press). Such treatment is provided through three levels of service provision:

- 1. *Integrated Treatment* interaction between the mental health and/or substance abuse clinician(s) and the individual, which addresses the substance abuse and mental health needs of the individual.
- 2. *Integrated Program(s)* the organizational structure for providing integrated treatment, the mental health and/or substance abuse program is responsible for ensuring an array of staff or linkages with other programs to address all of the needs of its clients. The program is responsible for ensuring that services are provided in an appropriate and easily accessible setting, services are culturally competent, etc.
- 3. *Integrated System* the organizational structure for supporting an array of programs for people with different needs, including individuals with co-occurring substance abuse disorders and mental disorders. The system is responsible for ensuring appropriate funding mechanisms to support the continuum of services needs, addressing credentialing/licensing issues, establishing data collection/reporting systems, needs assessment, planning and other related functions.

A common language has been developed.

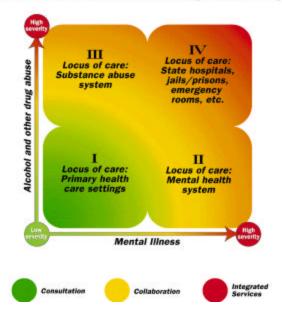
Because significant differences between the substance abuse and mental health systems persist, a common framework has been needed to help clarify how co-occurring disorders can best be understood and discussed from both policy and program perspectives. To provide such a common language, the co-occurring disorders conceptual framework (depicted below) was developed by the National Association of State Mental Health Program Directors (NASMHPD) and the National Association of State Alcohol and Drug Abuse Directors (NASADAD).

The framework provides a mechanism in addressing symptom severity and level of

service system coordination on a continuum from less severe to more severe disorders, and from consultation and collaboration to integration, respectively. While displayed as a simple four-quadrant matrix, it encompasses the full range of co-occurring substance abuse disorders and mental disorders (NASMHPD/NASADAD, 1999).

The framework is not intended as a way to classify individual clients; rather, it displays the *universe of individuals with* co-occurring disorders (CSAT, in press). In addition, the conceptual framework specifies the level of service coordination needed by those persons in each of the quadrants. The greater the severity, the more intense the level of coordination required. Finally, the conceptual framework points to various windows of opportunity within

Service coordination by Severity



which providers can act to prevent or deter the development of more serious disorders or the exacerbation of symptom severity for individuals of all ages.

II. The Impact of Federal Block Grants

Background

Care for people with co-occurring substance abuse disorders and mental disorders takes place at the State and local level. The two SAMHSA-administered block grant programs – the Substance Abuse Prevention and Treatment (SAPT) Block Grant and the Community Mental Health Services (CMHS) Block Grant – are sources of funds that can serve as a catalyst for the development of innovative State and local programs for people with co-occurring disorders. The two block grant programs may do so as long as all funds are used in accordance with the specific regulatory and statutory requirements that govern them under Section 1956 of the U.S. Public Health Service Act, which includes reporting and auditing requirements.

Block Grants are a source of funds for co-occurring disorders.

A key feature of both the SAPT and CMHS Block Grants is the flexibility each State has to target funds for co-occurring disorders based on community need. Many States have used funds from both Block Grants, in compliance with the regulatory and statutory requirements, to provide services to individuals with co-occurring substance abuse disorders and mental disorders.

Under the provisions of P.L. 106-310, SAMHSA's reauthorizing statute, SAMHSA was directed to realign the regulations governing the Block Grant programs consistent with the concept of Performance Partnerships. Such partnerships provide States even greater flexibility in the use of Block Grant funds. Performance Partnerships also mandate State accountability through performance measures with clearly defined outcomes, encouraging not only continuous quality improvement, but also a high level of responsiveness to consumers of substance abuse and mental health services.

States use their Block Grants to develop innovative programs.

Many States use their Block Grant funds, aggregated with other funding sources (e.g., State and Medicaid funds), to support multiple activities related to co-occurring disorders. These include strategic planning, training, residential and outpatient services, services for children and adolescents, and consumer support interventions, among others (NASMHPD/NASADAD, 2002).

Differences exist between the SAPT and CMHS Block Grants.

While both Block Grant programs span the States, Territories, and the District of Columbia, and while both support technical assistance, data collection and evaluation, they are distinguished from each other in a number of notable ways. The fiscal year 2002 SAPT Block Grant appropriation was \$1.725 billion, accounting for 40 percent of State expenditures for substance abuse prevention and treatment services (NASADAD, 2002). The CMHS Block Grant funds in the same fiscal year totaled \$433 million, accounting only for between 3 and 4 percent of State expenditures for community-based mental health care. Regarding the larger picture of national spending on mental and substance abuse disorders, the total expenditure for mental health and substance abuse for 1997 (latest available data) was \$82.2 billion. Of this amount, spending for mental health was \$70.8 billion (representing 86 percent) and spending for substance abuse accounted for \$11.4 billion (or 14 percent) (SAMHSA, 2000a).

SAPT Block Grant funds can be used for the provision of direct substance abuse treatment services without regard to the severity of an individual's substance abuse disorder, while the CMHS Block Grant funds may only be used to meet the needs of adults with serious mental illnesses and children with serious emotional disturbances.

The SAPT Block Grant does not require that services be provided to or reported for individuals with co-occurring disorders. In contrast, State mental health plans must include information about the ways in which the issue of co-occurring substance abuse disorders and mental disorders will be addressed both for adults with serious mental illnesses and children with serious emotional disturbances. Without such information, States are at risk of not receiving CMHS Block Grant funds.

III. Prevention of Co-Occurring Disorders

Though scant research has been conducted on the prevention of co-occurring substance abuse disorders and mental disorders, the limited data available suggest that since some of the risk factors for mental and substance abuse disorders may be identical, (e.g. low socioeconomic status, family conflict, exposure to violence), programs designed to prevent one disorder may prevent or forestall development of the other.

This may be especially true for adolescents, for whom emotional and behavioral problems, social problems, and risky health behaviors often co-occur as an organized pattern of adolescent risk factors (Greenberg et al., 2000). Children and adolescents already experiencing serious mental disorders are at heightened risk for substance abuse disorders. This suggests the existence of a "window of opportunity" in which it may be possible to prevent the development of co-occurring substance abuse disorders in these youth by intervening early (SAMHSA, 2000; Ziedonis, 1995). For these children and adolescents, comprehensive programs that are family-focused, culturally appropriate, and available on a long-term basis have been shown to reduce problems at school and with the juvenile justice system, increase family cohesion and effective parenting, and decrease substance use/abuse.

Adults (including older adults) also may benefit from preventive interventions. Key life changes may precipitate mental and/or substance abuse disorders in vulnerable individuals. Older adults, in particular, are at special risk for prescription drug misuse and alcohol-related problems, as well as for depression and suicide. Prevention programs that include outreach and support can help increase the protective factors that mitigate against these outcomes. Early identification and intervention, reinforced by appropriate alcohol and drug testing, where needed, also may prevent or deter development of more serious problems or exacerbation of symptoms in adults and older adults with co-occurring disorders.

IV. Evidence-Based Practices for Treating Individuals with Co-Occurring Disorders

Background

The extent to which individuals with co-occurring substance abuse disorders and mental disorders began to emerge as a public health concern in the early 1980s when it became evident that a significant number of people with serious mental illnesses also had substance abuse disorders. Initial studies and reports in the mid-1980s, many commissioned by the Federal Alcohol, Drug Abuse and Mental Health Administration (ADAMHA), the predecessor of SAMHSA, revealed that most mental health and substance abuse treatment systems were not addressing the problem of co-occurring disorders effectively (Ridgely et al., 1990).

At the same time, the two systems were not addressing the broad needs of people with either mental or substance abuse disorders as well as they might. The mental health system divided treatment into either treatment with medicine or treatment with "talk" therapy. Today,

"integrated treatment" for many individuals includes both medications and psychosocial treatments. Similarly, the substance abuse treatment system divided its services into either "alcohol" or "drug" treatment. Today most substance abuse treatment programs address both alcohol and drug problems.

Historically, individuals with co-occurring disorders received sequential or parallel treatment from the separate mental health services and substance abuse treatment systems. Neither system had developed the capacity to provide both mental health and substance abuse treatment within a single program. Fragmented and uncoordinated services created a service gap for persons with co-occurring disorders.

Both substance abuse and mental health programs must be able to assess new clients in a comprehensive manner, and programs must develop different types of specialized integrated services based on the individuals they expect to treat. In some cases, being able to provide an antidepressant treatment for individuals with mild to moderate depressive disorders seen in substance abuse treatment settings will be both "integrated" and improve outcomes. Integrated treatment programs vary in their depth and range of services, and clinicians must also continue to improve their skills to deliver integrated treatment and to know their limitations and when to also refer and coordinate with other providers.

Mental Health Research: Controlled research studies – both experimental and quasi-experimental – of co-occurring disorders programs for people with serious mental illnesses and substance abuse disorders in mental health settings reveal positive outcomes for integrated treatment programs (Drake et al., 1998). These studies have been summarized recently in the literature (Drake et al., 2001) and form the basis for the soon-to-be completed and evaluated toolkit on co-occurring substance abuse disorders and mental disorders within the *Implementing Evidence-Based Practices for Severe Mental Illness Project* (SAMHSA, in press).

Better identifying and treating both the substance abuse disorder and the mental disorder not only improve outcomes, but also appear to be cost-effective. The limited data on costs and cost-effectiveness of various types of co-occurring disorders treatment are mixed (Greenberg, 2002). However, some studies have begun to show both that specific interventions for co-occurring disorders may be cost-effective, and that societal costs to care for these individuals may be reduced, as well (Jerrell et al., 1994).

Substance Abuse Research: In a similar manner, there is a growing literature in the alcohol, nicotine, and drug abuse research fields – using well controlled studies that have evaluated specific interventions for specific subtypes of co-occurring disorders – that demonstrate improvements in outcomes. SAMHSA is funding a number of grant and demonstration programs focusing on innovative approaches, including integrated treatment, for co-occurring substance abuse disorders and mental disorders. In addition to these programs, many research studies have evaluated the addition of specific medications and psychosocial treatment approaches to a wide variety of co-occurring disorder subgroups (e.g., cocaine addiction and depression; tobacco and depression; alcohol, cocaine, and panic disorder; personality disorder; mild depression; and poly-drug dependence). The Behavioral Therapies

Development Program and the Medication Development Program of the National Institute on Drug Abuse have begun to help clinical researchers develop and test specific integrated treatments for specific subtypes.

Studies within substance abuse and mental health settings have demonstrated that integrated treatment is successful in retaining individuals who have co-occurring disorders in substance abuse treatment, reducing substance abuse disorders, and reducing symptoms of mental disorders. These studies have included very structured studies of specific subtype combinations (schizophrenia and alcohol dependence) and general clinic program evaluations of all in treatment. As the field progresses there is a great need for more research of specific interventions and program evaluations, including cost-effectiveness. For example, in the mental health setting, research on the use of medications to aid in the treatment of substance abuse disorders is lacking and needed (antabuse, naltrexone, buprenorphine, outpatient detoxification medications, nicotine replacement, etc.), and in the substance abuse treatment setting, research on program evaluations of integrated programs is needed.

Development of Evidence-Based Treatment Interventions

Just as no single diagnosis can be made that encompasses all substance abuse disorders and mental disorders, interventions need to be unique to the individual's needs. However, over the past few years, many effective practices have emerged that combine the best available research with clinical expertise to address the individual needs of persons with co-occurring substance abuse disorders and mental disorders.

For example, the evidence base is growing about the effectiveness of interventions that respond to an individual's stage of recovery and motivation to change with the focus on building a therapeutic relationship between client and clinician, and that offer services for other needs in the person's life, including the need for housing and work (Drake et al., 2001). Specific medications and specific psychosocial treatments that target specific disorders (e.g., depression, anxiety, cocaine addiction, alcohol dependence, etc.) are being combined and modified for specific combinations of substance abuse disorders and mental disorders. These integrated clinical interventions are being implemented in integrated and non-integrated programs that include a broad range of settings that include inpatient, outpatient, community-based, and residential.

Many psychosocial treatment interventions are being pilot tested. More research is needed. In addressing co-occurring disorders, the system must also help the family members to learn about the different disorders, how to be supportive, when to be firm, and how to help themselves. Family involvement is particularly critical for children. Family-based treatment providers work with adolescents, parents, parent-adolescent combinations, and whole families and include attention to the youth's environment, including peers, schools, and neighborhoods. An extensive body of clinical research shows the effectiveness of one particular model called multisystemic therapy for improving family relations, decreasing adolescent substance use, and reducing long-term rates of re-arrest and out-of-home placements (CSAP, 2001).

There is a gap between what research shows to be effective and what is practiced in the clinical setting. This gap is due to many factors, including limited financial resources. For example, many substance abuse outpatient treatment programs have no resources to pay for a medical specialist to evaluate and do ongoing management of mental disorders, and therefore the known effective interventions of psychiatric medications cannot be integrated into the program or treatment plan at that site. Another issue is the knowledge gap. The National Institute on Drug Abuse has published a monograph about evidence-based practices for drug abuse. The CSAT Treatment Improvement Protocol focusing on co-occurring disorders outlines many of the evidence-based practices for such disorders and is currently being revised to reflect new research. SAMHSA's initiative – Implementing Evidence-Based Practices for Severe Mental Illness Project – is developing toolkits to promote the delivery of effective practices at the State and local levels, including integrated treatment for co-occurring disorders.

Many approaches to treat co-occurring disorders that do not meet strict standards of evidence are nevertheless commonly accepted and believed to be effective based on the best available research, clinical expertise, individual values, common sense, and a belief in human dignity. It is incumbent on practitioners to use the best available approaches.

SAMHSA has the key Federal role in moving evidence-based and other effective practices to the field through a collaborative process and will take the lead in bringing together researchers, clinicians, and other specialists in a National Summit on Co-Occurring Disorders to share practices and lessons learned in such areas as prevention, the adoption of evidence-based practices, funding, and service systems changes.

Innovative System-Level Approaches

Evidence-based practices are necessary but not sufficient to meet the multiple and complex needs of people of all ages who have co-occurring disorders. These individuals require a system-wide response.

Systemic barriers to the integration of mental health and substance abuse treatment are difficult and longstanding. These include addressing separate administrative structures, funding mechanisms, priority populations, treatment philosophies, clinician competencies, and eligibility criteria, among others. Inadequate resources for both mental health services and substance abuse treatment, and lack of staff educated and trained in co-occurring disorders treatment, are among the most significant barriers to the provision of integrated, comprehensive service systems.

An increasing number of States and communities throughout the country are initiating system-level changes and developing innovative programs that overcome barriers to providing services for individuals of all ages who have co-occurring disorders. Many make use of their Substance Abuse Prevention and Treatment and Community Ment al Health Services Block Grant funds to do so, as authorized by law.

States and communities that are successful build consensus around the need for an integrated response to co-occurring disorders, develop aggregated financing mechanisms, cross-

train their staff, and measure their achievement by improvements in client functioning and quality of life. Some innovative State practices are highlighted in a recent report (NASMHPD/NASADAD, 2002). Though each of the programs profiled in the report implemented different approaches, they shared important commonalties, including those noted below.

- Agency leaders created a shared vision and established a set of expectations concerning co-occurring disorders treatment that staff were encouraged, supported, and expected to follow.
- Each State created its own particular model of integrated services to respond to local needs, but they all featured comprehensive service systems capable of responding to most or all of the needs of individuals with co-occurring disorders, including comorbid medical conditions.
- Agency staff *expected* their clients to present them with a full range of co-occurring symptoms and disorders (emphasis in original). They screened and assessed for related conditions, including HIV/AIDS, physical and/or sexual abuse, brain disorders, physical disabilities, etc.
- Staff were cross-trained in both mental health and substance abuse disciplines; however, they did not work outside their field of expertise. Many clinicians now realize the value of developing the credentials to treat both the substance abuse disorders and mental disorders. They delivered care as part of a multidisciplinary team that featured shared responsibility for clients and was culturally appropriate.
- Services were client-centered. Staff engaged with individuals who were at various stages of acceptance and recovery. They expressed hope for their clients' success in treatment and empowered their clients to do the same.

V. SAMHSA's Five-Year Blueprint for Action

SAMHSA will lead the national effort to ensure accountability, capacity, and effectiveness in the prevention, diagnosis, and treatment of co-occurring substance abuse disorders and mental disorders. The Agency's Five-Year Blueprint for Action to address co-occurring disorders will guide this effort.

SAMHSA's mission is clear. The Agency will enhance its leadership to create systems that put people first. It will provide incentives including training, technical assistance and discretionary funds to increase integrated substance abuse and mental health approaches in both settings and encourage the appropriate integration of medication and psychosocial treatment approaches. These actions will support co-occurring capacity enhancement by developing performance measures based upon prevention, screening, assessment, treatment, training and evaluation.

By ensuring that States and communities have the needed incentives through technical assistance and training, attention will be given to promoting provider and system accountability, enhancing system capacity, and to ensuring more effective coordination of services to address co-occurring disorders. To this end, SAMHSA will, for example:

- Strengthen the Agency's role in moving evidence-based practices to the field through a collaborative process with Federal partners, consumers/recovering persons, family members, faith-based and community organizations, providers, researchers, advocates, and State, tribal and local authorities.
- Support a new State Incentive Grant for Co-Occurring Disorders to help enhance States' supporting infrastructure and treatment system capacity. The focus of grant activities will be on the implementation of timely and accurate assessment of both the substance abuse disorders and mental disorders; the creation of a system in which "any door is the right door" to receive needed services for co-occurring disorders; and the expectation that States will select one or more of three capacity expansion goals screening, assessment, and treatment. Increased service capacity is an expected program outcome.
- Demonstrate leadership in ensuring development of a workforce educated and trained
 to address co-occurring disorders. For example, the purpose of the fiscal year 2003
 planned National Co-Occurring Disorders Prevention and Treatment Technical
 Assistance and Cross-Training Center is to develop, coordinate, and provide, on a
 national scale, cross training to mental health, substance abuse, education, homeless,
 criminal justice, and primary care providers.
- Direct the Agency's Minority Fellowship Program (MFP) to focus on co-occurring disorders. The MFP is the only Federal program providing funding to increase the number of racial and ethnic minorities entering the Nation's mental health and substance abuse workforce.
- Provide grant, technical assistance and training to help States develop/enhance cooccurring State capacity building in prevention, screening, assessing, treating, training and evaluating for co-occurring substance abuse disorders and mental disorders.
- Continue SAMHSA's work with the Health Resources and Services Administration (HRSA), the Agency for Healthcare Research and Quality (AHRQ), the Centers for Disease Control and Prevention (CDC), NASMHPD, NASADAD, the National Alliance of State and Territorial AIDS Directors (NASTAD), State Public Health Organizations and other State representatives, and community-based providers to develop States' capacities to enhance the integration of services for HIV/AIDS, substance abuse disorders, and mental disorders.

- Expand SAMHSA's partnership with its colleagues at the National Institutes of Health (NIH), including the National Institute of Mental Health (NIMH), the National Institute on Drug Abuse (NIDA), and the National Institute of Alcohol Abuse and Alcoholism (NIAAA), as well as the Agency for Healthcare Research and Quality. As the development of the science-to-services partnership agenda is a two-way process in which research informs services, and services inform research, the agenda's development includes enhancing research attention to co-occurring disorders and the field's research needs. Areas to be discussed include research on the NASMHPD/NASADAD quadrants, and on appropriateness of integrated interventions, programs and systems of care.
- Strengthen the Agency's relationship with the Centers for Medicare and Medicaid Services (CMS) and AHRQ. In particular, explore ways to utilize existing reimbursement mechanisms for the assessment, diagnosis and treatment of people with co-occurring substance abuse disorders and mental disorders. Further, SAMHSA will provide State Medicaid directors and mental health and substance abuse authorities with information on how co-occurring disorders can be addressed within their respective Medicaid plans.
- Disseminate successful strategies for appropriate use of the SAPT and CMHS Block Grants to serve individuals with co-occurring disorders, compliant with Section 1956 of the U.S. Public Health Service Act. This will occur, in part, by supporting Stateto-State peer technical assistance by States that have implemented recognized, statewide, system-level changes for co-occurring disorders.
- Convene a National Summit on Co-Occurring Disorders. Summit participants will
 include SAMHSA's Federal partners, consumers/recovering persons, family
 members, faith-based and community organizations, providers, researchers,
 advocates, and State, tribal and local authorities. Among the expected outcomes are
 identification of current incentives that bounce individuals between systems, gaps in
 the substance abuse and mental health treatment/service systems, and
 recommendations to address identified issues.
- Continue to improve, refine, test, and apply consistent outcome measures for cooccurring disorders. This action is consistent with the Performance Partnership
 requirements of SAMHSA's 2000 reauthorization and will build on the significant
 work in performance measurement conducted to date by NASMHPD and
 NASADAD, in collaboration with SAMHSA.
- Examine the complex issues regarding the use of psychoactive medications to treat mental disorders for individuals who also have co-occurring substance abuse disorders, looking toward the creation of a robust research base on which to make sound clinical judgments in this area.

The collaborative process involved in developing this report to Congress is a major step in the right direction, but it is only a beginning. Over the next 5 years, SAMHSA will take the lead in helping States, tribes, and communities promote accountability, capacity, and effectiveness in prevention, early identification and intervention, and treatment for co-occurring substance abuse disorders and mental disorders.

The goal is simple: to improve outcomes for individuals of all ages who are at risk for or who have a full range of co-occurring disorders. This means addressing alcohol, tobacco, and other drugs, and a wide range of mental disorders, in both the substance abuse and mental health treatment systems. This will occur by initially improving access and an initial evaluation at any door – "any door is the right door." SAMHSA will promote the development of seamless systems of prevention, early identification and intervention, treatment, and follow-up care. The Agency will forge collaboration and cooperation among its Centers for Substance Abuse Treatment, Substance Abuse Prevention and Mental Health Services and across all key constituencies. Staff training, technology transfer, use of evidence-based practices, and the development of new research programs to address the problem of co-occurring disorders will be enhanced and strengthened.

Ultimately, this report to Congress is a call to action for all whose lives are touched by people who have co-occurring substance abuse disorders and mental disorders. SAMHSA is acting on what is known and will continue to learn and promulgate the best ways to prevent and treat these serious and potentially disabling conditions. Children, adolescents, adults, and older adults deserve nothing less.

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CHAPTER 1

Characteristics and Needs of the Population

For Laurie Gable, it's all about recovery, from drugs and alcohol – 7 years plus – and from attention deficit disorder, on a daily basis. "I am in recovery, but for today I consider myself recovered," she says.

Ms. Gable, 46, coordinates projects funded by the CSAT Recovery Community Support Program at Easy Does It Inc., a transitional housing program in Leesport, Pennsylvania for people in early recovery. "I believe I was born addicted," she says. Further, she was caught up in the 1960s spirit of drugs and sex. "It was part of my passage into young adulthood," she notes. Later, as a young married mother, Ms. Gable took a night job. Stopping by the bar after a shift seemed natural.

"It began with a little beer and within a year I lost everything—my home, my kids, my husband," Ms. Gable says. She later became addicted to cocaine. She spent 17 days in a residential program and has been clean since. But another disorder lurked for 5 years.

"I was at a conference on attention deficit disorder and all of a sudden I said, 'That's me.' What I heard was that people with ADD are calmed by cocaine," Ms. Gable says. "Cocaine made me normal, while it made other people very, very high."

To deal with the ADD, she keeps a close eye on her habits, moods, and pace, and takes time off to regroup when necessary. Self-care fits with her recovery from her addictions. "The most important aspect of my recovery is my faith," Ms. Gable says.

Understanding Co-Occurring Disorders

Co-occurring substance abuse disorders and mental disorders¹ are both common and highly complex phenomena that have been estimated to affect from 7 to 10 million adult Americans in any one year (U.S. DHHS, 1999b; SAMHSA National Advisory Council, 1998). Children, youth, and older adults also may experience co-occurring substance abuse disorders and mental disorders. According to the U.S. Surgeon General in the 1999 report on mental health: "Forty-one to 65 percent of individuals with a lifetime substance abuse disorder also have a lifetime history of at least one mental disorder, and about 51 percent of those with one or more lifetime mental disorders also have a lifetime history of at least one substance abuse disorder" (U.S. DHHS, 1999b). Although limited co-occurring prevalence information is available on older adults, it is known that like their younger counterparts, older adults with mental disorders may be especially prone to the adverse effects of drugs or alcohol. The presence of severe mental illness may create additional biological vulnerability so that even small amounts of

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¹For the purposes of this report "mental disorders" represent the continuum of psychiatric severity from less to more severe.

psychoactive substances may have adverse consequences for individuals with schizophrenia and other brain disorders (Drake et al., 1989).

Using the Term "Co-Occurring Disorders"

Co-occurring disorders have been called many other terms over the years, and many of these are still in use in the literature and in the field. While some of these terms represent an attempt to identify which problem or disorder is seen as primary or more severe (CSAT, in press), many have been criticized for insufficient specificity, accuracy, and sensitivity (Osher and Drake, 1996). They include: mentally ill chemically addicted (MICA); chemically abusing mentally ill (CAMI); mentally ill substance abuser (MISA); substance abusing mentally ill (SAMI); mentally ill chemically dependent (MICD); co-occurring addictive and mental disorders (COAMD); dually diagnosed; dually disordered; and addiction and co-occurring disorders (ACD).

More recently, the research literature has seen the growing use of the term "dual diagnosis." Drake and Wallach (2000), however, argue that this term is an "unfortunate misnomer." First, the term has been used to refer to people with other combination of illnesses, such as individuals with mental illness and developmental disabilities. Second, individuals rarely experience *only* two disorders. Rather, they have "multiple interacting disabilities, psychosocial problems, and disadvantages" (Drake and Wallach, 2000).

Drake and Wallach (2000) also posit that the use of the term "dual diagnosis" tends to ignore the broad range of psychosocial issues that are interrelated with co-occurring substance abuse disorders and mental disorders – issues such as risk and protective factors at the levels of family, community, and society. Such issues become important since, as with other chronic illnesses, co-occurring substance abuse disorders and mental disorders need to be monitored and reassessed on a regular basis to promote recovery and prevent relapse despite an individual's changing life circumstances and ongoing risk and protective factors.

Defining "Co-Occurring Disorders"

This report defines "co-occurring disorders" consistent with the definition developed by the expert consensus panel that crafted SAMHSA's revised Treatment Improvement Protocol (TIP), Substance Abuse Treatment for Persons with Co-Occurring Disorders (CSAT, in press). According to the consensus panel, people with co-occurring substance abuse disorders and mental disorders are

...individuals who have at least one mental disorder as well as an alcohol or drug use disorder. While these disorders may interact differently in any one person (e.g., an episode of depression may trigger a relapse into alcohol abuse, or cocaine use may exacerbate schizophrenic symptoms), at least one disorder of each type can be diagnosed independently of the other.

The panel observed that while some individuals' mental health problems may be subclinical and not meet DSM-IV criteria for a specific mental disorder, such individuals may still benefit from the full range of services available to those whose conditions meet the DSM-IV criteria for co-occurring substance abuse disorders and mental disorders. The same may be true for those individuals who may have transitory conditions such as substance-induced mood swings (CSAT, in press).

Co-occurring disorders may vary among individuals, and in the same individual over time. Both disorders can vary along the dimensions of severity, chronicity, and degree of impairment in functioning. Both disorders may be severe or mild, or one may be more severe than the other. Either or both disorders may reflect episodes of acute symptom exacerbations or a chronic condition and may change over time. (CSAT, 1994)

Co-occurring disorders may include any combination of two or more substance abuse disorders and mental disorders identified in the Diagnostic and Statistical Manual of Mental Disorders - IV (DSM-IV). There are no specific combinations of substance abuse disorders and mental disorders that are defined uniquely as co-occurring disorders. As Osher (2001) notes, "Any drug of abuse may combine with any mental disorder to produce a wide range of symptoms and disability." For example, co-occurring substance abuse disorders and mental disorders may include major depression with cocaine dependence, alcohol abuse with panic disorder, alcohol and poly-drug abuse with schizophrenia, and borderline personality disorder with episodic poly-drug use (CSAT, 1994). Drake and Wallach (2000) point out that "the population of persons with co-occurring mental illness and substance use disorders...includes individuals with less disabling mental illnesses such as anxiety disorders, those with different severe illnesses such as schizophrenia and bipolar disorder, and those with either substance abuse or substance dependence." Thus, the range of disorders may vary widely among people with cooccurring substance abuse disorders and mental disorders. In addition, substance abuse and mental health problems (such as binge drinking by people with mental disorders) that do not reach the diagnostic threshold also are part of the co-occurring disorders landscape – problems that may offer opportunities for early intervention.

How Many People Have Co-Occurring Disorders?

A significant lack of prevalence data on co-occurring disorders exists. The best data available on the prevalence of co-occurring substance abuse disorders and mental disorders are derived from two extensive surveys conducted and analyzed over the past two decades: the Epidemiologic Catchment Area (ECA) Survey, initially administered in the period 1980 to 1984 (Regier et al., 1990), and the National Comorbidity Survey (NCS), administered between 1990 and 1992 (Kessler et al., 1994). Both surveys document high prevalence rates for co-occurring substance abuse disorders and mental disorders in the general population².

² For purposes of estimating the annual prevalence rates of co-occurring disorders, epidemiologists typically assume that diagnostic criteria for specific disorders as defined by American Psychiatric Association's Diagnostic and Statistical Manual (DSM) must be met, and that the two disorders must occur within a 12-month time period.

The ECA Survey focused on five geographical areas and assessed substance abuse disorders and mental disorders in more than 20,000 people living in the community and in various institutional settings, such as psychiatric hospitals, nursing homes, and jails or prisons. It provided the Nation's first quantitative information on co-occurring disorders. Because this report to Congress focuses heavily on annual prevalence rates, it relies somewhat more heavily on the more recent NCS data.

The NCS, a nationally representative, face-to-face household survey carried out between 1990 and 1992, was designed to build upon the results of the ECA Survey. The NCS estimates are based on a stratified, multistage area probability study of people age 15 to 54 years in the non-institutionalized population. The survey examined prevalence rates for co-occurring substance abuse disorders and mental disorders, as well as the temporal relationship between these disorders and the extent to which 12-month co-occurrence is associated with service utilization (Kessler et al., 1996).

Results of the NCS support the high prevalence rates for co-occurring substance abuse disorders and mental disorders among the general population described in the ECA Survey. The results also confirm the increased risk for people with either a substance abuse disorder or mental disorder for developing a co-occurring disorder. The NCS found that:

- 42.7 percent of individuals with a 12-month addictive disorder had at least one 12-month mental disorder.
- 14.7 percent of individuals with a 12-month mental disorder had at least one 12-month addictive disorder.

The ECA Survey found that individuals with severe mental disorders were at significant risk for developing a substance use disorder during their lifetime. In particular:

- 47 percent of individuals with schizophrenia also had a substance abuse disorder (more than four times as likely as the general population).
- 61 percent of individuals with bi-polar disorder also had a substance abuse disorder (more than five times as likely as the general population).

Estimates from both studies reveal that during a 12-month period, 22 to 23 percent of the U.S. adult population – 44 million people – have diagnosable mental disorders (U.S. DHHS, 1999b). About 15 percent (approximately 6.6 million) of adults with a diagnosable mental disorder have a co-occurring substance abuse disorder. More specific findings follow, along with some initial data from the National Comorbidity Survey Replication (NCS-R).

The reader is cautioned, however, that these prevalence studies are based on data that was collected between 15 and 25 years ago. Within the next year, the NCS-R, now underway, will provide new and more current estimates for adults and adolescents that are both comprehensive

and more refined. New estimates based on the replication are expected to be closer to the lower end of the 7 to 10 million adults range (U.S. DHHS, 1999bb; SAMHSA National Advisory Council, 1998) found in previous studies. The replication relies on the classification and description of disorders found in the fourth edition of the American Psychiatric Association's Diagnostic and Statistical Manual (DSM-IV; American Psychiatric Association, 1994), which has more restrictive diagnostic criteria than the earlier manual, DSM-III-R, the nosology of which was utilized in the original NCS study. Balanced against these changes, however, is the continuing growth of the U.S. population, which will tend to increase the estimates.

The 2001 National Household Survey on Drug Abuse (NHSDA), for the first time in the Survey's history, included questions for adults and youth that measure serious mental illness (SAMHSA, 2002e). The survey found a strong relationship between substance abuse disorders and mental problems. Results are based on a scientific sample of the Nation's civilian non-institutional population and can be generalized to this population. As such, it does not include individuals in long-term institutions such as prisons and State mental hospitals.

According to the NHSDA, in 2001 there were an estimated 14.8 million adults age 18 or older with serious mental illness (SMI)³. This represents 7.3 percent of all adults. Of those with SMI, 6.9 million received mental health treatment in the 12 months prior to the interview. Among adults with SMI, 20.3 percent were dependent on or abused alcohol or illicit drugs; the rate among adults without SMI was 6.3 percent. An estimated 3 million adults had both SMI and substance abuse or dependence problems during the year.

Overall, an estimated 16.6 million persons age 12 or older were classified with dependence on or abuse of either alcohol or illicit drugs in 2001 (7.3 percent of the population). Of these, 2.4 million were classified with dependence or abuse of both alcohol and illicit drugs, 3.2 million were dependent or abused illicit drugs but not alcohol, and 11 million were dependent on or abused alcohol but not illicit drugs. In the 12 months preceding the NHSDA interview, an estimated 3.1 million persons age 12 or older (1.4 percent of the population) received some kind of treatment for a problem related to the use of alcohol or illicit drugs. Of this number, 1.6 million received treatment through a self-help group. An estimated 6.1 million persons age 12 or older needed treatment for an illicit drug problem in 2001. During the same period, 1.1 million persons received treatment for this problem at a specialty facility. However, overall the number of persons needing but not receiving treatment was estimated at 5 million. Of the 5 million people who needed but did not receive treatment in 2001, an estimated 377,000 reported that they felt they needed treatment for their drug problem. This includes an estimated 101,000 who reported that they made an effort but were unable to get treatment and 276,000 who reported making no effort to get treatment.

Children and Adolescents. The presence of co-occurring substance abuse disorders and mental disorders is not limited to adults. A substantial number of children and adolescents also experience substance abuse disorders, mental disorders, or co-occurring disorders. A study of mental health service use among youth reveals that nearly 43 percent of youth who receive

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³ Serious mental illness is defined as having a mental disorder that resulted in functional impairment within the past 12 months.

mental health services in the United States have been diagnosed with a co-occurring disorder (CMHS, 2001). Data from the NCS indicated that the median age of onset for a mental disorder was 11 (Kessler et al., 1996). In her study of a nationally representative sample of 12 to 17-year-olds, Greenblatt (2000) noted that substance use increases dramatically with youth in the 11 to 15 year age group. Moreover, tobacco dependence is a gateway drug for other substances and is also a gateway drug for co-occurring disorders (Lasser et al., 2000; Ziedonis 1995).

Researchers have found a link between mental/emotional and behavioral disorders and substance abuse disorders in youth. Data from the SAMHSA 1994-96 National Household Survey on Drug Abuse indicated that alcohol or illicit drug dependence was reported by approximately 13 percent of adolescents with significant emotional problems (SAMHSA, 1999).

Adolescent treatment studies conducted by SAMHSA's Center for Substance Abuse Treatment, likewise, show a high rate of emotional disorders, including behavioral problems, among adolescents entering substance abuse treatment, 62 percent for males and 83 percent for females (CSAT 1997-2002). This includes conduct disorders, attention deficit hyperactivity disorders, major depressive disorder, generalized anxiety disorder and post traumatic stress disorder; for these populations of adolescents, multiple problems are the norm.

The 2001 National Household Survey on Drug Abuse found that an estimated 4.3 million youths age 12 to 17 received treatment or counseling for emotional or behavioral problems in the prior 12 months. This represents 18.4 percent of this population and is significantly higher than the 14.6 percent estimate for 2000. The reason cited most often by youths for the latest mental health treatment session was "felt depressed" (44.9 percent of youths receiving treatment), followed by "breaking rules or acting out" (22.4 percent), and "thought about or tried suicide" (16.6 percent). The rate of mental health treatment among youth who used illicit drugs in the past year (26.2 percent) was higher than youths who did not use illicit drugs (16.3 percent) (SAMHSA, 2002e).

The likelihood that a child or adolescent with a mental disorder will develop a subsequent substance abuse disorder varies by the kind of mental disorder being experienced. Costello et al. (2000) found that adolescents with behavioral disorders (e.g., conduct disorder, attention deficit hyperactivity disorder) were most likely to develop substance abuse disorders. Adolescents with depression were four times as likely as those without to develop substance abuse disorders, and those with anxiety disorders were twice as likely to develop substance abuse disorders.

The literature provides little information on which groups of adolescents with mental disorders are at greater risk than others for developing a substance abuse disorder. However, Costello and colleagues found that the presence of multiple mental disorders accounted for much of the increased risk for developing a substance abuse disorder (Costello et al., 2000).

Data from the NCS indicate that the onset of a mental disorder may precede the substance abuse disorder. According to this survey, almost 90 percent of those with a lifetime co-occurring disorder had at least one mental disorder prior to the onset of a substance abuse disorder.

Generally, the mental disorder occurred in early adolescence (median age 11), followed by the substance abuse disorder 5 to 10 years later (median age 21) (Kessler et al., 1996).

The time between the onset of a mental disorder and a subsequent substance abuse disorder represents an important "window of opportunity" in which a co-occurring disorder may be prevented (Ziedonis, 1995). It suggests not only the value of early diagnosis and treatment of mental disorders in youth, but also the critical role for alcohol and drug testing as important tools for prevention, early identification and intervention.

How Do People Develop Co-Occurring Disorders?

Researchers have offered explanations for high prevalence rates of substance abuse disorders among individuals with mental disorders but the etiology is not yet clear. Schuckit (NASMHPD/NASADAD, 1999) has outlined three ways in which substance abuse disorders and mental disorders may relate to one another: 1) the disorders may occur independent of each other; 2) the mental disorder may place an individual at greater risk for substance abuse disorders (e.g., schizophrenia and anti-social personality disorder); and 3) drug abuse intoxication or withdrawal may result in temporary mental disorder syndromes.

Mueser et al. (1998) reviewed two decades of etiological theories related to co-occurring substance abuse disorders and mental disorders. Based on that analysis, they offered 4 general models that synthesize current thinking in the field regarding the etiology of co-occurring substance abuse disorders and mental disorders (Anthony, 1991; Kosten and Ziedonis, 1997; Kushner and Mueser, 1993; Lehman et al., 1989; Meyer, 1986; Weiss and Collins, 1992):

- *Common factor models*. High rates of co-morbidity are the result of risk factors⁴ shared across both severe mental illness and substance abuse disorders.
- Secondary substance abuse disorder models. Severe mental illness increases a person's chances of developing a substance abuse disorder.
- *Secondary mental/psychiatric disorder model*. Substance abuse precipitate severe mental illness in people who would not otherwise develop a severe mental illness.
- *Bi-directional models*. Either severe mental illness or substance abuse disorders can increase a person's vulnerability to developing the other disorder.

The researchers found modest support for a connection between antisocial personality disorders and increased co-morbidity (an example of the common factor model), and for a secondary substance use model in which a person with a mental disorder is biologically vulnerable to develop a substance abuse disorder if they use even small amounts of alcohol or

⁴ Risk factors, as described in detail in the "Prevention" chapter of this report, are factors such as low socioeconomic status or relationship loss and bereavement that increase an individual's, a group's, or a community's vulnerability to mental illness or substance abuse.

other drugs (Mueser et al., 1998). However, the lack of longitudinal assessment data limited evaluation of these models. Further, they noted that different models may account for co-occurrence in different people and that more than one model may apply to a given individual and that some of the models have not been examined systematically (Mueser et al., 1998).

For other individuals, substance abuse disorders may precede or precipitate the onset of a mental disorder. Data from one study reveal that mood and anxiety disorders diagnosed in individuals with a substance abuse disorder may be an artifact of their substance abuse and may improve with recovery from substance abuse (Verheul et al., 2000). This study found little support, however, for the theory that personality disorders also may be secondary to substance abuse.

Schuckit (1996) and Schuckit and Hesselbrock (1994) examined the relationship between lifelong alcohol dependence and anxiety disorders. They found that even though depressed or anxious people who also are alcohol dependent may believe they drink to relieve symptoms of sadness or nervousness, research does not unanimously support the contention that severe depressive or anxiety disorders are the usual cause of alcoholism (Schuckit, 1996). The researchers conclude that high rates of co-morbidity of anxiety and alcoholism may reflect a mixture of true anxiety disorders along with temporary substance-induced anxiety syndromes (Schuckit and Hesselbrock, 1994).

RachBeisel and McDuff (1995) note that depression and psychosis may be precipitated by substance abuse. However, they caution that differentiating a substance-induced or secondary mental illness from a primary disorder is complex and imprecise. Chronic use of alcohol, opiates, and cocaine is the most common factor leading to depressive symptoms. Psychotic disorders have been identified as secondary to a wide variety of addictive substances, including PCP, crack cocaine, hallucinogens, alcohol, and ecstasy. The type of depression seen as secondary to substance abuse is similar to a primary depressive disorder, except the symptoms are likely to be mild to moderate rather than severe (RachBeisel and McDuff, 1995).

Suicide, associated with depression, is a serious concern for individuals with cooccurring disorders: 15 to 25 percent of suicides are committed by individuals who abuse
alcohol, and between 5 and 27 percent of all deaths in individuals who abuse alcohol are due to
suicide, compared to 1 percent in the general population (Jaffee and Ciraulo, 1986, in RachBeisel
and McDuff, 1995). Psychotic episodes, including suicide, may be associated with intoxication
or withdrawal from addictive substances, or may be a lasting result of chronic substance abuse.
The 2000 National Household Survey on Drug Abuse reported that approximately 3 million
youth age 12 to 17 thought seriously about suicide or attempted suicide in 2000. The data show
that while 13.7 percent of youths aged 14 to 17 considered suicide in the past year, only 36
percent of those at risk children received mental health treatment or counseling. The data also
reveal that youth who used alcohol or illicit drugs in the past year were more likely than other
youths to consider taking their own lives. The likelihood of suicide risk was similar among
white, black, Hispanic and Asian youth.

A growing body of research has implicated trauma – including past or current physical or sexual abuse – as a risk factor for the development and course of both substance abuse disorders and mental disorders. For example, between 51 and 97 percent of women with serious mental illnesses report some form of physical or sexual abuse during their lifetimes (Goodman, 1997). Among women in treatment for drug or alcohol disorder, 41 percent to 71 percent report being sexually abused as children or adults (Alexander, 1996). A more complete discussion of the role of trauma is presented in Chapter 4 of this report.

Despite strides in the research base over the past two decades, little remains known about the etiology and temporal ordering of co-occurring substance abuse disorders and mental disorders. For this reason, many researchers and clinicians believe that *both disorders must be considered as primary and treated as such* (Ridgely, Osher & Talbott, 1987; Minkoff, 1991; Drake, McLaughlin et al., 1991; Osher and Kofoed, 1989).

How Are People with Co-Occurring Disorders Receiving Treatment?

A report on the treatment experiences of youth with co-occurring substance abuse disorders and mental disorders states:

Tragically, youth with co-occurring substance abuse disorders and mental disorders and their families rarely get the kind of help they need at the time they need it. Services and supports are fragmented, isolated, and rigid (Federation of Families, 2000).

The discussion that follows summarizes data that confirm this observation, not just for youth, but for people of all ages who have co-occurring disorders. A history of treatment approaches for co-occurring disorders and barriers to providing appropriate care are highlighted in subsequent sections of this chapter.

Many Individuals Receive No Care or Inadequate Care.

Research has suggested that the vast majority of people with co-occurring substance abuse disorders and mental disorders do not receive care for a broad range of reasons. For example, severe under-funding of the public substance abuse and mental health treatment delivery systems has led to long waiting lists for care. At the same time, private insurance often excludes or severely limits coverage for services for people with either substance abuse disorders or mental disorders, a significant issue since both disorders can be chronic in nature, requiring long-term treatments, not dissimilar to the long-term needs of people experiencing diabetes, heart disease or stroke. Finally, the discrimination and stigma of substance abuse disorders and mental disorders may be isolating, making people with these disorders less likely to seek care in the first place.

The National Comorbidity Survey Replication. A total of 5,000 interviews have already been conducted for the NSC-R, out of a planned total of 10,000. The principal investigator, Ronald C. Kessler, has provided SAMHSA with new estimates based upon these

cases, with the important caveat that preliminary results are incompletely weighted and based on the first half of the NCS-R survey.

The data from the NCS-R provide valuable information about service use (see Table 1.1 below). Of those with both substance dependence and serious mental illnesses, only 19 percent receive treatment for both disorders; 29 percent do not receive treatment for either problem. If treatment is received at all, it most often is for the mental disorder alone (49 percent).

Table 1.1 Rates of Treatment by Type (Mental Health, Substance Abuse) and by Severity Level of the Disorder (NCS-R)							
Level of Substance Abuse	Type of Treatment	Level of Mental Disorder					
Disorder		12-month serious mental illness	12-month other mental illness				
12-month substance	Neither MH nor SA	29%	71%				
dependence	MH only	49%	25%				
	SA only	3%	1%				
	Both MH and SA	19%	4%				
12-month substance abuse	Neither MH nor SA	51%	78%				
	MH only	49%	19%				
	SA only	0%	0%				
	Both MH and SA	0%	3%				

For people with less severe but still diagnosable mental illnesses and either substance dependence or substance abuse, the pattern is similar. Most receive no treatment (71 percent and 78 percent, respectively), and only a very few receive treatment for both disorders (4 percent and 3 percent, respectively). Once again, the most frequent treatment is for the mental disorder alone. As stated in the table and elsewhere in the report, there is a clear need and challenge to strengthen the training and resources in mental health treatment systems to use appropriate alcohol and drug testing tools in the diagnosis and treatment of patients with co-occurring disorders.

The Healthcare for Communities Survey. Data from the Healthcare for Communities Survey, conducted by UCLA and RAND[®], support the NCS-R findings. Among people with co-occurring disorders, this study found that 72 percent did not receive any mental health or substance abuse treatment over the previous year (Watkins et al., 2001). Fewer than 25 percent of individuals with co-occurring disorders received appropriate mental health services, and only 9 percent received supplemental substance abuse services.

Both the NCS-R and Healthcare for Communities Survey also found that individuals with a substance abuse disorder are more likely to receive treatment if they have a co-occurring mental disorder, suggesting that substance abuse disorders are left untreated more often than mental disorders. This is a matter of special concern because individuals with substance abuse disorders tend not to get better unless they receive treatment, and because the severity of the co-occurring mental disorder is predictive of substance abuse treatment outcomes among individuals with co-occurring disorders (McLellan et al., 1983; Drake et al., 1996).

Insurance Claims Data. Under SAMHSA sponsorship, a multi-organizational team of investigators analyzed rates of treatment of individuals with substance abuse disorders and/or mental disorders as represented in fee-for-service, health insurance claims data (Finkelstein et al., 2002a). They employed files from public insurance programs (Medicare and Medicaid in Michigan, New Jersey, Pennsylvania, and Washington) and from a sample of claims representing private insurance companies from the mid-1990s. The investigators found that between 7 and 9 percent of all enrollees had evidence of either a substance abuse disorder or a mental disorder or both. In contrast, rates of treatment among adults for both disorders are less than one percent, ranging from 0.2 to 0.9 percent.

The question arises as to whether these rates are higher, lower or about what would be expected. The actual prevalence rates for these disorders in these particular insurance programs are not known. However, it is known, for example, that the prevalence rate of co-occurring disorders in the general adult population is estimated to be 4.8 percent (Kessler et al., 1996). The rate in the Medicaid population, given the fact that people living in poverty are at increased risk for developing co-occurring disorders, is likely to be even higher. Thus, finding treatment rates of 0.2 to 0.9 percent for both disorders that there are many fewer people in treatment than those who need it.

Veterans Affairs Data. Unlike other systems, the health care system operated by the Department of Veterans Affairs has high rates of identification of co-occurring disorders. Rosenheck and Greenberg (2002) reported that 44 percent of 72,252 inpatients treated during fiscal year 2001 had co-occurring substance abuse disorders and mental disorders. Among veterans receiving specialized treatment for post traumatic stress disorder, 41 percent had a co-occurring substance abuse disorder (Fontana et. al., 2002).

Individuals Who Receive Care in the Mental Health or Substance Abuse System

Individuals with co-occurring disorders who receive care are likely to be treated in the system to which they present themselves. Mental health service programs have assumed responsibility for comprehensive care, including substance abuse treatment, for individuals with serious mental illnesses (Drake, Essock et al., 2001). Substance abuse treatment programs care for large numbers of individuals who have co-occurring substance abuse disorders and mental disorders.

An analysis of State Alcohol and Drug Abuse Profile (SADAP) data reveals that in fiscal year 1999, 142,164 individuals were admitted to State-funded alcohol and drug abuse programs

specifically for treatment of substance abuse disorder with a co-occurring mental disorder (NASADAD, 2002; emphasis original). SAMHSA's 1999 Uniform Facility Data Set (UFDS) indicates that in 1999, nearly half of all public and private facilities that provide substance abuse treatment offered services to individuals with co-occurring mental disorders. Thirty-eight percent of programs that focus primarily on substance abuse disorders reported offering services to people with co-occurring disorders. This survey does not reveal the specific types of services offered or the manner in which they were delivered (SAMHSA, 2002d). Services for co-occurring disorders were most likely to be offered by facilities operated by the U.S. Department of Veterans Affairs (73 percent), and by programs that provide treatment for both substance abuse disorders and mental disorders (67 percent).

Typically, individuals with co-occurring disorders who receive services through either the mental health or substance abuse treatment systems receive sequential treatment (treatment first from one provider, then another) or parallel treatment (treatment from two separate providers at the same time). Neither system has the capacity to provide both mental health and substance abuse treatment within a single program. Despite evidence in support of integrated treatment for substance abuse disorders and mental disorders, only 4 percent of individuals in the Healthcare for Communities Survey reported receiving sequential care (Watkins, et al., 2001). Another 4 percent reported receiving parallel treatment.

Fragmented and uncoordinated services create a service gap for persons with cooccurring disorders. This service gap led to a call by many clinicians, researchers, and consumers for the provision of treatment for people with co-occurring disorders in an integrated program where both the mental health services and substance abuse treatment could be provided by the same clinician or group of clinicians (e.g., Drake et al., 1995; Mueser et al., 1997), identified as integrated treatment. There is no need to create a separate system of care for people who have co-occurring substance abuse disorders and mental disorders (The National Council and SAAS, 2002; AACP, 2000; Osher, 1996; Ridgely et al., 1987).

Individuals Who Receive Care Outside of the Mental Health or Substance Abuse System

Recognizing that stigma is associated with substance abuse disorders and mental disorders, many individuals with co-occurring disorders seek treatment in primary care settings. However, when the mental health, substance abuse, or primary care setting does not meet the needs of an individual, that person risks becoming homeless or incarcerated. The challenge is to ensure individuals receive care wherever they present.

Primary Health Care. Individuals with co-occurring substance abuse disorders and mental disorders have high rates of other health problems and often present for care in the primary health care system. In fact, many individuals with mental disorders seek and receive care exclusively through the primary health care system (Gournay et al., 1997; Shapiro et al., 1984). There is little evidence that these disorders are identified or treated, or that the primary health and behavioral health care systems collaborate to deliver care effectively (Ridgely and Johnson, 2001). Data from the Medical Outcomes Study found evidence that primary care

physicians often do not detect the presence of substance abuse disorders and mental disorders (Ford, 1994; Wells et al., 1989). This is especially true for older adults.

Homeless Services. Approximately 39 percent of people who are homeless have a mental disorder, and an estimated 50 percent of adults with serious mental illnesses who are homeless have a co-occurring substance abuse disorder (U.S. DHHS, 1999b; Lehman and Cordray, 1993; Ridgely & Dixon, 1993; Fisher and Breakey, 1991). Because individuals who are homeless are far less likely to use the traditional systems for receiving care (Burt et al., 1999), a broad range of community programs has emerged to address their substance abuse, mental health, housing and social support needs. Many of these programs are supported by Federal initiatives, such as the SAMHSA Projects for Assistance in Transition from Homelessness (PATH) program, the Health Resources and Services Administration (HRSA) Health Care for the Homeless Program, and the U.S. Department of Housing and Urban Development (HUD) Continuum of Care program.

Though these programs provide important, high quality and sometimes lifesaving services, they alone are not sufficient to provide fully adequate care for individuals who are homeless, including those with co-occurring disorders who are without a home, and who struggle with all of the conditions associated with a life of poverty (Osher and Dixon, 1995).

The Criminal Justice System. Epidemiological studies show the use of drugs or alcohol by people with untreated serious mental illnesses increases their potential for violent behaviors (IOM, 1999). One analysis suggests that substance abuse, psychotic symptoms, lack of contact with specialized community mental health services, and poor adherence to medication are all associated with greater risk of adult life-time violence (Swartz et al., 1998).

The criminal justice system, as a whole, has experienced substantial growth over the past decade with a 76 percent increase in the number of individuals incarcerated since 1990. Estimated rates of severe mental and substance abuse disorders in jail and prison populations range from 3 percent to 16 percent (Peters and Hill, 1993; Teplin, 1990; Steadman et al., 1987). Among detainees with mental disorders, 72 percent also have a co-occurring substance abuse disorder. In the juvenile justice system, preliminary data suggest that two-thirds of the 1 million youth who have formal contact with the justice system, or more than 670,000 youth, have one or more substance abuse disorders and mental disorders (OJJDP, 2001).

Studies have found that approximately one-third of adult male detainees and one-quarter of female detainees who needed services for severe mental disorders reported receiving treatment in jail. Fewer than 10 percent of Federal inmates who are addicted to drugs or alcohol have treatment available to them, despite the growing evidence demonstrating that intensive treatment in prison can reduce recidivism by one-half after release (CSAT, 1996).

Barriers to Providing Treatment for Co-Occurring Disorders

The ability to provide the most effective and coordinated range of services for people with co-occurring substance abuse disorders and mental disorders is complicated by a number of

factors: the traditional philosophical, financial and administrative separation between the mental health services and substance abuse treatment systems (SAMHSA, 1997); policy barriers, funding barriers, program barriers, clinical barriers, and consumer and family barriers (Drake, Essock et al., 2001; Ridgely, Goldman & Willenbring 1990).

Policy Barriers

Key SAMHSA constituents regard policy barriers as a major impediment to the provision of effective care (The National Council and SAAS, 2002; SAMHSA 2002f). At the Federal level, they have identified insufficient coordination between Federal agencies and conflicting statutory requirements and regulations. Further, at the State level, impediments related to training and certification discourage clinicians from seeking joint credentials for professionals who serve individuals with co-occurring disorders or joint licenses to programs that offer both substance abuse and mental health services (CSAT, unpublished document; Drake, Essock et al., 2001). At the community level, zoning ordinances may permit one type of facility but not the other. Finally, most substance abuse and mental health treatment systems – whether Federal, State or local levels – collect their own unique data, and there often are no shared assessment tools to help determine the exact nature and extent of substance abuse disorders and mental disorders (NASMHPD/NASADAD, 1999).

Funding Barriers

Mental health and substance abuse treatment are funded through a patchwork of separate Federal, State, local, and private funding sources. The need to fund services for co-occurring disorders from these multiple, disparate programs may place the burden of aggregating funds on providers. As noted in Chapter 2, the Substance Abuse Prevention and Treatment (SAPT) Block Grant is the single largest source of State expenditures for public substance abuse prevention and treatment services, representing 40 percent of such expenditures. The Community Mental Health Services (CMHS) Block Grant represents between 3 and 4 percent of State expenditures for community-based mental health care. The bulk of public mental health services are paid for with State and other Federal dollars, including Medicaid. Medicaid spends approximately \$20 billion per year on mental health services and approximately \$1 billion annually for drug and alcohol treatment services. Other funding sources that form part of the patchwork may include private health insurance, as well as dollars from other service sectors – education, criminal justice, and child welfare.

Medicaid

During the written and verbal public input sessions, SAMHSA constituents cited State-based Medicaid policies as a significant barrier to providing comprehensive services for people with co-occurring disorders (SAMHSA, 2002f). Medicaid programs vary from State to State in the types of substance abuse treatment programs and mental health services they fund. Few providers have control over how Medicaid services are reimbursed or administered (Drake, Essock et al., 2001).

Coverage Gaps

The patchwork of funding mechanisms and disparities in coverage can create gaps in the availability of needed services. For example, existing funding streams often do not cover the so-called "wraparound" supports, such as transportation, childcare, and vocational training. Yet these ancillary services may be among the most cost-effective means of improving treatment outcomes (CSAT, unpublished document). Individuals with no insurance or inadequate coverage may be unable to afford the newer, and in many cases more effective, antipsychotic medications. Though people with co-occurring conditions are likely to be among those with the least resources, funding problems are not limited to people who are indigent or served in the public sector.

Lack of Resources

The insufficiency of service system dollars and trained professionals to provide care means there is also a significant gap in the ability of both systems to treat people in need. A new analysis of trends in health care spending reveals that expenditures for mental health services and substance abuse treatment represented 7.8 percent of the more than one trillion dollars in all U.S. health care expenditures in 1997, down from 8.8 percent of the total in 1987 (SAMHSA, 2000).

This decline occurred despite the persistent gap between the prevalence of substance abuse disorders and mental disorders and treatment use. Estimates suggest that while about 20 percent of the U.S. population is affected by mental disorders in any given year, only one-third of people in need of mental health treatment receive it (U.S. DHHS, 1999b). When it comes to substance abuse disorders, between 13 million and 16 million people need treatment for alcoholism and/or drug abuse in any given year, but only 3 million (20 percent) receive care (SAMHSA, 2000). To help improve the substance abuse treatment capacity, the President has committed \$1.6 billion over the next 5 years to reduce drug use, build treatment capacity, and increase access to services that promote recovery.

Program Barriers

At the local level, providers often lack service models, administrative guidelines, quality assurance procedures, and outcome measures to implement a full range of needed services for people with co-occurring disorders (Drake, Essock et al., 2001). Perhaps one of the most significant program-level barriers, noted by consumers and family members as well as by providers during the public input sessions, is *the lack of staff trained in treating co-occurring disorders* (SAMHSA, 2002f). A significant focus of public attention was around opportunities for cross-training of staff and availability of staff trained in areas of co-occurring disorders. Despite an increasing body of evidence affirming the importance of integrating mental health and substance abuse treatment, few educational institutions teach this approach (The National Council and SAAS, 2002; Drake, Essock et al., 2001).

Education of new clinicians and supervisors is important, but so, too, are efforts to retrain current clinicians and supervisors (IOM, 2000). Program administrators cite lack of funds for

training and the difficulty of working across systems to cross-train providers as significant barriers (Ridgely et al., 1990). In addition, few incentives exist in the current system to motivate clinicians to become cross-trained (CSAT, unpublished document; Drake, Essock et al., 2001). They may be reluctant to diagnose a disorder for which reimbursement is unavailable, especially in cost-cutting environments that discourage more intensive care.

Clinical Barriers

Clinicians who work with people with co-occurring disorders must have sufficient knowledge of a discipline in which they were not trained to be both comfortable and capable. While the fundamental approach to clinical education has not changed appreciably since 1910 (IOM, 2000), the demands on clinicians have changed dramatically. They are asked to do more in less time with fewer resources and to incorporate best practices into their work. Further, cross-training is hampered by the fact that substance abuse and mental health providers often have very different philosophies and treatment approaches (Drake, Essock et al., 2001). The result is a training gap that "leaves graduate students, working professionals, and other direct care providers inadequately prepared for practice in the current health care environment" (Hoge, 2001).

Providers in both systems have to tailor their approach to the special needs of people who have co-occurring disorders. For example, in substance abuse settings, mental health services for individuals with co-occurring substance abuse disorders focuses on educating individuals about their mental illness, engaging and persuading them to address their mental health problems, and helping them manage medications they may need to address their psychiatric symptoms. In addition, the substance abuse counselors tailor their approach to the special needs of people who have a mental disorder, including serious mental illnesses. Much of substance abuse counseling occurs in groups while mental disorders often occurs in individual sessions. In mental health service settings in contrast, providers must be able to identify substance abuse problems, assess their severity, and plan appropriate treatment based on knowledge of the interaction of the mental illness and substance abuse disorder.

Despite the fact that, historically, the mental health and substance abuse approaches to care have been different, principles of care within the two fields converge in several key areas: respect for the individual, engagement of those who are most difficult to reach, belief in the human capacity to change, and the importance of community, family, and peers to the recovery process (Osher, 1996). The substance abuse field has contributed the concept of recovery, now increasingly a focus of mental health treatment, and clinicians in both systems see the conditions they treat as chronic disorders that require long-term support.

Consumer and Family Barriers

Key barriers to treatment for individuals with co-occurring disorders are perceptions by them and their families. The following highlights major obstructions that may result in ineffective care or a decreased desire to receive care.

The stigma that is still associated with substance abuse disorders and mental disorders remains a significant barrier to the receipt of appropriate mental health services and substance abuse treatment (CSAT, in press; CSAT, 2000; U.S. DHHS, 1999b). Individuals with cooccurring substance abuse disorders and mental disorders bear a double burden.

In addition, consumers and their families often lack accessible information about the interaction of substance abuse disorders and mental disorders and the availability of effective treatment. People with serious mental illnesses may deny or minimize problems related to substance abuse or believe that substance use helps alleviate psychiatric symptoms (Drake, Essock et al., 2001). Because even limited use of substances of abuse may create significant problems for people who have serious mental illnesses, individuals, family members, and providers may not recognize the extent of the problem. People whose substance use precipitates psychiatric symptoms may be in denial about both problems.

Further, treatment of an individual in the context of his or her family helps the household as a whole realize improvement and decreases the likelihood that mental illness and substance abuse will become an ongoing pattern. However, even if family treatment is prescribed, coordinating appropriate services for adults and children is difficult because care and funding mechanisms are separate.

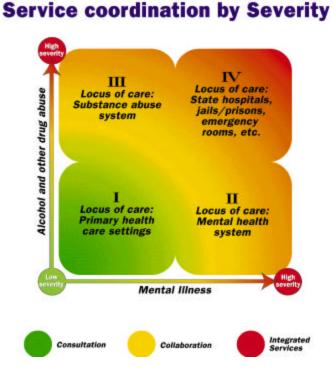
Consumers who provided guidance in the development of this report cited additional barriers, as well. They spoke of a low level of cultural competence among providers, which sometimes led to inappropriate diagnoses; programs that ended too soon, "dropping" them just as they were beginning to lead stable lives; restrictive eligibility criteria that favored individuals who are severely ill at the expense of people who are less ill but no less in need of treatment; and lack of involvement of consumers in their own care.

The NASMHPD/NASADAD Conceptual Framework

A four-quadrant conceptual framework for co-occurring disorders was adapted from a model used in New York State and originally proposed by Rosenthal (1993). Developed with support from SAMHSA by the National Association of State Mental Health Program Directors (NASMHPD) and the National Association of State Alcohol and Drug Abuse Directors (NASADAD), the structure helps to frame the systems of care for serving people with co-occurring substance abuse disorders and mental disorders and does so in terms of symptom multiplicity and severity rather than specific diagnoses. The framework delineates symptom severity and level of service system coordination on a continuum from less severe to more severe disorders and from consultation and collaboration to integration, respectively (NASMHPD/NASADAD, 1999). The framework also specifies the typical locus of care based on symptom severity (see Figure 1.1, below).

Figure 1.1 - Co-Occurring Substance Abuse Disorder and Mental Disorder Conceptual Framework

It is important to recognize that individuals at various stages of recovery from substance abuse disorders and mental disorders may move back and forth among these quadrants during the course of their illnesses. The framework is designed to serve as a general guide. In this way, the framework encompasses the full range of co-occurring substance abuse disorders and mental disorders and allows both fields to move beyond a focus on only those individuals with the most severe disorders (NASMHPD/NASADAD, 1999). Critically, the framework is not for the purposes of classifying individuals, but rather is widely regarded as the best way to depict the universe of clients who have co-occurring disorders (CSAT, in press).



A Common Language

Development of this framework provides a common language and establishes shared priorities between the mental health and substance abuse treatment systems for individuals who have co-occurring disorders and their families. Perhaps the most important contribution of the NASMHPD/NASADAD conceptual framework is the fact that it represents a major shift in attitude on the part of both the mental health and substance abuse treatment communities. There is now joint recognition that both disorders deserve equal attention. Prevention and early intervention are appropriate for individuals in quadrant I, for whom any mental and substance abuse problems they might have would not require specialty care. Strategies can also be applied to quadrants II, III and IV to prevent increases in mental or substance abuse disease severity.

Innovative Programs and Funding Strategies

SAMHSA also has supported development of three additional documents on co-occurring disorders by the NASMHPD/NASADAD Joint Task Force that provide guidance to the field. A report on financing and marketing within the context of the conceptual framework outlines a set of general principles needed to finance a continuum of care for people who have co-occurring substance abuse disorders and mental disorders, among them joint purchasing of effective services, use of funding combined from multiple sources, and adoption of performance-based

contracts that align financial incentives and disincentives with system goals (NASMHPD/NASADAD, 2000).

Another report (Bixler and Emery, 2000) highlights successful programs for individuals with co-occurring disorders developed in Massachusetts, New York, Pennsylvania, Washington State, and Wisconsin. These sites were successful because 1) they responded to locally identified consumer needs; 2) they employed high quality clinical leadership; 3) they used various models of integrated mental health and substance abuse treatment; 4) they had strong referral relationships with other providers; and 5) they had support and encouragement from State and county agencies.

Finally, the most recent NASMHPD/NASADAD Joint Task Force report (2002) highlights various methods of financing integrated services for people with co-occurring disorders (see Appendix III).

Summary

The problem of co-occurring substance abuse disorders and mental disorders can no longer be ignored. Research and practice indicates that individuals of all ages – children, adolescents, adults, and older adults – who have co-occurring disorders have multiple, interactive conditions that complicate their treatment and, when left untreated, produce negative outcomes. Individuals with co-occurring disorders are not the exception in substance abuse and mental health treatment systems. It is expected that an individual with a mental disorder is at increased risk for developing a substance abuse disorder and, conversely, that a person with a substance abuse disorder is at increased risk for developing a mental disorder.

CHAPTER 2

The States Respond: The Impact of Federal Block Grants

On the front lines of treatment, Ray Daw, Executive Director of the Na'nizhoozhi Center Inc.(NCI) in Gallup, New Mexico, sees a common pattern of co-occurring substance abuse disorders and mental disorders.

"Most persons who are chronic abusers have mental disorders of some kind," Mr. Daw says. "Primarily, it's memory and cognitive dysfunction or head injuries or, to a lesser degree, personality disorders such as anti-social personality or aggressive disorders. Generally we see more affective than psychotic disorders, and depression is number one."

NCI primarily helps people with chronic substance abuse who are homeless and, in most cases, American Indians. With a 150-bed facility, and short stays, it has 20,000 admissions a year, making it one of the busiest substance abuse providers in the Nation, according to SAMHSA admission data for the year 2000. NCI has 75 workers, most of them American Indian, including eight traditional healers. The center also holds sweat lodges.

Mr. Daw and his staff integrate care by consulting with psychiatric workers and by trying to disentangle one problem from the other. "Substance abuse, a lot of the time, masks the co-occurring disorder, so the difficulty is getting people to abstain long enough to get a diagnosis," Mr. Daw says. They also work with clients on employment skills.

The facility can treat clients for up to 5 days, long enough to begin treatment but often too short for much. "We do the best that can be done," says Mr. Daw. "We tell them if there's a problem, they can always come back." The Na'nizhoozhi Center is supported by a wide range of Federal, State, and private resources, including the SAMHSA Substance Abuse Prevention and Treatment Block Grant program.

Background

The Substance Abuse Prevention and Treatment (SAPT) and the Community Mental Health Services (CMHS) Block Grants are important mechanisms available to the Federal government to support substance abuse prevention and treatment programs, and mental health services programs, in the States and Territories. A key feature of both Block Grant programs is the flexibility given to each State to target funds based on State and community need.

In 2000, Congress reauthorized SAMHSA and its statutory programs under the Children's Health Act of 2000 (P.L. 106-310). The statute requires SAMHSA to realign the regulations governing the Block Grant programs consistent with the concept of Performance

Partnerships that provide States even greater flexibility in the use of Block Grant funds. Performance Partnerships also establish State accountability through the use of performance measures with clearly defined outcomes, encouraging not only continuous quality improvement, but also a high level of responsiveness to the consumers of substance abuse and mental health services. As a result, SAMHSA will be better able to document changes in each of the States and Territories in critical areas such as access to services, service effectiveness, and the level of success in meeting the needs of vulnerable populations, including individuals with co-occurring substance abuse disorders and mental disorders.

As described later in this chapter, many States have used funds from both the SAPT and CMHS Block Grants to provide services to individuals with co-occurring disorders. The information provided to SAMHSA by the States does not necessarily represent all of the activities supported by the Block Grants for individuals with co-occurring disorder nor does it reflect changes in the Block Grant related to the development of Performance Partnerships.

Services for Individuals with Co-Occurring Disorders

Section 1956 of the U.S. Public Health Service Act, as amended by Public Law 106-310, clarifies that States may use both SAPT and CMHS Block Grant funds for services to individuals with *co-occurring substance abuse disorders and mental disorders*. They may do so as long as all funds are used in accordance with the specific regulatory and statutory requirements that govern the relevant funding source, including the purposes for which the funds are authorized and the reporting and auditing requirements.

In other words, SAPT and CMHS Block Grant funds *may only* be aggregated in ways that maintain the integrity of the separate funds for the purposes of reporting and auditing. Thus, SAPT and CMHS Block Grant funds *may be* provided by the States to providers of treatment services for individuals with co-occurring disorders as long as the funds are allocated based on the purposes for which the funds are authorized. This means that:

- SAPT Block Grant funds must be used for planning, carrying out, and evaluating activities to prevent and treat substance abuse. SAPT Block Grant funds may also be used for substance abuse prevention activities for individuals at risk of developing co-occurring substance abuse disorders and mental disorders. To the extent that States use the SAPT Block Grant's 20 percent primary prevention set-aside for such activities, they must use such funds in accordance with the statutory and regulatory requirements that govern this set-aside.
- CMHS Block Grant funds must be used to carry out the State plan for comprehensive community mental health services for adults with serious mental illnesses and children with serious emotional disturbances; to evaluate programs and services carried out under the plan; and to plan, administer, and educate regarding service provision under the plan.

However, nothing in the reporting or accounting requirements precludes programs from using Block Grant funds to provide integrated treatment for co-occurring substance abuse disorders and mental disorders. The Agency provides technical assistance and promotes peer assistance to States and providers to ensure that the reporting requirements associated with Block Grant funds do not present an undue barrier to providing a full array of services, including integrated treatment, for people who have co-occurring disorders.

Differences between the SAPT and CMHS Block Grants

While similar in some respects, the differences between the SAPT and CMHS Block Grants are important to acknowledge particularly since they influence how each of the grant programs responds to the needs of individuals with co-occurring disorders. Differences include:

- The fiscal year 2002 SAPT Block Grant appropriation was \$1.725 billion, accounting for 40 percent of State expenditures for substance abuse prevention and treatment services (NASADAD, 2002). The CMHS Block Grant funds in the same fiscal year totaled \$433 million, accounting for between 3 and 4 percent of State expenditures for community-based mental health care. Regarding the larger picture of national spending on mental and substance abuse disorders, the total expenditure for mental health and substance abuse for 1997 (latest available data) was \$82.2 billion. Of this amount, spending for mental health was \$70.8 billion (representing 86 percent) and spending for substance abuse accounted for \$11.4 billion (or 14 percent) (SAMHSA, 2000a).
- Medicaid expends approximately \$20 billion per year for mental health services and approximately \$1 billion per year for drug and alcohol treatment services.
- The SAPT Block Grant does not require that services be provided or reported for individuals with co-occurring disorders. In contrast, in order to be approved to receive CMHS Block Grant funds, State mental health plans must include information about the ways in which the issue of co-occurring substance abuse disorders and mental disorders will be addressed both for adults with serious mental illnesses and children with serious emotional disturbances.
- SAPT Block Grant funds can be used without regard to the severity of an individual's substance abuse disorder while the CMHS Block Grant funds may only be used to meet the needs of adults with serious mental illnesses and children with serious emotional disturbances.

Both Block Grant programs have served as a catalyst for the development and implementation of programs for individuals with co-occurring disorders. States have aggregated Block Grant funds with other Federal, State and local resources, to support innovative approaches to mental health services and substance abuse prevention and treatment.

The Substance Abuse Prevention and Treatment Block Grant

The Substance Abuse Prevention and Treatment Block Grant, established in fiscal year 1993, is the cornerstone of the States' programs for substance abuse treatment and prevention. Funds are allocated to the States, Territories, the District of Columbia, and one Indian tribe based on a congressionally mandated formula, and the program is administered by SAMHSA's Center for Substance Abuse Treatment and Center for Substance Abuse Prevention. Currently, more than 10,500 community-based organizations receive SAPT Block Grant funds from the States.

SAPT Block Grant funds are intended to be used for a wide range of activities related to the abuse of alcohol, the use or abuse of illicit drugs, the abuse of licit drugs, and the use or abuse of tobacco products. Funding agreements with States through the SAPT Block Grant also include a number of provisions relating to intravenous substance abuse and tuberculosis and human immunodeficiency virus (HIV) testing and services, group homes for recovering substance abusers (made optional under the Children's Health Act of 2000), and peer review requirements.

The SAPT Block Grant provides States with the flexibility to plan, carry out, and evaluate substance abuse prevention and treatment services provided to individuals and families. The grant also provides a 20 percent set-aside for support of substance abuse prevention. States are required to expend their primary prevention services funds using six specific strategies. These include: community-based processes, information dissemination, education, alternative activities, problem identification and referral, and environmental strategies. A seventh category labeled "other" strategies can also be approved but on a limited basis. In Federal fiscal year 1997 (the most recent expenditure data available), States expended \$262 million in these particular categories. The activities reported do not vary greatly from year to year. A summary of each strategy and their reported expenditures is presented below. Although not targeted specifically to co-occurring disorders, all activities critical to prevention promote positive mental health and substance abuse prevention.

- Community-based processes comprised 17 percent of the total expended by the States. This strategy includes working with communities to effectively address alcohol treatment outcome data prevention efforts. Examples are training of volunteers, the development of community coalitions, and neighborhood action training.
- States expended 18 percent of the total for information dissemination activities. This activity includes, but is not limited to, the development of educational brochures, pamphlets, and other media materials for dissemination to youth, parents, teachers, and the general public.
- States expended 34 percent of their prevention funding applying educational strategies. This includes, but is not limited to, education and training in life skills, problem solving and developing peer resistance skills.

- States expended 10 percent of their funds for alternative activities. This includes activities such as drug free dances, leadership activities, and drop-in centers.
- A total of 13 percent was expended for problem identification and referral. This strategy often includes the identification of individuals at-risk for substance use and referring those individuals to appropriate services and counseling.

The balance of expenditures was divided between the last two strategies – environmental strategies, and the "other" category. A total of 6 percent was expended in the "other" category which may include such initiatives as HIV prevention efforts. Environmental strategies were 2 percent of the total expended. These activities include maximizing enforcement of tobacco and alcohol access laws and modifying alcohol and tobacco advertising practices.

Technical Assistance Activities in Support of Co-Occurring Disorders

SAMHSA's State Systems Development Program (SSDP) – an enhanced technical assistance program involving conferences and workshops, development of training materials and knowledge transfer manuals, and on-site consultation assists States with the administration and implementation of SAPT Block Grant activities. The SSDP plays a critical role in helping States address the issue of co-occurring substance abuse disorders and mental disorders.

The Treatment Improvement Exchange (TIE), another aspect of SSDP, facilitates and promotes information exchange between CSAT and State and local alcohol and substance abuse agencies. The TIE program is the hub for the full range of SSDP technical assistance services including information development and dissemination; State, regional, and national conferences; and on-site expert consultation.

In August 2000, the TIE launched the Co-Occurring Dialogues discussion list, a moderated group accessed through electronic mail. The list provides a forum to discuss the broad range of issues related to the prevention and treatment of co-occurring disorders. Subscription to the list is free and unrestricted. Members include consumers; family members; treatment providers; researchers; local, State, tribal, and national organizations; and others with a special interest in the subject of co-occurring disorders. Today, the discussion group includes more than 700 members, with approximately 150 messages processed per month. The list continues to grow and provides a valuable forum for information exchange and for dialogue on topics of special interest to the field.

The Community Mental Health Services Block Grant

The Community Mental Health Services Block Grant, established in 1981, is the cornerstone of the Federal partnership with States to plan and deliver state-of-the art, community-based services to the most vulnerable individuals with mental illnesses. The Center for Mental Health Services allocates CMHS Block Grant funds based on a legislated formula to the 59 States and Territories to develop or expand community-based systems of care for adults

with serious mental illnesses and children with serious emotional disturbances. States have a great deal of flexibility in their use of CMHS Block Grant funds.

CMHS Block Grant Support for People with Co-Occurring Disorders

The law reauthorizing SAMHSA and its programs resulted in changes that affect State planning for people who have co-occurring disorders. In particular, the new statute added a requirement that States include in their State mental health plans a description of their services for individuals with co-occurring substance abuse disorders and mental disorders. In addition, the statute now permits States to use their CMHS Block Grant funds to serve individuals with co-occurring disorders, as long as the funds are used "for the purposes for which they were authorized by law and can be tracked for accounting purposes" (Section 1956 of the legislation). This codified in law the previous SAMHSA policy that States could allocate CMHS Block Grant funds to serve individuals with co-occurring disorders.

State Plans

As part of their CMHS Block Grant application, States must submit a plan to delineate how they will create and maintain "an organized community-based system of care for individuals with mental illnesses and describe available services and resources in a comprehensive system of care, *including services for dually diagnosed individuals* (Section 1912 of the legislation; emphasis added). As an example, the State of Tennessee in fiscal year 1999 established the "Cooccurrence Subcommittee" of the Tennessee Statewide Mental Health Planning Council (CMHS Block Grant).

A review of State plans for fiscal year 2002 reveals that all 59 States and Territories described activities to address co-occurring disorders. The activities delineated generally fit into one or more of these categories: planning, training, service delivery, and outcomes measurement. Forty-one States reported on their service delivery system for individuals with co-occurring disorders; 31 States are actively engaged in strategic planning for co-occurring disorders; and 23 States are providing training to professionals serving individuals with co-occurring disorders. Seven States report that they are in the process of collecting data on co-occurring disorders outcomes, and three States (Kansas, Ohio, and Oregon) plan to establish multiple Centers of Excellence to deliver evidence-based practices to people with co-occurring substance abuse disorders and mental disorders.

More than half of the States (28) reported they are planning to provide or currently are providing integrated services for people with co-occurring disorders. Two States (Hawaii and New Hampshire) have designed co-occurring disorders programs specifically for adults who also are homeless; two States (New Jersey and Wisconsin) have created services for older adults with co-occurring disorders; and Minnesota is providing co-occurring services to members of an American Indian tribe (see Appendix V).

Technical Assistance, Data Collection, and Evaluation

Technical assistance, data collection, and evaluation activities support States and Territories and their representatives, and to Mental Health Planning Council members, consumers, and family members including:

- The National Technical Assistance Center for State Mental Health Planning provides technical assistance to State mental health agencies to improve the design, delivery, and evaluation of mental health services—including services for people who have cooccurring disorders.
- The Targeted Technical Assistance Project provides state-of-the-art guidance to State mental health agencies and other stakeholders to enhance systems of care for adults with serious mental illnesses and children with serious emotional disturbances, including those who have co-occurring disorders.
- The Olmstead Project promotes the development of statewide coalitions, and provides technical assistance and training to State groups to design community integration plans for adults with serious mental illnesses and children with serious emotional disturbances, including those who have co-occurring substance abuse disorders and mental disorders.
- The Mental Health Statistics Improvement Program is designed to develop state-level minimum data standards that provide a basis for uniform, comparable, high-quality statistics on mental health services, including co-occurring disorders.
- The Technical Assistance Center for the Evaluation of Adult Mental Health Systems Change helps States conduct evaluations of programs and systems to improve the planning, development, and operation of adult services, including services for people who have co-occurring disorders, operated under the CMHS Block Grant.

State Program Activities

There is a wide variety of financing and organizational structures being implemented in a number of States to support individuals with co-occurring substance abuse disorders and mental disorders. The following information describes both a case study analysis and a general survey.

The NASMHPD/NASADAD Joint Task Force on Co-Occurring Disorders recently completed a case study analysis of the financing and organizational structures of nine integrated programs throughout the Nation. These case studies provide detailed analyses of the financing used to operate stable programs that are demonstrably sustainable over the long term. Some of these programs are operated within the public substance abuse treatment systems, others within public mental health. Still others are jointly administered. Both substance abuse and mental health block grant funds are used commonly. The report concludes by finding, among other things, that:

No agency external to the case study programs has indicated concern regarding block grant expenditures. Those case study programs that are receiving block grant funds are successfully using these "braided" [aggregated] funding streams to support integrated services for persons with co-occurring substance abuse disorders and mental disorders and tracking expenditures in a manner that is consistent with Federal law and SAMHSA policy. The most significant problem that has come to light regarding the use of SAPT and CMHS block grant funds as a result of this project is that funds from either source standing alone are insufficient to meet the needs of persons with serious mental illness, substance abuse and co-occurring mental health and substance abuse disorders [emphasis in original] (NASMHPD/NASADAD Task Force, in press).

The 15 State reports that follow are representative of the activities of States making flexible use of SAPT and CMHS Block Grants and other funds to provide innovative services, including integrated treatment, for individuals of all ages who have co-occurring substance abuse disorders and mental disorders. These are not the only States using CMHS and SAPT Block Grant funds for these purposes; they are included in the report as representative examples of how States make innovative use of multiple funding sources to serve people with co-occurring disorders. All of the States are at various stages of addressing the issue of co-occurring disorders. A summary of these efforts in matrix form is included at Appendix V.

Current SAPT Block Grant reporting and auditing regulations do not require States to provide data about services provided to individuals with co-occurring mental disorders. Consequently, the State-specific information in this chapter of the report has been provided voluntarily as part of a survey of States about the use of these funds to support the treatment of individuals with co-occurring disorders.

Arizona

The SAPT and CMHS Block Grants have been used creatively to promote the development of services for people with co-occurring disorders. The original impetus for the Arizona Integrated Treatment Initiative was a SAMHSA Community Action Grant for Service System Change, coupled with other resources, including State appropriations and tobacco settlement funds.

Recognizing that individuals with co-occurring disorders were commonly found in both substance abuse and mental health service settings, the Arizona Department of Health Services' Division of Behavioral Health Services launched a major initiative in 1999 to develop a best practice treatment model for individuals with co-occurring disorders. The result was a statewide refocusing of service practices in the behavioral health care system.

In particular, the State chose to pursue a consensus-based practice development model to identify the principles and practices of integrated treatment within Arizona, with the knowledge that implementation of this model would vary within the State based on local resources and the characteristics of the individuals being served. Among the outcomes of this effort were:

- New Contract Language. Contracts for regional behavioral health authorities were revised to include language regarding co-occurring disorders consistent with that contained in the CMHS Block Grant statute.
- New Policies and Guidelines. A work group of local and national experts developed Service Planning Guidelines for Co-Occurring Disorders and revised the State's eligibility policy for people with serious mental illnesses. The new policy expedites entry into services, regardless of concurrent substance use, and allows for an expanded time frame to gather necessary records. This means that individuals are not denied eligibility based on the inability to clinically differentiate multiple disorders or for lack of information.
- Consensus-Based System Change. One of the most significant findings of the Arizona initiative was that consensus-based system change encourages and sustains community action. System planners determined that had the initiative been developed in isolation at the State level and simply mandated by administrative requirement, the level of community "buy-in" needed to make change happen simply would not have taken place.

California

The California State Departments of Mental Health and Alcohol and Drug Programs entered into an interagency agreement in 1996 for a three-year period that was later extended for an additional year to fund four dual diagnosis demonstration projects using their respective Block Grant funding. This initiative was an outcome of the States' Dual Diagnosis Task Force. To adhere to Federal block grant requirements, both Departments worked with Federal liaisons to secure approval for the proposed process and to ensure a clear audit trail to each of the separate funding sources that supported the demonstration programs. While the process was approved by Federal officials, the conduct of the process and reconciliation of expenditures both proved difficult.

Selected grantee counties were required to match CMHS Block Grant and SAPT Block Grant funds with other funds, including State and local monies, pursuant to the selection criteria of the Request for Application.

The dual diagnosis demonstration projects served more than 950 individuals—including children, adolescents, adults, older adults, people who were homeless, and people who were involved in the criminal justice system. Of that number, 479 clients consented to participate in research activities. Outcomes included improvements in psychiatric functioning, access to mental health treatment, quality of life, and physical health treatment, and decreases in substance abuse and criminal justice costs. The demonstration spanned four years (1997-2001). All four counties have continued (and in some cases, expanded) program services funded by a combination of local and Federal dollars. The final evaluation report of the demonstration projects has not yet been distributed by the two State Departments.

Connecticut

In 1995 the State of Connecticut created the Department of Mental Health and Addiction Services (DMHAS) as the Single State Agency for both mental health and substance abuse services for adults. The Connecticut Department of Children and Families (DCF) is charged with the care of youth for behavioral health services.

SAPT Block Grant funds are distributed across all DMHAS-funded substance abuse treatment programs, including programs that provide addiction services for people with both substance abuse and co-occurring mental disorders. DMHAS, in coordination with DCF, uses CMHS Block Grant funds to fund and administer services for youth with serious emotional disturbances and adults with serious mental illness. Over the past several years, both an Alcohol and Drug Policy Council and a Mental Health Policy Council, with broad stakeholder representations jointly address policy and service issues related to the planning and coordination of adult and children's behavioral health services including those persons with co-occurring disorders.

DMHAS has directly focused SAPT Block Grant funds to provide services to adults with co-occurring substance abuse disorders and mental disorders in three methadone maintenance programs. These programs have implemented screening and assessment protocols to help identify clients with co-occurring mental disorders. Clients identified as possibly having a mental health disorder receive a full psychiatric assessment.

Clients determined to have a mild or moderate mental illness are seen by an on-site psychiatrist for medication review. They are assigned to a dual diagnosis counselor, and receive ongoing case management. The counselors also provide intensive, individual, or group counseling to these clients. Individuals diagnosed with a serious mental illness are referred to appropriate mental health services; care is coordinated across the two programs.

DMHAS continues to explore ways to enhance access to appropriate care for people with co-occurring substance abuse disorders and mental disorders. Various policy making and planning bodies within the State are involved in ongoing discussions regarding care coordination and implementation of best practices. The State has used State general fund dollars and other non-Block Grant resources to promote a coordinated system of care for individuals with co-occurring disorders.

Maryland

In fiscal year 2000, Maryland developed three co-occurring disorders programs serving youth, young adults, and people who are homeless. Two projects provided co-occurring outpatient services and outreach to American Indian and Hispanic community groups. Services included educational activities and referrals to treatment.

The third project developed transitional programs for adolescents and young adults (aged 16 and older) with co-occurring substance abuse disorders and mental disorders, and provided

comprehensive clinical services and rental assistance. Funding for these programs, identified as continuing activities in the fiscal year 2003 State Block Grant application, includes a match of CMHS Block Grant by State monies. No SAPT Block Grant funds are used for these programs.

Michigan

Four localities in Michigan undertook special initiatives to develop integrated service delivery models, promote in-service cross-training, hire outreach staff, and enhance consumer support systems for programs serving individuals with co-occurring substance abuse disorders and mental disorders. One program developed a fully integrated service delivery model and continues to provide cross-training of staff to address the continuity of care from assessment to recovery. Services include individual and group therapy and education about coping with substance abuse disorders and mental disorders, drug interactions, and recovery.

A second project was designed to enhance services to consumers, emphasizing relapse prevention and maintenance of ongoing recovery. The third project provided in-service training for agency staff on the stages of recovery, provision of relevant interventions at different stages of treatment, and relapse prevention.

The fourth project hired a community-based outreach worker to coordinate prevention services with substance abuse outreach groups, mental health clinicians, and other entities. Funding for the four projects, which served approximately 71 adults, included CMHS Block Grant, SAPT Block Grant, State, and Medicaid monies.

Minnesota

Minnesota developed a statewide co-occurring disorders demonstration initiative to enhance strategic planning and cross-training efforts. Focus groups comprised of staff, consumers, and members of mental health and substance abuse advisory councils participated and developed a mission statement to coordinate co-occurring services. The strategic plan also identified barriers, including current legislation and separate funding streams.

Funding for this effort includes a mix of State and CMHS Block Grant monies. The planning and training activities have been ongoing for 3 years, and more than 200 professionals and consumers have participated. In addition, a staff person from the Chemical Health Division, funded by the SAPT Block Grant, is assigned to the Mental Health Division to address co-occurring mental illness and chemical dependency.

Missouri

Missouri has used SAPT Block Grant funds to develop the Comprehensive Substance Treatment and Rehabilitation (CSTAR) Program for individuals with co-occurring substance abuse disorders and mental disorders. Each client receives a DSM diagnosis by a qualified diagnostician. Intensive individual and group counseling is combined with psychoeducational groups, residential support, family therapy, co-dependency counseling, child care, and case management as part of a continuum of treatment services.

All of the core CSTAR services are covered under Missouri's Medicaid plan, using the rehabilitation option under Missouri's Medicaid plan that allows services to be delivered in a variety of settings, including a client's home, and to be delivered by a variety of professional and paraprofessional staff. The Division of Alcohol and Drug Abuse certifies eligible agencies as CSTAR Medicaid providers, which allows them to offer services and obtain reimbursement.

Non-Medicaid eligible clients and non-Medicaid covered CSTAR services (e.g., child care, housing) are reimbursed by the Division through a combination of SAPT Block Grant funds and general revenue. Specialized CSTAR programs also provide integrated treatment to adolescents, women, and children.

Most CSTAR programs effectively treat people with co-occurring substance abuse disorders and mental disorders alongside the mainstream population. However, some programs have effectively aggregated separate funding streams, including SAPT Block Grant funds, to create specific programs for individuals with co-occurring disorders. Programs include both outpatient and residential. For example, the Daybreak Residential Treatment Center in Columbia is a long-term residential program that helps individuals make the transition from the State forensic mental health system back to the community.

The Missouri Department of Mental Health's Divisions of Comprehensive Psychiatric Services and Alcohol and Drug Abuse have jointly developed and implemented Core Rules for Psychiatric and Substance Abuse Programs. The rules identify common treatment principles and outcomes and administrative standards for both divisions' programming. In addition, these two divisions have created a Practice Guidelines Document for the Treatment of Adults with Co-Occurring Substance Use Disorders and Mental Illness. The guidelines focus on treatment of individuals with the most severe disorders.

New Jersey

The New Jersey Department of Health and Senior Services' Division of Addiction Services (DAS) provides services to people with co-occurring substance abuse disorders and mental disorders. The primary activity is the Screening Center Project, a collaborative effort between DAS and the Division of Mental Health Services.

The goal of the SAPT Block Grant-funded Screening Center Project is to improve the delivery of services to people with primary drug and/or alcohol problems, who present at three selected mental health screening centers. A newly-funded component of the Screening Center Project provides \$25,000 to each of three screening centers to provide detoxification services specifically for individuals with co-occurring substance abuse disorders and mental disorders.

In addition to the Screening Center Project, DAS and the Division of Mental Health Services are undertaking other collaborative efforts. These include sharing of databases, jointly planned and executed training activities, shared funding of several treatment programs, and participation and collaboration with local-level substance abuse and mental health organizations.

New Mexico

In 1997, the State of New Mexico combined the Division of Mental Health and the Division of Substance Abuse into the Behavioral Health Services Division. The Division administers the SAPT and CMHS Block Grants and non-Medicaid mental health and substance abuse treatment funds. This integration has fostered significant collaboration between disciplines in policy and program implementation.

SAPT and CMHS Block Grant funds, as well as State appropriations in mental health and substance abuse, are used to develop system capacity for people with co-occurring disorders. As part of a statewide managed care initiative, the Behavioral Health Service Division implemented a regional model of service delivery that includes the following features:

- Five regional contractors that are responsible for the delivery of continuum of care in mental health and substance abuse treatment;
- Comprehensive Behavioral Health Standards established by the Division to guide service delivery, network management, and performance/outcome requirements; and
- A Behavioral Health Information System to monitor contract compliance and service delivery protocols through standardized reporting and site visits.

Because New Mexico's system is based on the assumption that co-occurring disorders are an expectation and not an exception, both substance abuse and mental health treatment programs must screen all individuals for the presence of both disorders on a routine basis. All programs employ a "no wrong door" approach that welcomes and supports the individual. In addition to screening, standard practices include assessment by appropriately licensed practitioners, integrated treatment planning, and direct services for both substance abuse disorders and mental disorders provided at the same time.

Some programs for individuals with co-occurring disorders have the in-house capacity to deliver services for both disorders; others coordinate services as part of a network of community partners. In addition, the system includes the capacity to address treatment and service needs throughout the entire continuum, including residential and hospital-based levels of care. The goal is to create a system that meets the standards of accessibility, integration, continuity, and comprehensiveness (Minkoff, 1998). A more comprehensive report on New Mexico's integrated services can be obtained by contacting SAMHSA's Office of Program, Planning, and Budget at (301) 443-4111.

New York

Since 1998, the New York State Office of Mental Health (OMH) and the New York State Office of Alcoholism and Substance Abuse Services (OASAS) have worked together to improve the proficiency of both systems of care in treating individuals with a broad range of co-occurring substance abuse disorders and mental disorders along the full continuum of severity of disorder.

In 2001, the two agencies launched a regional training series for clinical supervisors, attended by more than 600 individuals across the state. The agencies are now conducting validation studies on two instruments to establish systemwide screening and assessment of co-occurring substance abuse disorders and mental disorders. To better align the systems of care within a particular locality, OASAS and OMH are supporting county-level Dual Recovery Coordinator positions in selected counties.

The commissioners of the two agencies convened the Quadrant IV Task Force–composed of clinicians, trade associations, local government representatives, and consumers—to identify barriers to more integrated models of care. Based on the Task Force report issued in 2001, the State held regional forums to build consensus around the report's recommendations and planned demonstration projects of the New York Co-Occurring Framework Model.

In fiscal year 2001, a New York special initiative launched two projects for people with co-occurring substance abuse disorders and mental disorders; one for adolescents and one for adults. The CMHS Block Grant is the primary funding source for these projects and is aggregated with local, State, and Medicaid monies. New York State encourages local mental health programs to bill for Medicaid-reimbursable services and provides local assistance funding, as well. Both programs have been in operation for nearly 2 years. The adolescent program is a partial day program for youth ages 14 to 18, providing milieu, group, individual, and family therapy. Drug screening occurs on a regular basis. The adult program is a self-help, peer support/advocacy program that emphasizes that clients take an active, responsible role in their recovery. Services include a drop-in center, outreach and advocacy, and peer support groups.

Oregon

Oregon has been working toward improvements in delivery of services to persons with co-occurring disorders for over 15 years. Two statewide task force initiatives, one in 1986 and the other in 2000, have supported these developments. Like many other states, Oregon recognized the challenges and risks in promoting the dual recovery process for persons who experience alcohol/drug and mental health problems. There are now co-occurring program efforts in nearly all of the 36 counties with more than 60 different agencies providing some level of integrated service. Most of the funding continues to be categorical and there are continuing challenges in blending services at the local level while maintaining administrative and fiscal accountability to State and Federal regulations. The State has taken a lead role in adjusting administrative rules to eliminate unnecessary contradictory requirements and clarifying misconceptions about the necessity for separate assessments and treatment plans.

Oregon has a number of programs which are dually certified as alcohol/drug and mental health providers. These counties, such as Benton and Clackamas, receive a combination of Federal block grant funds for both substance abuse and mental health as well as state General Funds and Federal Medicaid mental health funding and to a lesser degree Medicaid funds for alcohol/drug treatment services through "Fully Capitated Health Plans" under the Oregon Health Plan. Using this combination of funding sources and within State and Federal regulatory requirements, services are then provided in an integrated manner to persons with co-occurring disorders. Examples of integrated services include unified assessment and treatment planning (for example in Benton County) which meet the requirements for both systems of care. Other examples include integrated group treatment (for example, in Clackamas County) provided by dually approved staff. Integration of services in Oregon are actually provided at the local level consistent with separate funding and administrative requirements.

Oregon has also developed draft guidelines which describe co-occurring substance abuse disorder and mental disorder "capable" and "enhanced" care. These guidelines were developed with input from both mental health and alcohol/drug staff and are one of the outgrowths from a statewide dual disorders work group which released its report and recommendations 2 years ago. The State's Office of Mental Health and Addiction Services is working toward the completion of many other recommendations including the development of a common enrollment form for persons who receive integrated treatment and improved data collection efforts. These initiatives are funded at the State level by the integrated state level office (OMHAS) and at the local level by Local Administration funds which have few if any administrative barriers to supporting integrated service systems.

Pennsylvania

In 1997, the Office of Mental Health and Substance Abuse Services in the Department of Public Welfare and the Bureau of Drug and Alcohol Programs in the Department of Health jointly sponsored a statewide Mental Illness and Substance Abuse (MISA) Consortium to examine integrated approaches in working with people who have co-occurring substance abuse disorders and mental disorders. Stakeholders from the mental health and drug and alcohol systems participated. The group's 1999 report recommended service and systems integration in four areas: assessment, professional credentialing and training, service standards, and adolescent services. Pennsylvania's MISA Pilot Project is the embodiment of those recommendations.

The MISA Pilot Project is a product of a collaboration between the State Departments of Health and the State Department of Public Welfare. Designed to promote systems and services integration for individuals with co-occurring substance abuse disorders and mental disorders, the project is composed of five county systems and a network of 11 providers offering integrated services. The network continues to expand as additional providers meet the required integrated service criteria. The projects total funding is \$3.3 million annually and comes from the combined resources of three funding sources: State Intergovernmental Transfer Funds, CMHS Block Grant Funds, and the SAPT Block Grant Funds. Traditional reporting mechanisms are used for tracking and accountability.

Based on the consortium's recommendations, the State issued a solicitation for pilot projects to interested county mental health administrators and substance abuse directors. Available funds were to be used as seed money for development of program models that combine resources and expertise from both the community mental health and drug and alcohol systems. Four adult and one child/adolescent proposal were selected for funding.

Mental health and drug and alcohol funds have been allocated to the projects over a 2-year period, with an additional year for evaluation by the Center for Mental Health Policy and Services Research at the University of Pennsylvania. All pilot projects provide a varying number of services that meet criteria for enhanced/integrated services for co-occurring disorders.

The pilot projects are being evaluated to determine the impact of integrated treatment and systems of care on client outcomes; the impact on client satisfaction; the potential of specialized co-occurring disorders integrated treatment and support services; and best practice models of system integration, representing a variety of strategies that can be replicated for adult and adolescent services. Ultimately, the projects are expected to generate ideas for future policy and program development and identify potential funding sources for co-occurring disorders services.

Texas

The Texas Commission on Alcohol and Drug Abuse and the Texas Department of Mental Health and Mental Retardation created and funded a dual diagnosis coordinator position in 1995 to help ensure coordination between the two agencies. This position is funded with SAPT and CMHS Block Grant and general revenue funds. These monies also are funding 16 dual diagnosis projects throughout Texas.

The Commission on Alcohol and Drug Abuse purchases "dual diagnosis specialized services" to offer a coordinated approach to the delivery of integrated substance abuse and mental health services. The programs link patients to mainstream substance abuse and mental health services through research-based engagement strategies, and provide specialized dual diagnosis training and case consultation to service providers.

The target population includes people with substance abuse or dependence and a serious mental illness, including schizophrenia, major depression, and bipolar disorder. The State requires that "dual diagnosis specialized services" respond competently to age, gender, sexuality, geography, and culture for all people needing services in Texas. The Commission also provides statewide conferences on co-occurring disorders throughout the year to train staff and expand capacity to serve this population.

The Texas alcohol and drug and mental health agencies also have implemented significant system changes. To strengthen the ability of substance abuse providers to meet the multiple needs of people with co-occurring disorders and their families, the Commission on Alcohol and Drug Abuse has adopted statewide rules and regulations which require that mental health expertise be incorporated into existing programs and/or coordinated with other providers. These rules address requirements, including those for screening and admission, assessment, and

treatment services for facilities licensed by the Commission. The two agencies operate under a Memorandum of Understanding (MOU) that addresses principles and practices for treating individuals with co-occurring disorders.

Wisconsin

In May 1996, then-Governor Tommy Thompson created the Blue Ribbon Commission on Mental Health to examine the mental health delivery system and propose changes that fostered system effectiveness in an environment emphasizing managed care, client outcomes, and performance contracting. The Bureau of Substance Abuse Services and the Bureau of Community Mental Health are currently working cooperatively to develop a coordinated and flexible managed care model of service delivery, that includes the design, implementation and evaluation of a single entry point for consumers of mental health, alcohol, and drug services. The initiative emphasizes recovery principles and a consumer-focused approach with long-term care enrollees. The target group for this model includes individuals with severe and persistent mental illness, including individuals in that group who have co-occurring disorders.

During fiscal year 2000, Wisconsin developed a coalition to address co-occurring substance abuse disorders and mental disorders among the aging population. Five regional training sessions with over 450 participants in attendance educated about, and enhanced coordination of, mental health and substance abuse interventions, including the provision of integrated treatment, for older adults. Both the coalition and training efforts have been in operation for approximately 2 years. Funding is aggregated from multiple sources, including the CMHS Block Grant.

In addition, the Bureau of Substance Abuse Services used SAPT Block Grant funding to develop eight women-specific treatment programs that either provide or refer their clients to qualified mental health services. Coordination of mental health services for substance abuse clients is required for State program certification.

Wyoming

Wyoming developed both a statewide cross-training initiative and a strategic planning process to address the treatment of co-occurring substance abuse disorders and mental disorders among adults and adolescents. A statewide task force of private and public partners, including mental health and substance abuse treatment providers, developed an integrated treatment model for people with co-occurring disorders. Cross-training efforts began in 2001.

The 2002 Wyoming legislature passed and the Governor signed a law requiring cross-training of clinical staff throughout the State beginning July 1, 2002. Training programs will be held in multiple regional locations to reach as many staff as possible. Accompanying rules, regulations, and standards will be in effect December 31, 2002. State funds will support cross training efforts. In addition, working together, the State Mental Health and Substance Abuse Divisions will develop a best practice treatment manual and guidelines for use by all staff treating people with co-occurring substance abuse disorders and mental disorders in Wyoming.

In addition to adults, separate sections will address special issues of women and adolescents with co-occurring disorders. The CMHS Block Grant provides funds for these activities and, in fiscal year 2003, Wyoming plans to use CMHS Block Grant funds to develop and demonstrate a co-occurring disorders service model. The SAPT Block Grant funds the substance abuse staff involved in these collaborative efforts.

Children's Services

A number of States have sought to develop programs focusing on the issue of cooccurring substance abuse disorders and mental disorders in children and youth. Highlights of some of those activities follow.

- *Alabama* convened a task force to examine service delivery gaps for children diagnosed with substance abuse disorders and mental disorders.
- Arkansas provides mental health case management services, referrals to
 detoxification and substance abuse treatment, and a program that serves children with
 substance abuse disorders and mental disorders at a chemical dependency treatment
 program.
- *Colorado's* Interagency Advisory Committee on Adult and Juvenile Correctional Treatment is addressing co-occurring disorders in adults and juveniles involved with the justice system.
- *Maine's* initiative to address juvenile co-occurring disorders will include unit-based treatment teams to deliver mental health services integrated with education and substance abuse disorder services.
- *Nebraska* has initiated a pilot project of integrated care to address co-occurring substance abuse disorders and mental disorders in children.
- *North Carolina* has an integrated system of care for adults and youth with cooccurring disorders that includes comprehensive assessment, case management, counseling, monitoring of medication, and substance abuse and relapse prevention.
- *Oregon* is working with the New Hampshire-Dartmouth Psychiatric Research Center to provide co-occurring disorders training and research. The State has also developed additional services for transition-age youth (ages 18 to 24) with co-occurring substance abuse disorders and mental disorders.
- *Tennesse*e provides case management services to adults and children with co-occurring disorders through inpatient and outpatient programs.
- *Virginia* has aggregated eight funding streams to identify, intervene, and create services for young people with co-occurring disorders.

- Washington State has created a treatment guide for adults and youth titled How to Provide Integrated Services, based on the NASMHPD/NASADAD conceptual framework.
- West Virginia is developing plans to deliver comprehensive and integrated cooccurring disorders services to children and families.

In addition, the Community Guidance Center of the Commonwealth of the Northern Marianas, supported by the CMHS Block Grant, provides services by an interdisciplinary team to adults and children with co-occurring substance abuse disorders and mental disorders. The Virgin Islands provides psychological assessments, counseling, day treatment, psychosocial rehabilitation, and case management for adults and youth with co-occurring disorders.

Summary

Many States are using funds from both the SAPT and CMHS Block Grants, in compliance with the regulatory and statutory requirements, to provide services to individuals with co-occurring substance abuse disorders and mental disorders. These States use multiple funding sources – including Block Grant, State, and Medicaid funds – to support activities related to co-occurring disorders. These include, among others, strategic planning, training, residential and outpatient services, services for children and adolescents, and consumer support interventions.

CHAPTER 3

Prevention of Co-Occurring Disorders

For Sonia Gonzales, 38, the depression came first. "I was five years old, and it was horrible," Ms. Gonzales says. "I was always crying for no reason. And I was in an abusive situation. I was not able to have feelings or to go out and play. I was always being hit, and once I was almost drowned in a bathtub."

Eventually her stepmother left and the abuse stopped, but Ms. Gonzales had to grow up quickly to take care of her father, who was quadriplegic. By the time she started drinking at 18, she had both depression and post traumatic stress disorder (PTSD). Then came drugs, domestic abuse and, at 35, a crisis. "I tried suicide and ended up in a hospital," Ms. Gonzalez says. "One day it clicked with me that I was an alcoholic. I asked my case manager to be in a co-occurring program."

While in treatment, Ms. Gonzales relapsed. At age 36, her recovery began. "What made it work was the different groups they had—anger management, Twelve Step study, and WRAP," she says. WRAP is the Wellness Recovery Action Plan for people with mental illnesses, later adapted to include those with co-occurring disorders.

Life is more manageable now for Ms. Gonzales. She works as a VISTA volunteer at the Pima Prevention Partnership PWRD (People with Recovery and Disabilities) in Tucson, Arizona. Medication helps relieve her depression. She confronts the PTSD. "Before I used to hide with alcohol or drugs," Ms. Gonzalez says.

Understanding Prevention

Prevention Is Necessary

Preventing people from becoming sick is more humane and less expensive than treating them when they become ill. This is the public health approach to disease prevention and health promotion and is critical for people who have co-occurring substance abuse disorders and mental disorders. As noted elsewhere in this report, co-occurring disorders are prevalent, costly in both economic and human terms, and result in unnecessary disability, family dysfunction and often inappropriate involvement in the criminal justice system. Young people and people over the age of 65 are at special risk of co-occurring disorders. Prevention is very different from treatment in that there are no clinics, credentialing of practitioners, third party payers and so forth. Typically, prevention programs use existing service systems for the implementation of research based prevention program components.

Defining Prevention

In 1998, the National Institute of Mental Health Ad Hoc Committee on Prevention Research offered a broad definition of prevention activities:

Prevention refers not only to interventions that occur before the initial onset of a disorder, but also to interventions that *prevent co-morbidity*, *relapse*, *disability*, *and the consequences of severe mental illness for families* (NIMH, 1998).

This definition acknowledges that prevention strategies may be effective not only in keeping a substance abuse disorder from occurring, but also in delaying onset of a substance abuse disorder or mental disorder, reducing the severity of one or both disorders, or preventing relapse in a person who has experienced one or both disorders. The programs described in this chapter as well as the full range of SAMHSA's substance abuse disorders and mental disorders prevention activities reflect this more inclusive definition. Thus, consistent with the 1988 IOM Report, disease prevention and health promotion are two key components of the public health approach to healthcare in this country (IOM, 1988). Prevention is an essential part of a continuum that includes treatment and rehabilitation. Prevention efforts may occur at any point along this continuum.

Research studies reveal that to be effective, prevention programs must be comprehensive, family-focused, and include appropriate cultural, developmental and gender perspectives. In addition, they need to focus on risk and protective factors that are both identifiable and modifiable (SAMHSA, 2002c; Davis, 2002; CSAP, 2000; Greenberg, 1999; Olds, 1999; CMHS School Violence Prevention Program, 1999; U.S. NIDA, 1997a; GAO, 1995; Mrazek and Haggerty, 1994).

Prevention Can Be Cost-Effective

SAMHSA commissioned two studies on the provision and costs of prevention strategies for mental health and substance abuse services under managed care. The first (Dorfman, 2000) recommends six prevention programs for consideration by managed care organizations, and the second (Broskowski and Smith, 2001) estimates the costs of providing these services. Two of these interventions and their associated costs are particularly relevant to this discussion – prenatal and infancy home visits for high-risk mothers and targeted cessation education and counseling for smokers, especially those who are pregnant.

Prenatal and infancy home visits are recognized as an effective intervention for children at risk of mental disorders (Olds, 1999). SAMHSA's review of these programs under managed care found that the average per member per month costs ranged from \$0.58 to \$1.49, with a median of \$1.03 (Broskowski and Smith, 2001). Though the costs of these programs were low, the results were significant, according to Dorfman (2000):

Significant findings included fewer subsequent pregnancies and live births, greater spacing between births, less alcohol and drug impairment, and less child abuse and

neglect among mothers receiving home visits; greater weight and better scores on motor development tests among infants whose mothers received intervention; and reduced incidence of mental retardation among infants whose mothers received interventions.

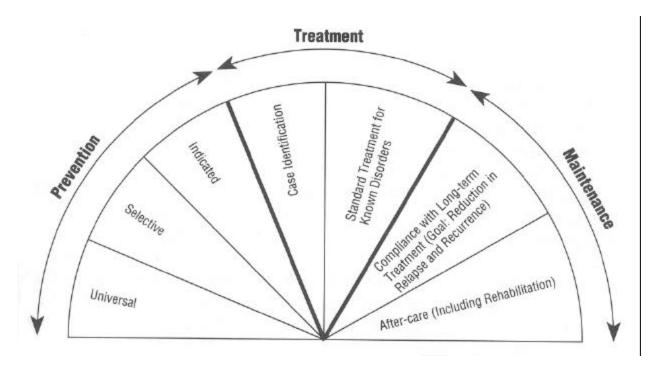
Women who smoke during pregnancy are at higher risk for delivering low-birthweight babies (Slotkin, 1998; U.S. DHHS, 1990), and low birthweight has been identified as a risk factor for problem behaviors in children. Broskowski and Smith (2001) found that offering targeted smoking cessation education and counseling to pregnant women under managed care entails little in the way of initial start-up or operating costs, nor does it require any specialized staff training. Estimated savings, realized primarily through the prevention of low-birthweight babies and perinatal deaths, ranged from \$3.31 to more than \$17 for every dollar spent.

Classifying Prevention Strategies

Research has disclosed that most illnesses tend to result from the complex interrelationship among biological, psychological and social factors. For this reason, the IOM adopted a classification for disease prevention activities based on the relationship between the risk of an individual getting the disease compared to the costs of the intervention to prevent the disease. When describing prevention programs, people often talk about primary, secondary and tertiary prevention. Primary prevention attempts to decrease the number of *new* cases of a disorder. Secondary prevention is directed at prevalence and seeks to lower the rate of *established* cases of a disorder. Tertiary prevention seeks to decrease the amount of disability associated with a disorder (SAMHSA, 2000). The following classification of prevention interventions is adapted widely (see Figure 3.1), for both the mental health and substance abuse fields.

- Universal interventions are offered to an entire population. Examples include prenatal care, smoking prevention and childhood immunization, or screening of all primary care patients for depression nationwide (Davis, 2002).
- **Selective interventions** are targeted to groups at greater than average risk of illness than the rest of the population such as pregnant mothers with an increased incidence of drinking alcohol during pregnancy. The moderate costs are justified by the increased risk of illness. Examples include home visitation to pregnant adolescents and infant day care for low-birthweight children.
- Indicated interventions are provided to high-risk individuals, their families, and to people-experiencing early symptoms of a disorder. Generally, these interventions are more expensive than either universal or selective interventions and are designed either to prevent future development of a health problem or to reduce the duration or severity of an existing health problem. Examples include providing social skills or parent-child interaction training for children who exhibit signs of mental disorders and their families (SAMHSA, 2000) or children who have already started experimenting with drugs, but not at a clinically diagnosable level.

Figure 3.1 - The mental health intervention spectrum for mental disorders (Mrazek and Haggerty, 1994)



Understanding Risk and Protective Factors

Prevention research focuses on two interrelated concepts-risk and protection:

- *Risk factors* increase the vulnerability of an individual, a group, or a community's vulnerability to substance abuse disorders or untreated conduct disorders can develop into costly adult mental health and societal problems such as delinquency, substance abuse and antisocial personality disorder.
- *Protective factors* build resiliency in the same individual, group, or community and increase the likelihood that substance abuse and its related effects can be resisted (CSAP, 2001) or by providing youth with information about identifying the warning signs of violent behavior and how to get help if they recognize these signs in themselves or their peers (CMHS, 1999a).

Prevention programs are designed specifically to promote the reduction of risk factors and processes, and to enhance protective factors and processes (Hawkins and Catalano, 1992). Both risk and protective factors operate in multiple life domains. These include individual, family, school, peer, and community, as well as workplace and society. Further, risk and protective factors vary with the age and developmental stage of the individual.

While risk and protective factors are correlated with the development or absence of mental health and substance abuse problems, correlation does not imply causality (Davis, 2002).

In fact, no one risk factor specifically causes any one disorder and a variety of combinations of risk factors may lead to the same disorder. At the same time, many risk factors are not disorder specific and may relate to the development of a number of negative outcomes, such as mental disorders (e.g., posttraumatic stress disorder, and substance abuse). Finally, multiple risk factors predict more severe outcomes. Researchers have discovered, for example, that children with two or more family risk factors for mental illness are four to 10 times more likely to develop a psychiatric disorder than children with no risk factors or only one risk factor (in Davis, 1999, Rutter et al., 1975). Biology and heredity are among those risk factors for mental disorders; for example, children of parents with depression or schizophrenia are at greater risk for the disease, possibly due to a genetic predisposition. Similarly, "the greater the number of drug abuse risk factors, the greater the risk for drug abuse" (in Davis, 1999, Glantz and Pickens, 1992).

The Concept of Resilience

Over the past 25 years, researchers studying risk factors have identified certain individuals – termed resilient individuals – who are better able to resist destructive behaviors, even in the presence of identified risk factors. While protective factors typically are defined as influences external to a person that contribute to his or her well being, resilience is conceptualized as a set of strengths internal to the individual (Wolin and Wolin, 1993). However, resiliency is highly influenced by protective factors (CSAP, 2001; Dyer and McGuinness, 1996).

Many protective factors contribute to a resilient personality. These include easy-going temperament, above-average intelligence, positive self-esteem, outgoing personality, supportive family relationships and strong bonds to family, school and community (Davis, 2002, Weinberg et al., 1999, 1998; NIDA, 1997). Just as multiple risk factors predict more severe outcomes, multiple protective factors improve one's chances for positive outcomes (Davis, 1999). In fact, researcher Emmy Werner observes that protective buffers "appear to make a more profound impact on the life course of individuals who grow up and overcome adversity than do specific risk factors" (1996).

The Need for a Developmental Approach

As noted above, risk and protective factors change as a product of an individual's age and developmental stage. The IOM organized its own conceptual framework for health promotion and disease prevention around the course of human development throughout the lifespan. As Mrazek and Haggerty (1994) note:

...Each developmental phase [of life throughout the lifespan] brings new tasks to be accomplished; each is accompanied by potential biopsychosocial risk factors as well as opportunities for growth. Just as each individual is continually changing and evolving, risk and protective factors emerge and disappear over time or, if present for a long time, may express themselves differently.

Thus, prevention programs must be matched to the appropriate developmental stage of the individuals for which they are designed. This is especially true during childhood and adolescence, years of significant physical and behavioral milestones. Evidence has suggested that to be effective, prevention interventions must focus on the chosen risk factor during the precise developmental period in which it begins to stabilize as a predictor of a child's subsequent drug abuse or mental disorders (SAMHSA, 2000).

Until recently, prevention in the field of mental health and substance abuse largely has been limited to childhood and adolescence (U.S. DHHS, 1999b). Now the value of prevention across the lifespan is becoming more widely accepted. To that end, increased investigation is warranted to explore how the concept and practices of prevention can be expanded to address the needs of adults and older adults, as well.

Prevention for Children and Adolescents

The tendency to develop substance abuse and mental disorders often reveals itself at an early age. Thus, many prevention programs and most prevention research efforts focus on children and adolescents in preventing the development of co-occurring substance abuse disorders and mental disorders.

The Window of Opportunity

Data presented in Chapter 1 have shown that co-occurring disorders are evident in childhood and adolescence, and that such disorders tend to develop at an early age (Kessler et al., 1996; Ziedonis, 1995; Coombs and Ziedonis, 1995). Children with serious emotional disturbance are at heightened risk for substance abuse, and youth already struggling with less severe mental disorders are particularly vulnerable to increasing problems as a result of substance use.

Compared to the nationally representative sample of youth in 8th and 10th grades reporting substance use in the National Institute of Drug Abuse's 2000 Monitoring the Future Study (Johnson et al., 2001), youth with serious emotional disturbance entering services in systems of care (CMHS, 1999b) in 1997 and 1998 had higher prevalence rates for use of all substances except inhalants, amphetamines, and tranquilizers across both grades (Manteuffel et al., 2002). More than 40 percent of youth, ages 11 to 17, who had either a substance use diagnosis or moderate to severe functional impairment as a result of substance use, reported problems that included involvement with the police, missing school or work, changing friends to those who drink or use drugs, getting into arguments with family and friends, and getting in trouble in school (Manteuffel et al., 2002).

Further, certain mental disorders among children are more likely than others to lead to later substance abuse. In a meta-analysis of the research related to the development of co-occurring disorders, Dr. Jane Costello and colleagues (2000) found that adolescents with

behavioral disorders (e.g., conduct disorders and attention deficit hyperactivity disorder) were most likely to develop a substance abuse disorder.

Adolescents with anxiety or depressive disorders were two to four times more likely than their peers without mental disorders to develop substance abuse disorders, but still less likely than those with behavioral disorders. Costello (2000) found the odds ratios were stronger for substance abuse/dependence disorders than for substance use problems, consistent with findings that mental disorders are associated with more serious substance abuse problems (Merikangas et al., 1998).

Finally, as noted in Chapter 1, epidemiological data suggest that for at least some youth, the presence of a mental disorder may arise before-the onset of a substance abuse disorder. The National Comorbidity Study (Kessler et al., 1996) revealed that among individuals with co-occurring disorders, generally the mental disorder occurs in early adolescence (median age 11), followed by the substance abuse disorder 5 to 10 years later (median age 21).

This finding does not explain the sequencing of all co-occurring substance abuse disorders and mental disorders, particularly since many different factors affect how and when mental and substance abuse disorders may arise. This does not negate research cited earlier which reveals the many different ways in which co-occurring disorders may develop (Mueser et al., 1998). There is a need for research identifying ways to prevent mental disorders in youth with diagnosed substance abuse disorders. However, the knowledge that youth with certain mental disorders, in particular, are vulnerable to the development of substance abuse problems does suggest a window of opportunity for preventing co-occurring disorders.

The window of opportunity to implement prevention strategies may occur even before children reach middle school age. According to SAMHSA's National Household Survey on Drug Abuse, the rate of substance abuse increased with age – from age 12 to 21. Treatment of younger children for depression, anxiety, and other problems may help prevent engagement in high-risk behaviors such as substance use (Manteuffel et al., 2002).

Strong evidence suggests that childhood conduct disorder most often precedes the development of antisocial personality disorder in adults. Both are strongly related to substance use disorders (Kessler et al, 1996; Reiger et al., 1990).

Risk and Protective Factors

Many disciplines are in agreement about the nature of risk factors that predispose youth to problem behaviors and the protective factors that mitigate against negative outcomes. Children who experience pre- and post-natal complications (e.g., fetal alcohol syndrome), whose families live in extreme poverty, in constant conflict, or who are exposed to multiple traumatic events, are at significant risk for developing substance abuse and mental disorders.

Early Risk Factors for Children

The earlier young people experiment with substances of abuse—such as alcohol, tobacco, and marijuana—and the more substances they try, the more likely they are to develop substance abuse problems as adults (NIAAA, 2000; CASA, 1998). The risk factors of fetal alcohol syndrome and methamphetamine exposure relate directly to parents' activities, but inhalants are often a youth's first drug of choice.

Fetal Alcohol Syndrome. Even before they are born, children may be exposed to toxic substances, including tobacco and alcohol that impede normal growth and development. Fetal alcohol syndrome (FAS) is made up of birth defects that are caused by mothers who drink alcohol when they are pregnant. These birth defects can affect how a person's face looks, how a person grows and how a person's brain and nervous system develop (Streissguth et al., 1996).

Of all the substances of abuse, including heroin, cocaine, and marijuana, alcohol can produce the most serious neurobehavioral effects in the fetus, resulting in life-long permanent disorders of memory function (impulse control and judgment) (Institute of Medicine, 1999). In a large study of secondary disabilities in people of various ages with either FAS or fetal alcohol exposure, 94 percent were found to have a history of mental disorders (Streissguth et al., 1996). Other studies that assess social abilities and psychological functioning have indicated impairments in alcohol-exposed children. One such study indicated that alcohol-exposed children had greater problems in such areas as anxiety, social skills and academic achievement (Streissguth et al., 1996).

Methamphetamine. When parents manufacture methamphetamine in the home, their children may be the first victims. The chemicals used to make methamphetamine are highly toxic and tend to affect children more adversely than they do adults, potentially leading to developmental problems, and short-term or permanent brain damage. In some California counties, one-third of children found living in homes with methamphetamine labs tested positive for methamphetamine (West, 2001). Moreover, the likelihood of violence in homes running methamphetamine labs is high – posing an additional risk factor for children. Children's exposure to violence and maltreatment is significantly associated with increased depression, anxiety, posttraumatic stress disorders, anger, greater alcohol use, and lower school attainment (CMHS, 1999a; Singer et al., 1995; Martinez and Richters, 1993; Garbarino et al., 1992).

Inhalants. Inhalants may be the first substance a child abuses, primarily because they are in legal products like spray paint, correction fluid, rubber cement, and nail polish remover that were developed for other purposes. As such, they are readily available and difficult to detect. Use of inhalants can lead to sudden death or long-term damage to the brain, nerve cells, heart and lungs. A 1998 survey found that 2.2 percent of fourth graders and 2.7 percent of sixth graders admitted to sniffing glue and other inhalants on a monthly basis (DEA, 2002). SAMHSA's own data (2001) indicate that 19 percent of adolescents admitted to treatment for using inhalants in 1999 were younger than 12 when they started "huffing."

Common Risk and Protective Factors for Problem Behaviors

In line with its developmental framework, the IOM report describes biopsychosocial risk and protective factors for infants, young children, elementary-age children, and adolescents. By identifying risk factors and applying evidence-based interventions throughout childhood and adolescence, there is opportunity for prevention of co-occurring disorders. Research has disclosed that gender may be a risk factor for behavioral problems only at specific developmental stages. Boys, in general, are more vulnerable to the development of mental disorders in the first decade of life; girls become more vulnerable in the second decade. Poverty and family disharmony have a greater effect on young boys' physical and emotional status than on girls at the same age (Werner and Smith, 1982, 1992, in Davis, 1999). As they enter adolescence, girls become less sure of themselves as they attempt to meet stereotypic gender expectations (Gilligan et al., 1982).

Prevention Programs for Children and Adolescents

Prevention programs need to focus on risk and protective factors that are both identifiable and modifiable, recognize schools as central loci for intervention, and provide long-term support (SAMHSA, 2002c; CSAP, 2000; Davis, 2002; Greenberg, 1999; Olds, 1999; CMHS School Violence Prevention Program, 1999; U.S. NIDA, 1997a; GAO, 1995; Mrazek and Haggerty, 1994). Children and adolescents at risk for co-occurring substance abuse disorders and mental disorders have multiple and complex needs, and they interact with a variety of school, community and social service agencies. Effective prevention programs must address the multiple domains in the life of a child and the family and promote a consistent message among key agents (e.g., parents, peers and teachers) (CSAP, 2001; NIDA, 1997a). Ideally, prevention programs should be coordinated with systems of treatment to facilitate the best possible outcomes for children and adolescents and their families (Greenberg, 1999). Prevention programs should be sustained over multiple years, e.g., from kindergarten through 12th grade (GAO, 1995), with repeat interventions to reinforce the original prevention goals (NIDA, 1997a). After school programs included in SAMHSA's National Registry for Effective Prevention Programs (NREPP) also demonstrate effective prevention strategies.

Researchers have learned that family-focused prevention efforts have a greater impact than strategies that focus on children only or parents only (NIDA, 1997a). Further, findings of the Yale Family Study of Co-morbidity of Substance Use Disorders and Psychopathology demonstrate that a family history of substance abuse is one of the most potent risk factors for the development of substance abuse among exposed offspring (Merikangas and Avenevoli, 2000). Both individual and environmental factors contribute to this risk. The study revealed that the other major risk factor for the development of substance abuse disorders is pre-existing psychopathology.

Prevention programs must be developmentally and culturally appropriate and gender specific (CSAP, 2001; NIDA, 1997c). Because youth risk and protection influences differ, prevention programs must include relevant gender-based strategies (SAMHSA, 2002c).

Individuals selected to deliver prevention programs must be trained in the intervention (CSAP, 2001). Researchers found that effective interventions use individuals known to the students (peers, parents, teachers, guidance counselors, coaches, etc.) to deliver prevention messages (CSAP, 2001).

Programs that Work

Two programs in the SAMHSA prevention portfolio – the subject of extensive process and outcome evaluation – suggest how the foregoing principles can work and do work to reduce risk factors and enhance protective factors for children and youth. They are the National High-Risk Youth Demonstration Program and the Starting Early Starting Smart (SESS) program. The latter program was implemented in partnership with the Casey Family Programs, a private foundation which provides support for children from foster care to adoption. Both of these programs focus on early identification of problem behaviors and apply interventions to develop resiliency and prevent the onset of substance abuse and/or mental disorders. Each is profiled below.

High-Risk Youth Demonstration Program

From 1987 to 1995, SAMHSA's National High-Risk Youth Demonstration Program funded more than 400 projects that have created a wealth of knowledge about substance abuse prevention (SAMHSA, 2002c). Designed for youth at high risk of substance abuse, the program sought to reduce the effects of such individual, family and community risk factors as a history of suicide attempts or other problems of mental disorders, involvement in violence or other delinquent behavior, leaving school before graduation, a home in which alcohol or drugs are abused, or in which there is physical, sexual or psychological abuse, and an economic disadvantaged environment.

Major findings. The national 48-site evaluation of the High-Risk Youth Programs revealed that *substance abuse prevention produces statistically significant reductions in substance use*:

- Substance abuse prevention programs reduce rates of substance use. Substance use for participants was 12 percent less at exit than among comparison youth and 6 percent below comparison youth 18 months later. Positive effects of program participation continue for at least 18 months after the program ends.
- Youth already using cigarettes, alcohol or marijuana significantly reduced substance use after joining a program. Substance use by participants who reported prior drug use was 10 percent less at exit than comparison youth. Use levels were 22 percent below comparison youth 18 months later.

The evaluation revealed that substance use outcomes were more positive for boys than for girls at program end, but tended to fade by 18 months later. For girls, effects on substance use emerged later and lasted longer (SAMHSA, 2002c). It also revealed important information about the components of particularly successful prevention programs

Starting Early Starting Smart

Starting Early Starting Smart, a four-year grant program and study, began in 1997 as a public-private partnership between SAMHSA and the Casey Family Programs. The grant program's goal was to identify new and effective ways to provide substance abuse prevention and treatment and mental health services to at-risk young children (birth to age 7) and their families by reaching them in settings such as primary health care and early childcare (e.g., Head Start, daycare, preschool). Five of 12 nationwide project sites were housed in primary care physician centers, and the remaining seven sites were housed in early childhood programs.

Major findings. Preliminary findings from a study of 2,908 children across the 12 sites reveal significant improvements in both child and family functioning:

- Participating families reduced verbal aggression in the home 17 percent more than
 comparison families, where reported verbal aggression increased on average. SESS
 families reported statistically significant improvements relative to comparison
 families in use of appropriate discipline, positive reinforcements, and the variety of
 experiences.
- Preschool-aged children in SESS improved significantly in social-emotional and cognitive development relative to comparison youth. These developmental areas are crucial to school readiness. Of particular interest, parents reported that SESS children reduced externalizing problem behaviors 21 percent more than comparison children.

Prevention for Adults

Serious mental illnesses, such as schizophrenia and bipolar disorder generally arise and are first diagnosed in youth and young adults. Because these individuals are at increased risk for developing co-occurring substance abuse disorders and mental disorders (Mueser et al., 1998), the opportunity is available to clinicians and others in the caregiving system to intervene to prevent the co-occurrence. Intervention can reduce the likelihood of a host negative outcomes, increased rates of relapse and rehospitalization, homelessness, legal problems, violence, treatment noncompliance, HIV infection, and family stress (Drake and Brunette, 1998, in Mueser, et al., 1998).

The results from a study integrating data from State mental health, substance abuse, and Medicaid agencies found that individuals with a single diagnosis (substance abuse or mental disorder) were not likely to be hospitalized. In 1996 there were 87 hospital stays per 1,000 for individuals with a mental disorder only and 23 stays per 1,000 for individuals with substance abuse only in 1996. In contrast, individuals with co-occurring substance abuse disorders and

mental disorders were considerably more likely to be hospitalized, at a rate of 457 hospitalizations per 1,000 (SAMHSA, 2001a).

Youth in transition to adulthood who experience serious emotional disturbance are at special risk (Davis and Stoep, 1996). Many leave institutions in the child mental health system or foster care settings with few skills and little social support. They remain largely unclaimed by either the child or the adult mental health systems and are at significant risk for developing co-occurring substance abuse disorders, as well as for suicide, arrest, and homelessness (Lezak and MacBeth, 2002; Davis and Stoep, 1996).

Risk and Protective Factors

Common psychological and social stressors in adult life – the breakup of intimate relations, death of a family member or friend, economic hardship, racism and discrimination, trauma and poor physical health – may precipitate mental disorders in adults with particular biological, social or psychological vulnerabilities (U.S. DHHS, 1999b). For example, adult survivors of past trauma, childhood sexual abuse and/or domestic violence are at increased risk for post traumatic stress disorder (PTSD), depression, anxiety, substance abuse, eating disorders, and suicide. Family history – including genetics – may act as biological risk factors for some forms of mental disorders and substance abuse disorders.

Protective factors are at work in adulthood, as well. Mrazek and Haggerty (1994) have suggested that problem-solving skills, the availability of responsive social and medical services, and support from friends, family, and others act as protective factors. Additional protective factors include the ability to cope with one's emotions, to control the demands of work and mobilize supportive co-workers, to use job-seeking skills, and to nurture spouse and family support.

Prevention Opportunities for Adults

Following on a 1996 report that identified depression as an important issue in health care, the U.S. Preventive Services Task Force (2000) recently recommended that primary care physicians be encouraged to screen their adult patients for depression. Based on a broad corpus of research that shows improvements in overall health status when depression is recognized and treated, the Task Force, further recommended that primary care physicians should have or gain the skills necessary to diagnose, treat, and provide follow-up to their patients who have depression.

Some new evidence suggests that early intervention by primary care providers also can help lower the onset and severity of depressive symptoms and depression-related impairment in adults. A randomized, controlled trial tested the effect of education about depression and controlling mood on 150 primary care patients who did not meet diagnostic criteria for depression but who were considered to be at high risk. A year after receiving the intervention, participants had developed significantly fewer symptoms associated with depression than members of the control group (Munoz et al., 1995).

Prevention for Older Adults

Americans are living longer. By the year 2020, adults age 65 years and older will account for 20 percent of the Nation's population, up from 13 percent in 2000. Already, the fastest

growing segment of the population is among people 85 years and older (Administration on Aging, 2001). Among those Americans are millions who are living longer with mental disorders and substance abuse disorders and others who will develop these illnesses in later life for the first time.

Co-Occurring Disorders in Older Adults

Co-occurring disorders manifest differently in older adults than in younger adults. Little research has been undertaken regarding the epidemiology, clinical care, and prevention of co-occurring disorders in older adults. However, a few key facts may help point prevention efforts in responsible directions. For example, primary mood disorders (e.g., depressive disorders) are estimated to occur in from 12 to 30 percent of older adults who also abuse alcohol (CSAT, 1998). While research does not support the idea that mood disorders are precursors of alcohol disorders in older adults, some evidence suggests that depressive illness and other mental disorders – if undiagnosed and untreated – may precipitate or help maintain late onset drinking. Depression, for example, appears to precipitate drinking, especially among women (CSAT, 1998). The alcohol may become a form of self-medication. Moreover, research has disclosed that the most frequent configuration of co-morbid disorders among older adults in residential or hospital settings is depression joined with alcoholism and personality disorder (Bartels and Liberto, 1995). In fact, older adults who have a lifetime substance abuse problem are nearly three times as likely to also be diagnosed with a mental disorder (CSAT, 1998).

Further, the substance abuse and mental disorder issues experienced by older adults are often misdiagnosed, remain hidden, or are neglected (Derry, 2000). This results in limited or inappropriate treatment or opportunities to prevent the disorder, even though research has shown that the prevalence of prescription drug misuse, alcohol abuse and mental disorders for those aged 65 years or older is significant. Gerontologists have pointed out that the abuse of alcohol and other drugs by the present cohort of baby boomers as they age will vary significantly from the previous generation's substance abuse patterns. Baby boomers have a different attitude towards alcohol and other drugs than their parents, and they are more likely to have experimented with drugs during their lifetime (CSAT, 1998).

Risk and Protective Factors

Older adults face a number of significant transitions and new developmental tasks that, in some instances, may precipitate mental or substance abuse disorders. Risk factors for older individuals include relationship loss and bereavement, chronic illness and caregiver burden, social isolation, and loss of meaningful social roles (Mrazek and Haggerty, 1994). Indeed, bereavement is a well-established risk factor for depression (U.S. DHHS, 1999b). Older adults also may experience chronic pain, physical disabilities, and handicapping conditions; impaired self-care; and reduced coping skills, that alone, or in combination, may act as risk factors for substance abuse and mental disorders (CSAT, 1998).

Protective factors at this time of life include social support in the form of family, peers, and informal relationships; more formal support groups; health and social services such as respite care; and opportunities for new, productive social roles (Mrazek and Haggerty, 1994). For example, self-help support groups for people experiencing bereavement have been found to improve the mental health status of widows and widowers (Administration on Aging, 2001; U.S. DHHS, 1999b; Mrazek and Haggerty, 1994).

Prevention Opportunities for Older Adults

The Surgeon General's Report on Mental Health (1999) recommends ways in which prevention can improve the independence and health of older adults. Specifically it calls for efforts to prevent depression and suicide, excess disability, and premature institutionalization. It also recommends grief counseling for widows and widowers, and calls for the prevention of medication side-effects and adverse reactions.

The physicians of older adults are unlikely to identify a substance abuse problem in their patients, even though 87 percent of older adults see their physician regularly (Raschko, 1990 in CSAT, 1998). Further, approximately 40 percent of older adults do not self-identify or seek services for substance abuse problems. To overcome these problems in identification and screening it is important to improve identification efforts among the various disciplines of health care providers and apply "multitiered, nontraditional case-finding methods within the community." (Derry, 2000; CSAT 1998). Often people such as friends, family, senior center employees and volunteers are in a position to know the daily lives and routines of older adults. It is necessary to engage these people who are closely involved with older adults to be aware of behavioral changes that may indicate a problem (CSAT, 1998).

Realizing these goals can be complicated by the frequent isolation of older adults in their homes. A unique program, now 25 years old, uses nontraditional community referral sources, "gatekeepers," to identify at-risk older adults who typically do not come to the attention of service providers (Administration on Aging, 2001).

SAMHSA's Leadership in Prevention

The Substance Abuse and Mental Health Services Administration takes seriously its mission to improve the quality and availability of prevention, treatment and rehabilitative services for people with substance abuse and mental disorders. Through its Center for Substance Abuse Prevention and Center for Mental Health Services, SAMHSA actively seeks to identify, evaluate and disseminate successful prevention programs. Some of the Agency's prevention programs, such as the CSAP High-Risk Youth Demonstration Program, are discussed earlier in this chapter; other activities are highlighted below.

State Incentive Grant Program

The State Incentive Grant Program develops and evaluates the efficacy of prevention programs in reducing or eliminating substance use among at-risk youth and in reducing or eliminating problem behaviors that may lead to mental disorders. The program was funded at \$61 million in fiscal year 2001. The program enables Governors to coordinate and leverage all prevention resources in their respective States, resources that can address problem behaviors that may lead to both substance abuse and mental disorders. Grant recipients are required to use no less than half of their funding on scientifically defensible program activities. Today 38 States and the District of Columbia are testing 20 model programs that target youth who exhibit problem behaviors and are at risk for substance abuse. Six regional Centers for the Application of Prevention Technology support their work.

Prevention Program Outcomes Monitoring System

Once model programs are disseminated, CSAP assesses how these programs are being adapted, and the extent to which these adaptations affect program effectiveness. This assessment effort, the Performance Program Outcomes Monitoring System (PPOMS), measures how many of the model programs are implemented nationwide, the degree to which they are being adapted to community needs and norms, how well they are succeeding, and the continuing fidelity of the models as originally specified. These empirical findings can help SAMHSA determine whether adaptations of effective, evidence-based models remain successful.

Mentoring and Family Strengthening Program

Healthy children need healthy parents and nurturing relationships with other adults in their lives. The Mentoring and Family Strengthening Program was established in 1999 to help 95 grant-recipient communities identify cost-effective methods to disseminate information, provide training, and evaluate the impact of evidence-based, family-focused, prevention strategies and models. The program sought to understand the factors influencing a community's decision to adopt/adapt and implement these practices. Since then the program has been expanded to science-based prevention activities by helping experienced grantees disseminate effective program models and approaches to the community at large.

Best Practice Grant

SAMHSA's Programs of Regional and National Significance efforts include support for the discovery of new, more effective ways to deliver substance abuse prevention and treatment and mental health services by translating new research knowledge to community-based programming. Grant programs include a number of targeted prevention areas such as underage drinking, family-focused prevention programs, and children of parents who abuse substances. For example, a three-year program focusing on the children of substance abusing parents was designed to identify and evaluate prevention programs that enhance protective factors and reduce risk factors for children ages 6 to 8 and 9 to 14 whose parents abuse substances. Preliminary data from this program reveal that prevention programs increase negative attitudes toward drugs. Overall, negative attitudes toward drugs increased for 44.7 percent of parents; among children ages 6 to 8, perception of harm increased 40.5 percent. Nearly 41 percent of children ages 9 to 14 showed increased perception of risk.

Safe Schools/Healthy Students

The Safe Schools/Healthy Students Initiative is a landmark collaboration among the Department of Health and Human Services, the Department of Justice and the Department of Education that is focused specifically on the prevention of youth violence in schools. SAMHSA serves as the lead agency within the Department of Health and Human Services in this large-scale effort. To date, 97 grants totaling \$445 million have been awarded to local education authorities around the country.

Grantees are required to establish formal partnerships with local mental health and law enforcement agencies to promote the development of school safety, substance abuse and violence prevention and early intervention programs, and school and community mental health prevention

and treatment services, among other activities. A parent education component of the program – undertaken entirely by SAMHSA – the 15+ Make Time to Listen/Take Time to Talk initiative provides practical guidance for parents on how to strengthen their relationships with their children by spending at least 15 minutes of undivided, child-directed time with them each day.

School Action Grant Program

SAMHSA's School Action Grant Program provides grantees with up to \$150,000 a year for 2 years to build consensus among key stakeholders in the community to adopt and pilot test an evidence-based program to prevent youth violence and promote healthy child development.

Summary

The development of co-occurring substance abuse disorders and mental disorders in individuals of all ages is a multi-faceted problem influenced by interrelated risk and protective factors. For youth and adolescents, particularly those with emotional disorders, comprehensive prevention programs that are family-focused, culturally appropriate, and offered on a long-term basis have been shown to reduce problem behaviors, increase family cohesion and effective parenting, and decrease substance use/abuse. Adults and older adults are no less in need of prevention services. Key developmental tasks and major life changes may precipitate mental health problems and/or substance abuse in vulnerable individuals. Older adults are at risk for prescription drug misuse and alcohol-related problems, as well as depression and suicide. Prevention programs that feature outreach and support can help increase the protective factors that mitigate against these outcomes.

CHAPTER 4

Evidence-Based Practices for Co-Occurring Disorders

When she arrived at St. Elizabeth's Hospital in Washington, D.C., Janice Grady heard what sounded like a death sentence. "They suggested drug treatment and I said, 'If you send me there I'm dead,' because I had been through drug treatment before. I knew that something else was wrong with me," Ms. Grady says.

Over 12 years, Ms. Grady was treated several times. During periods of recovery, she attended Federal City College and worked as a nurse and as an assistant director of a drug rehabilitation center. She wanted to stay off drugs, but other problems lurked. She was suicidal before the age of 13. At 14 she was raped and became a teenage mother. "Drugs were a way of dealing with those feelings," she says.

So in 1990 when a doctor from the St. Elizabeth's dual diagnosis program diagnosed her with depression, Ms. Grady says, "I cried, because someone said that there might be something else wrong with me." Now she understood why treatment of addiction, alone, was not enough. She subsequently was diagnosed with bi-polar disorder.

After 9 months of treatment, Ms. Grady entered an apartment at a women's residence, and received care at a mental health agency, including a weekly group for women with trauma and other co-occurring disorders, case management, and psychiatric help. She later earned a college degree and works at a treatment agency helping others with co-occurring disorders. Ms. Grady was in the stands cheering at her granddaughter's recent high school graduation. "I have never felt better," she says.

Understanding Evidence-Based Practices

Definition of Evidence-Based Practice

Just as treatments for other chronic illnesses change based on new advances in research and science, so, too, do treatments for substance abuse and mental disorders, whether occurring separately or co-occurring in a single individual. The challenge to mental and substance abuse professionals – and to the field as a whole – is to ensure that the services being provided, in fact, are the most appropriate for the individual and are the best possible from the perspectives of effectiveness and appropriateness. Those principles undergird the concept of evidence-based services and evidence-based practice.

The evidentiary yardstick against which the effectiveness of services is measured, itself, can vary in precision. Today's "gold standard" evidence-based practice to determine whether a treatment intervention does more good than harm is the assessment of research findings from randomized controlled clinical trials, constituting a rigorous research design (Ley et al., 2000; Sackett et al., 1996). Slightly lower on the scale – the next best evidentiary base – is the quasi-experimental study, in which comparison groups are assigned by randomization (Drake, Goldman et al., 2001). Some researchers believe that findings from open clinical trials (those lacking

independent comparison groups) coupled with expert-based clinical observations are insufficient findings on which to determine the effectiveness and rigor of a particular practice. Such researchers believe that only the "gold standard" ensures against the adoption of practices as evidence-based that are contradicted by later findings of controlled research (Drake, Goldman et al., 2001).

It is not surprising that many approaches to care for people with co-occurring substance abuse disorders and mental disorders do not reach the high bar set by the research community's "gold standard." For that reason, the Institute of Medicine has adopted a more pragmatic approach. In its report, *Crossing the Quality Chasm: A New Health System for the 21st Century* (2000), IOM embraced a less stringent definition of what constitutes an evidence-based practice, suggesting it is the integration of three critical elements:

- Best research evidence: clinically relevant research, often from the basic health and medical sciences, but especially from patient-centered clinical research into the accuracy and precision of diagnostic tests (including the clinical examination); the power of prognostic markers; and the efficacy and safety of therapeutic, rehabilitative, and preventive regimens.
- *Clinical expertise:* the ability to use clinical skills and past experience to identify and treat each patient's unique state and diagnosis, to assess the individual risks and benefits of potential interventions, and to do so within the context of the patient's personal values and expectations.
- *Patient values:* the preferences, concerns, and expectations each patient brings to a clinical encounter that must be integrated into clinical decisions if they are to serve the patient.

The meaning and interpretation of evidence, no matter what kind, is an essential and probably continual task. All forms of evidence must be weighed to determine whether efficacy (evidence of an effect under ideal conditions) or effectiveness (assessed/evaluated in actual practice) is achieved, and to delineate the particular conditions under which the approach can reasonably be expected to produce favorable outcomes (Peterson, 2001).

Many approaches to treating co-occurring disorders that do not meet strict standards of evidence are nevertheless commonly accepted and believed to be effective based on the best available research, clinical expertise, individual values, common sense, and a belief in human dignity. It is incumbent on practitioners to use the best available approaches. Whatever the definition adopted, some general cautions must be borne in mind. First, not every clinical condition has generated a corpus of research knowledge (Drake et al., 2001). Not every problem has an evidence-based answer (Goldman et al., 2001). Evidence-based medicine cannot be all things to all people (Davidoff, 1999). Finally, some clinical questions cannot wait for an evidence-based solution (Goldman et al., 2001; Davidoff, 1999).

With these cautions in mind, the evidence-based practices included in this chapter reflect this broad IOM-adopted definition, and represent the state-of-the-science in treatment for

individuals with co-occurring substance abuse disorders and mental disorders. The strength and level of evidence for each will be noted, along with acknowledgment of the limitations of the research that supports a particular intervention or practice. In several areas – especially reimbursements and costs, access and effectiveness and quality – SAMHSA will collaborate with the Agency for Healthcare Research and Quality and its National Guidelines Clearinghouse to continue to work toward development of guideline criteria for evidence-based practices.

Evidence-Based Integrated Tre atment is Multifaceted.

Current research attributes effectiveness to programs of integrated treatment for co-occurring disorders that include certain critical components as described in detail in this chapter (see "Interventions for Adults with Co-Occurring Disorders" section). Each of the individual interventions described has a body of research evidence supporting its effectiveness for individuals with co-occurring disorders. However, it is not simply the use of individual interventions that constitutes an integrated treatment program. Rather, it is the constellation of coordinated interventions – generally several evidence-based interventions used in combination to meet individual client needs, and delivered by the same clinicians working in one setting – that constitutes the evidence-based practice known as integrated treatment for co-occurring disorders.

Evidenced-based integrated treatment approaches combine or integrate mental health and substance abuse treatment and services at the level of the clinical intervention. Hence, integrated treatment programs mean that the same clinicians or teams of clinicians, working in one setting, provide appropriate mental health and substance abuse interventions in a coordinated fashion, whereby the agency or direct providers take responsibility for combining the treatment and service interventions into one coherent package (Drake et al, 1998; Drake et al, 2001). Integrated treatment programs can take place in either the mental health or substance abuse treatment systems, requiring only that treatment and services for both the mental health and substance abuse conditions are delivered by appropriately trained staff and occur within the same setting.

Program Structures and Settings

Evidence-based practices for individuals with co-occurring disorders are provided in the context of service programs in substance abuse, mental health, primary health, and other behavioral health and human services systems, and in inpatient, outpatient, community-based or residential settings.

Because no single intervention can meet the needs of all people experiencing co-occurring substance abuse disorders and mental disorders, programs working in this area are necessarily complex in structure. They must be able to organize multiple services across what may be multiple service systems. They also must be able to guide the implementation of evidenced-based practices that are tailored to the unique needs of the clients – practices that include interventions developed in the substance abuse, mental health, and other related fields specifically to address co-occurring disorders among individuals and their families (Minkoff, 2001; CMHS, 1998).

The most effective programs support the delivery of a comprehensive array of evidenced-based practices that not only reflect the diversity of individuals with co-occurring substance abuse

disorders and mental disorders, but also the spectrum of service need based on impairment and disability (Minkoff, 1991). Two diagnostic tools exist to help ensure that programs provide the level of care that is most appropriate for each individual: The Diagnostic and Statistical Manual, Fourth Edition (DSM-IV), and the Patient Placement Criteria for the Treatment of Substance-Related Disorders.

DSM-IV classifies both mental and substance-related disorders, providing clinicians with a common language to communicate about these disorders and to make clinical decisions. Specific minimum symptoms, including type and duration, are presented for each scientifically validated diagnosis included in the volume to help guide clinical diagnosis. The criteria also help clinicians distinguish among substance-induced mental disorders, substance problems attributable to psychiatric syndromes, and disorders meeting the criteria for co-occurring disorders.

The American Society for Addiction Medicine (ASAM) Patient Placement Criteria (2R) (ASAM, 1995, 2001) – guidelines to assess and determine care needs for people with substance abuse and other co-occurring disorders – delineate three types of programs to serve people with co-occurring substance abuse disorders and mental disorders: (1) addiction only; (2) dual-diagnosis capable in which less severe mental problems (some of which may not even reach diagnostic criteria) are able to be treated; and (3) co-occurring enhanced that provides a high degree of integrated substance abuse treatment and mental health services for people with considerably severe symptoms and impairment.

The National Registry of Effective Prevention Programs

To help program planners, and policy makers learn more about and be able to identify and implement the best evidence-based prevention programs in their States and communities, SAMHSA has established the National Registry of Effective Prevention Programs (NREPP) with the specific mandate to identify, review, and disseminate evidence-based effective prevention programs (CSAP, 2001). Starting in 2002, NREPP will be used as the Federal "seal of approval" for prevention programs targeting co-occurring substance abuse disorders and mental disorders.

The NREPP also helps address common methodological flaws in prevention program evaluations, including small samples, self-selection of participants, participant attrition and insufficient long-term follow-up, as reported in the Cochrane Review of Randomized Trials for Substance Abuse and Schizophrenia (in Dorfman, 2000; Ley et al., 2000; Heller, 1996). It also helps address issues identified by Greenberg (1999) such as lack of replication, little attention to how the quality of the implementation affects outcomes, and the need to measure multiple dimensions.

Programs nominated for candidacy each year are reviewed against a stringent set of criteria and are ranked based on scientific rigor of their evaluation and the practicality of their findings for substance abuse prevention. Based on those standards, programs that cross the first bar are then judged to be *effective*, *model*, or *promising* – the equivalent of gold, silver and bronze awards for excellence.

To move information about these high quality programs to the field where they can be adopted and adapted to local needs, SAMHSA established the internet-based National

Dissemination System. SAMHSA also works in collaboration with such national organizations as the National Mental Health Association, the National Head Start Association, and the National Association of Elementary School Principals to disseminate information about effective programs.

Organizing Services: The Four Quadrant Framework

As discussed in Chapter 1, the four quadrant framework (see Figure 1.1), adopted and refined by the NASMHPD/NASADAD Joint Task Force on Co-Occurring Disorders, can help substance abuse and mental health providers and systems better conceptualize and organize the range of services that can best meet the needs of individuals with multiple symptoms and varying degrees of severity. It also can help frame service coordination needs along the full continuum of care as well as the locus for that care.

The NASMHPD/NASADAD Task Force recommended that when it comes to providing care for people with co-occurring disorders, mental health, substance abuse and primary care service providers must adopt different ways of working with each that are consistent with the framework described above (NASMHPD/NASADAD, 1999).

- **Consultation.** *Quadrant I (both disorders less severe):* Informal relationships among providers that ensure both mental disorders and substance abuse problems are addressed, especially with regard to identification, engagement, prevention, and early intervention. An example of such consultation might include a telephone request for information or advice regarding the etiology and clinical course of depression in a person abusing alcohol or drugs.
- Collaboration. Quadrant II/III (one disorder more severe, the other less severe): More formal relationships among providers that ensure both mental disorders and substance abuse problems are included in the treatment regimen. An example of such collaboration might include interagency staffing conferences where representatives of both substance abuse and mental health agencies specifically contribute to the design of a treatment program for individuals with co-occurring disorders and participate in service delivery.
- Integrated Services. Quadrant IV (both disorders more severe): Relationships among mental health and substance abuse providers, in which the contributions of professionals in both fields are merged into a single treatment setting and treatment regimen. Integrated treatment is "any mechanism by which treatment interventions for co-occurring disorders are combined within the context of a primary treatment relationship or service setting" (CSAT, in press). Such treatment exists on a continuum that ranges from cross-referral and linkage, through cooperation, consultation, and collaboration, to integration in a single setting or treatment model (CSAT, in press).

This four-quadrant framework is especially useful because it encompasses the full range of people with co-occurring substance abuse disorders and mental disorders. It supports the "windows of opportunity" for preventing more serious disorders or exacerbation of symptoms in

all age groups (NASMHPD/NASADAD, 1999). For example, prevention and early intervention are appropriate for individuals in quadrant I, for whom any mental and substance abuse problems they might have would not require specialty care. Strategies can also be applied to quadrants II, III and IV to prevent increases in mental or substance abuse disease severity. People with the most severe disorders are the most difficult and expensive to treat and require the highest level of coordinated services. The quadrants also provide a valuable framework for coordinating care with family members, and for planning and coordinating programs and services, as well as managing available resources.

The Evolution of Treatment for Co-Occurring Disorders

The very fact of co-occurring substance abuse disorders and mental disorders began to emerge as a public health concern in the early 1980s when it became evident that a number of people with serious mental illnesses also had substance abuse problems (Drake and Wallach, 2000; Drake, McLaughlin et al., 1991; Bachrach, 1982; Pepper et al., 1981). Observers note that these were, by and large, young adults with serious mental illnesses who grew up in the post-deinstitutionalization era. They received most of their care in the community, where they had ready access to alcohol and other drugs (Bachrach, 1987; Drake, McLaughlin et al., 1991; Osher and Drake, 1996).

The ADAMHA Reports

In the mid-1980s, the Alcohol, Drug Abuse and Mental Health Administration (ADAMHA), the predecessor of SAMHSA, commissioned a review that examined both research and services issues related to people with co-occurring serious mental illnesses and substance abuse disorders (Ridgely et al., 1986; Ridgely et al., 1987). The reports that followed the review delineated the research evidence on co-occurring disorders available at the time, created a research agenda for the Federal institutes (National Institute of Mental Health, National Institute on Alcoholism and Alcohol Abuse, and National Institute on Drug Abuse), and for the first time, outlined principles of care for people with both serious mental illnesses and substance abuse disorders (Ridgely et al., 1987).

These reports emphasized that most mental health and substance abuse treatment systems were not addressing the problem of co-occurring disorders effectively; that many clinical programs did not take into account the complex needs of their clients with serious mental illnesses; and that individuals with severe mental disorders frequently were excluded from both the mental health and substance abuse treatment systems because of their co-occurring disorders (Galanter et al., 1988). Equally important in the reports was the delineation of significant organizational and financial barriers to the provision of effective services.

Investigators in the substance abuse field were beginning to identify co-occurring mental disorders as a serious concern for the substance abuse treatment field. Much of this research was being conducted in Veterans Administration facilities. In one very important stream of research, McLellan and his colleagues isolated the severity of the mental disorder as a key factor in predicting poor response to substance abuse treatment among people with co-occurring substance abuse disorders and mental disorders (McLellan et al., 1983). However, in response to the

ADAMHA reports, the bulk of the treatment research in the late 1980s and through the 1990s continued to emphasize issues related to people with the most severe mental illnesses, resulting in a large gap in the research base on populations other than those with severe mental illness (Ridgely, 1998).

Community Support Program

The Community Support Program (CSP) has been administered for more than ten years under SAMHSA by its Center for Mental Health Services. It began in 1987 in response to the ADAMHA reports when the National Institute of Mental Health (NIMH) Community Support Program initiated 13 demonstration projects to serve young adults (ages 18 to 45) with cooccurring serious mental illnesses and substance abuse disorders. These projects serving high-risk groups, including inner-city residents, minorities, women with children, and migrant farm workers were exploratory studies of clinical needs, integrated services, and treatment responses that might precede clinical services trials (Mueser et al., 1997; Mercer-McFadden et al., 1997). Though limited in the duration of follow-up and by design issues related to control groups, the studies produced several significant results. The CSP demonstration projects showed that individuals with co-occurring substance abuse disorders and mental disorders can be engaged into community-based treatment and that such treatment may reduce the severity of their substance abuse disorder as a result (Mercer-McFadden et al., 1997). They also determined that treatment for co-occurring disorders is a long-term process.

The CSP projects also found that many individuals with co-occurring disorders are not ready for abstinence-based programs. One of the most significant contributions of the program was the discovery that individuals with serious mental illnesses require stage-wise substance abuse interventions that engage clients in treatment first and then provide them with the motivation needed to change (Mercer-McFadden et al., 1997).

Integrated Treatment

Integrated treatment is broadly defined as "any mechanism by which treatment interventions for co-occurring disorders are combined within the context of a primary treatment relationship or service setting" (CSAT, in press). Depending on the needs of the client and the constraints and resources of particular systems, appropriate degrees and means of integration will differ. These range from cross-referral and linkage, through cooperation, consultation, and collaboration, to integration in a single setting or treatment model (Konrad, 1996). Integrated treatment is provided through three levels of service provision:

- *Integrated Treatment* the interaction between the mental health and/or substance abuse clinician(s) and the individual, which addresses the substance abuse and mental health needs of the individual.
- *Integrated Program(s)* the organizational structure for providing integrated treatment, the mental health and/or substance abuse program is responsible for ensuring an array of staff or linkages with other programs to address all of the needs of its clients. The program is responsible for ensuring that services are provided in an appropriate and

easily accessible setting, services are culturally competent, age, sexuality and gender appropriate.

• *Integrated System* – the organizational structure for supporting an array of programs for people with different needs, including individuals with co-occurring substance abuse disorders and mental disorders. The system is responsible for ensuring appropriate funding mechanisms to support the continuum of services needs, addressing credentialing/licensing issues, establishing data collection/reporting systems, needs assessment, planning and other related functions.

The critical components of an integrated program have been outlined (Minkoff, 1991; Drake et al, 2001) and include the evidence-based practice components described in other sections of this report. The critical components for integrated treatment include staged interventions; assertive outreach; motivational interventions; simultaneous interventions; risk reduction; tailored mental health treatment; tailored substance abuse treatment; counseling; social support interventions; comprehensiveness; addressing "real life" issues in addition to treatment; a longitudinal view of remission and recovery; and cultural sensitivity and competence.

Integrated treatment may involve other service systems. Because individuals with cooccurring disorders have a wide range of other health and social service needs, treatment integration may take the form of systems integration. For example, a mental health center, a local housing authority, a foundation, a county government alcohol and drug agency, and a neighborhood association may join together to establish a treatment center for women with cooccurring disorders and their children (CSAT, in press).

There is no need to create a separate system of care for people who have co-occurring substance abuse disorders and mental disorders. Ideally, integrated treatment builds on existing systems and programs wherever possible (The National Council and SAAS, 2002; AACP, 2000; Osher, 1996; Ridgely et al., 1987). At the same time, as Osher (1996) notes, we must preserve the strengths of the existing mental health and substance abuse treatment systems to serve individuals with "only" a mental or addictive disorder.

However, whether operating at the level of the individual or at the level of systems infrastructures, integrated treatment must be *person-centered*. Regardless of how it is configured, in its most successful form integrated treatment appears seamless to the individual receiving care, with a consistent approach, philosophy, and set of recommendations (Drake, Essock et al., 2001).

Studies of Comprehensive, Integrated Treatment Programs

Clinical research focused on the issue of co-occurring substance abuse disorders and mental disorders has yielded some promising modalities for treatment. However, the findings are suggestive rather than conclusive since few of the studies were randomized controlled trials and many of the studies suffered from significant methodological limitations (Ley et al., 2000).

Drake and colleagues (1998) reviewed 36 research studies on the effectiveness of integrated treatment in mental health settings for people with co-occurring substance abuse and

serious mental illness disorders. These included programs identified as "comprehensive" since they included many of the services believed effective in treating co-occurring disorders – such as assertive outreach, stage-wise treatment, motivational interventions, intensive case management, and family interventions.

Six open clinical trial studies reviewed found excellent engagement in services and substantial reductions in substance abuse (Drake, Mercer-McFadden et al., 1998). Three longer-term clinical trial studies among this group demonstrated substantial rates of stable remission of substance abuse.

Of four studies with research controls included in the Drake review, two compared integrated treatment with non-integrated treatment. One of these (Drake et al., 1997) used a quasi-experimental design to study integrated mental health, substance abuse, and housing services for 217 individuals with co-occurring disorders who were homeless. The integrated treatment group made greater progress toward recovery in substance abuse treatment and showed greater improvement in alcohol abuse. They also spent significantly less time in institutions and more time in stable housing (Drake, Mercer-McFadden et al., 1998). Individuals in both the integrated treatment and treatment-as-usual groups showed similar improvements in psychiatric symptoms and quality of life.

Based on his review of these studies, Drake concludes that "...integrated treatment, especially when delivered for 18 months or longer, resulted in significant reductions of substance abuse and, in some cases, in substantial rates of remission, as well as in reductions in hospital use and/or improvements in other outcomes" (Drake, Mercer-McFadden et al., 1998).

Other studies focusing on people with serious mental illness examined different forms of treatment for co-occurring disorders, including: assertive community treatment (Drake et al., 1998, Jerrell & Ridgely 1995), modified therapeutic communities (Carroll & McGinley 1998, French et al., 1999), behavioral skills training (Jerrell & Ridgely 1995), and cognitive behavioral therapy (Barrowclough et al., 2001). Findings from these studies generally support the proposition that assertive community treatment, therapeutic communities, behavioral skills training and cognitive behavioral therapy may have a positive effect on individuals with co-occurring disorders across a number of different types of outcome measures of substance abuse, psychopathology and general functioning. However, statistically significant effects are found on only some measures (Greenberg 2002). Of the two studies that have endeavored to examine cost-effectiveness, the results are mixed. Clark et al. (1988) found no cost-effectiveness differences between ACT and standard case management, while Jerrell, Hu & Ridgely (1994) found cost-effectiveness differences for behavioral skills intervention as compared to a modified 12-step recovery program. French and his colleagues (1999) found similar cost but superior outcomes for therapeutic communities as compared to usual care.

In the only evidence-based review of the literature on treatment for people with cooccurring severe mental illness and substance abuse, commissioned by the United Kingdom's Cochrane Collaboration, the investigators concluded that more research is necessary to establish an evidence base for integrated treatment (Ley et al., 2000). Some believe the current research base suggests a reason for "cautious optimism" (Mueser, 1997). In light of the high prevalence and negative consequences of co-occurring substance abuse disorders and mental disorders, Ridgely and Johnson (2001) observe that "the evidence suggests that routine screening and assessment of substance abuse is clearly warranted; that offering and attempting to engage people with dual diagnoses in some kind of treatment that focuses on reducing use and abuse of substances is appropriate; and that, without presuming the superiority of one particular model of treatment over another, there are program features that these models share that may be associated with effectiveness..." More methodologically sound research is needed to confirm current optimism.

Dr. Rosenthal and colleagues at the New York State Psychiatric Institute have developed an integrated treatment approach for schizophrenia and substance abuse in Beth Israel Medical Center's Combined Psychiatric and Addictive Disorders Program. Preliminary findings suggest that these individuals benefit from an integrated treatment approach. They have emphasized the importance of comprehensive assessment of these patients, and the importance of initial engagement to improve compliance with and retention in ongoing treatment (Rosenthal, 2001).

Costs/Cost-Effectiveness. While the Kraft (1997) and Weisner (2001) studies cited above found that integrating mental health services into substance abuse treatment to be cost-effective (CSAT, in press), on balance, the limited data on costs and cost-effectiveness of various types of co-occurring disorders treatment yield mixed findings (Greenberg, 2002).

Nonetheless, some facts do become clear from the research. Foremost, it is far more intensive, extensive, and expensive to treat a person with co-occurring substance abuse disorders and mental disorders than to treat an individual with either disorder alone (RachBeisel et al., 1999). In large part, people with co-occurring disorders are difficult to stabilize in outpatient services and make frequent use of acute care or inpatient services (Jerrell et al., 1994). For example, researchers found that veterans with co-occurring disorders had 10 percent to 30 percent greater costs than veterans without co-occurring disorders (Hoff and Rosenheck, 1998, 1999). Untreated co-occurring disorders also exact cost on other service systems, including the criminal justice, child welfare, and homeless service systems. For example, people who experience chronic homelessness, many of whom have co-occurring disorders, account for only 10 percent of people who are homeless but use nearly half of all homeless emergency assistance resources (Kuhn and Culhane, 1998).

One frequently cited study examined the cost-effectiveness of three interventions for people with co-occurring substance abuse disorders and mental disorders: 12-step recovery, case management, and behavioral skills training (Jerrell et al., 1994). All three approaches were found to be effective in reducing acute and subacute service use and increasing involvement with outpatient and case management treatments. Overall, the direct and indirect costs for these individuals were reduced by 43 percent without increasing the burden on clients' families or on the criminal justice system.

A more recent study (Finkelstein et al., 2002b) found that among people with co-occurring substance abuse disorders and mental disorders, the costs of substance abuse treatment were lower if the individual's mental disorder was also treated. The magnitude of the cost-saving varied by the type of mental disorder requiring treatment. Thus, the cost of substance abuse treatment for an individual with a substance abuse disorder and schizophrenia was lowered by an average of \$1,991

when the schizophrenia was also treated. Similarly, the cost of substance abuse treatment dropped \$1,310 when co-occurring psychosis was treated; and was lowered by \$291 when major depression was treated. However, Jerrell and others (e.g., Drake, Essock et al., 2001) caution that the results of the limited number of studies undertaken to date are not definitive. More research is needed to determine both the cost-effectiveness of specific co-occurring disorders interventions and the cost-offsets to be realized in other service systems.

Some observers have criticized the research on integrated treatment for its lack of randomized control groups, small numbers of participants, and other methodological flaws (Greenberg, 2002; Ley et al., 2000). Indeed, Drake and his colleagues (Drake, Mercer-McFadden et al., 1998) note a dearth of research on cost and cost-effectiveness, the needs of special populations (e.g., women, people who are homeless), and the effectiveness of specific interventions (such as group therapy) for people with co-occurring substance abuse disorders and mental disorders. Others cite the relative lack of evidence to support the effectiveness of treatment for co-occurring substance abuse disorders and mental disorders for individuals who are not experiencing a serious mental illness, such as schizophrenia or severe depressive illness (Greenberg, 2002; NASMHPD/NASADAD, 1999).

However, for others in research and clinical care, as well as for many consumers, the current research base suggests a reason for "cautious optimism" about the potential effectiveness of integrated treatment for co-occurring disorders (Mueser et al., 1997). Perhaps this is as much a matter of pragmatism as evidence.

Interventions for Adults with Co-Occurring Disorders

Interventions both fit within the four quadrant framework described above and help treatment professionals and others ensure that individuals with co-occurring substance abuse disorders and mental disorders receive the most appropriate care. This section is a discussion to help treatment professionals and others ensure that individuals with co-occurring substance abuse disorders and mental disorders receive the most appropriate care. The section includes a discussion of interventions and approaches that have been adopted, adapted and applied for adults with co-occurring disorders.

In addition to specific interventions, researchers are evaluating models of integrated treatment based in typical substance abuse settings including the consultant model (adding a mental health specialist to the team), fully-integrated model (training all staff to address co-occurring disorders), adjunctive psychiatric services within methadone maintenance programs, and the modified therapeutic community (CSAT, in press).

Screening/Assessment

The need for better screening and assessment strategies for people with co-occurring substance abuse disorders and mental disorders was identified by SAMHSA constituents as critical to success at both the program and the system levels. Indeed effective treatment for co-occurring disorders *begins* with accurate screening and assessment (SAMHSA, 2002f).

High prevalence rates for co-occurring substance abuse disorders and mental disorders, the low treatment rates (Kessler et al., 1996; Regier et al., 1990), and the under-diagnosis of substance use disorders (Drake, et al., 1990), highlight the need for better detection and screening strategies. According to Lehman (1996), the absence of assessment of co-occurring disorders presents the major barrier to effective prevention. Thus a "no wrong door" approach – in which assessment occurs wherever an individual with co-occurring disorder presents him or herself – becomes critical. Moreover, screening and assessment practices serve little value in the creation of a "no wrong door" approach unless they are implemented uniformly across treatment systems to ensure that service systems recognize individuals with co-occurring disorders.

Screening

The clinical screening process enables a service provider to assess if an individual with a substance abuse disorder shows signs of a mental disorder, or whether an individual with a mental disorder demonstrates signs of substance abuse. Lehman (1996) has recommended that all programs institute basic screening procedures for substance abuse and mental disorders, regardless of their primary focus. If a problem is identified, providers can initiate a more detailed assessment and an appropriate referral.

A broad range of instruments are available to screen for both disorders (CSAT, in press; Mueser et al., 1995); however, no one instrument is foolproof. Some may miss some cases or incorrectly identify others. Nonetheless, standard screening procedures can help avoid these shortcomings and follow-up assessments can clarify the screening findings.

The importance of appropriate and timely screening for alcohol and drugs of abuse cannot be understated. Drake and colleagues (1996) point out that this failure to detect substance abuse disorders can result in a misdiagnosis of mental disorders, sub-optimal pharmacological treatments, neglect of appropriate substance abuse interventions, and inappropriate treatment planning and referral.

Clearly mental health professionals need a sound education about the epidemiology of cooccurring substance abuse and about appropriate techniques for screening and assessment (Drake et al., 1996). At the same time, substance abuse programs and personnel need the capacity to screen for the full range of mental disorders that may present in clients in treatment in their facilities.

Assessment

The next step in the diagnostic process for an individual who is suspected to be experiencing co-occurring substance abuse disorders and mental disorders is assessment, which includes evaluation, diagnosis as to severity of illness, and motivation for treatment (Kofoed, 1991). Assessments also should address a broad range of other medical, psychological, and social problems (CSAT, in press; Lehman, 1996). A broad range of assessment instruments have been developed and found effective in both the substance abuse and mental health fields to guide practitioners (CSAT, in press; Carey and Correia, 1998; Mueser et al., 1995; CSAT, 1994; Kofoed, 1991), among them the GAIN assessment (Global Assessment of Individual Needs), a standard assessment for co-occurring disorders for both youth and adults developed as part of a SAMHSA-sponsored project.

While review of specific instruments is beyond the scope of this report, a number of general principles about assessment for co-occurring substance abuse disorders and mental disorders are worthy of mention:

- No single tool represents a "gold standard" for identifying and providing a comprehensive assessment of an individual with co-occurring substance abuse disorders and mental disorders. Rather, assessment is a process with a number of different components; specific tools may be used for different components (CSAT, in press).
- No single correct intervention or program is necessarily appropriate for all with cooccurring disorders. Program placement and treatment interventions must be matched to the needs of each individual (CSAT, in press).
- Accurate diagnosis requires a longitudinal assessment by a skilled clinician with an established trusting relationship with the client (Lehman, 1996).
- Because of the complex nature of co-occurring disorders, it is important to approach the diagnosis as an open-ended process that may change as more information is collected and analyzed (Kofoed, 1991).
- The process of assessment also includes the initial steps of treatment: forming a therapeutic relationship, bringing problems into the open, discussing treatment options, and setting treatment limits, all within the context of ongoing respect and acceptance of the individual (Kofoed, 1991).

Staged Interventions

Individuals presenting for treatment of co-occurring disorders have unique histories and varying capacities to form treatment relationships; they also are likely to be in different phases of recovery. If the individual is participating in integrated or other co-occurring treatment approaches, the value of staged interventions for individuals with co-occurring substance abuse disorders and mental disorders has been well documented (Drake et al., 1993, 2001; Mueser and Noordsy, 1996; Osher and Kofoed, 1989; Ridgely, Osher & Talbott, 1987). Staged interventions provide a basis for differentiating clients relative to the stability of one of their disorders and the readiness to engage in treatment for the other. Because both severe substance abuse and mental disorders often follow a chronic course with frequent relapses (Osher and Kofoed, 1989), staged interventions provide a valuable structure for clinicians to better match treatment to the needs of individuals. The value of staged interventions for individuals with co-occurring substance abuse disorders and mental disorders has been well-documented (Drake et al., 1993, 2001; Mueser and Noorsdsy, 1996; Osher and Kofoed, 1989; Ridgely, Osher and Talbott, 1987). This stepwise approach to the organization of treatment helps address varying levels of severity and disability of the co-occurring disorders during the course of treatment and recovery.

In the field of mental health, Osher and Kofoed (1989) have suggested four separate stages of readiness for and engagement in substance abuse treatment by an individual receiving care for a mental disorder: *engagement*, *persuasion*, *active treatment*, and *relapse prevention*. These stages have been used to create an assessment scale to help match level of engagement to the most appropriate treatment interventions (McHugo et al., 1995).

In substance abuse treatment, perhaps the most well known and frequently used conceptual model is the Stages of Change Model by Prochaska and DiClemente (1992). This model describes predictable stages of change for individuals involved in substance abuse, from *precontemplation* to *contemplation, determination, action, maintenance*, and *relapse prevention*. The model has been adapted for use in treatment of co-occurring disorders (CSAT, in press; Ziedonis and Trudeau, 1997).

Establishing Therapeutic Relationships

The helping relationship that is established between client and provider is a critical factor that spans the range of treatment interventions for people with co-occurring disorders. An empathic connection is critical if an effective therapeutic alliance (Minkoff, 2001; Ormont, 1999; Carkuff, 1969). Further substantial evidence supports the role a strong therapeutic alliance plays as a predictor of positive outcomes in psychotherapy (Najavits, 2000; Ziedonis and D'Avanzo, 1998; Luborsky et al., 1985; Carkuff, 1969). Similarly, counselors who demonstrate "empathy, genuineness, respect, and concreteness" also have been shown to have a positive effect on their clients' abstinence from alcohol (Valle, 1981).

The need for positive therapeutic relationships is especially critical for individuals with cooccurring substance abuse disorders and mental disorders in order to get them into treatment and keep them there as needed (Owen et al., 1997). Service fragmentation also places these individuals at high risk for falling through the cracks between multiple treatment systems. The staged approaches to structuring services for this population emphasize the need to engage the person in a trusting relationship and to enhance motivation as a necessary first step to participating in recovery-oriented activities (Miller and Rollnick, 1991; Osher and Kofoed, 1989).

SAMHSA's Substance Abuse Treatment for Persons with Co-Occurring Disorders (CSAT, in press) describes the therapeutic relationship as the lynchpin for successful interventions for people who have co-occurring disorders and identifies elements that can help form that bond. For example, maintain a recovery perspective; manage countertransference⁵; monitor psychiatric symptoms; use supportive and empathic counseling; employ culturally appropriate methods; and increase support, organization, and structure.

It is also important to note that therapeutic interactions include individual, group, and family interventions. These approaches are applied as part of traditional treatments for substance abuse and mental disorders, often with some adaptation for frequency and intensity of the interaction (Mueser et al., 1998). By addressing the individual and his/her family as part of the treatment intervention, prevention of the co-occurring disorder may occur where children and others are involved.

Psychopharmacological Interventions

One of the significant clinical issues associated with the treatment of people with chronic mental illness is the motivation to adhere to medication regimens. The research literature

⁵ Countertransference refers to an often unconscious transference of the clinician's emotional needs and feelings to the client.

generally shows that individuals who suffer from both substance use and mental disorders are at particularly significant risk for poor medication adherence (Magura, 2002).

It has been noted that chronic use of drugs of abuse, such as marijuana or cocaine, can produce psychotic symptoms, cause a relapse of existing psychotic illness, or create a need for medication adjustments in order to achieve clinical stability (Hunt, 2002). Individuals with co-occurring substance abuse disorders and mental disorders often need to follow medication regimens as part of their treatment for the mental disorder. Likewise, medications are also used as part of treatment for some substance abuse disorders. A physician prescribes psychiatric medication based on the assessment and diagnosis of the client. The medications also need to be monitored regularly to determine their effect and to help the person manage their own medications appropriately (CSAT, in press).

To help an individual with co-occurring substance abuse disorders and mental disorders to recovery requires an in-depth understanding of the complex interplay of substances of abuse, psychoactive medications, and medications used to treat substance abuse. This complex interplay may affect the therapeutic options available to assist in recovery. An individual actively using alcohol, heroin, cocaine, marijuana, methamphetamine or any substance that can produce alterations of mood, thought or trust creates a unique therapeutic challenge requiring the exercise of great care. An individual recovering from a substance abuse disorder may find cravings enhanced and relapse precipitated by the medication needed to manage the co-occurring mental disorder.

Thus, the introduction and management of medications for individuals with co-occurring disorders often is complex, affected by the stage of recovery and degree of abstinence from substances of abuse, target symptoms, the severity and clarity of the co-occurring mental disorder, poly-substance dependence, motivation to change, and individual and physician preference (Carroll, 1997).

The interactive effects of psychoactive medications and illicit drugs or alcohol, and the effects of prescribed psychoactive medications in people who have substance abuse, require that clinicians take special precautions, as the following examples illustrate:

- An addiction medicine specialist, primary care provider or clinical psychiatrist may need to address the needs of an individual experiencing both depression and cocaine dependence. Selecting an appropriate medication can yield mixed results. Clinical studies have found that desipramine, imipramine, and fluoxetine have produced disappointing results. Either both the depressive symptoms and the cocaine use/craving continued unimproved, or the antidepressant had an effect only on the depression symptoms (Schmitz, 2001). Thus, these and other antidepressants may have only limited effects in individuals with co-occurring depression and cocaine use (Schmitz, 2001).
- Minkoff (2001) notes that benzodiazepines, used to relieve anxiety, are not recommended in the ongoing treatment of individuals with co-occurring substance abuse disorders and mental disorders. Monamine oxidase inhibitors, an antidepressant, are generally contraindicated in individuals drinking alcohol, especially certain wines, or using cocaine. Randall (2001) points out that paroxetine appears to work for the

symptoms of social anxiety, but there is insufficient information about the effect on alcohol consumption.

- Caution needs to be exercised in treating alcohol dependent individuals on clozapine, used to treat schizophrenia, with benzodiazepines for alcohol withdrawal; the pharmacodynamic interactions between clozapine and benzodiazepines can produce significant adverse reactions (Devane, 2002).
- A case report detailed the use of cocaine by a individual suffering from schizophrenia and treated with risperidone for 2 years; the individual developed hyperthermia and a movement disorder (Tanvetyanon, 2001).
- Multiple case reports indicate that therapeutic doses of olanzapine taken in conjunction with alcohol may produce dizziness and lightheadedness secondary to orthostatic hypotension (Devane, 2002). This situation is an example of the individual information that should be given to an individual suffering from a co-occurring condition such as schizophrenia and alcohol dependence.
- Methadone is an important medication used in the treatment of people who are dependent on opioids (e.g., heroin). It often is used in individuals with co-occurring disorders. Thus, clinicians need to be aware, for example, that an individual on methadone being treated for depression with desipramine may experience an increase in despiramine levels outside anticipated levels. Alternatively, if that individual is treated with fluoxetine, there may be an increased methadone level beyond the therapeutic range (Devane, 2002).

Thus, clinicians treating co-occurring conditions must have a working knowledge of drug interactions across classes of medications and between therapeutic medications and substances of abuse. They also should be aware that different racial and ethnic groups respond differently to psychiatric medications. Though results vary, a number of recent studies suggest that many Asians, African Americans, and to a lesser extent, Hispanics respond to lower doses of many psychiatric medications, and may have greater side effects even at the lower doses (Wells, 1998).

When it comes to the use of medications for the treatment of substance abuse, addiction medicine specialists have a relatively small armamentarium. Foremost among addiction-related medications is methadone for the treatment of opioid addiction. Since methadone cannot be dispensed outside certain designated methadone treatment programs, opioid dependent individuals with co-occurring severe mental illness should have access to methadone treatment programs that either directly provide mental health services or that have access to off-site mental health service providers who recognize the importance of methadone stabilization. If medication compliance is an issue, an individual on daily dosing at a methadone program might be more successful if both medications were made available at the same place and time.

It is anticipated that buprenorphine will be available for the treatment of opioid abuse and dependence by the end of 2002. At the same time, as a result of changes in the Controlled Substance Act, many office-based physicians will be permitted to prescribe FDA approved schedule 3, 4 or 5 opioid agonists for approved narcotic abuse treatment. Physicians treating anxiety disorders with benzodiazpines need to be aware of the severe drug interaction between benzodiazepines and buprenorphine – sudden death (Reynaud, 1998). SAMHSA plays a role in reviewing and granting waivers of the Controlled Substances Act and the Narcotic Addict

Treatment Act to physicians as provided by the Drug Addiction Treatment Act 2000. Only a physician with a SAMHSA waiver can prescribe buprenorphine (once approved by the FDA) or any other schedule 3 to 5 FDA approved medication for the treatment of narcotics addiction.

Previous studies by other investigators have suggested that the antidepressant effects of medication may be important to reverse dsyphoric symptoms and increase motivation for change in dually diagnosed patients. Dr. Edward Nunes, New York State Psychiatric Institute, is currently conducting a NIDA funded study that is developing and evaluating a behavioral therapy for the treatment of depressive disorders among opioid dependent patients (NIDA, 1997b).

Another medication, disulfiram, is a well-established medication used to discourage alcohol consumption. Its use by individuals with co-occurring disorders is controversial, and in the eyes of some clinicians, is actually inappropriate since one side-effect may be the exacerbation of psychiatric symptoms.

The choice of medications for the treatment of substance abuse or co-occurring mental disorders sometimes is influenced by the price rather than the efficacy of the medication. For example, older generic medications may be chosen for individuals with limited means as a result of fiscal demands on treatment programs, cities, States or Tribes. These medications may produce more complications for an individual with chronic mental illness who also actively uses substances of abuse. For example, cocaine use can be responsible for cardiac rhythm problems, made worse, undoubtedly, in individuals taking medications such as thioridazine which cause conduction problems in the heart (Hollister, 1995).

Motivational Interventions

Due to the effects of their disorders, many individuals with co-occurring substance abuse disorders and mental disorders are not ready or able to benefit from abstinence-oriented programs (Ziedonis and Trudeau, 1997; Test et al., 1989). Many also lack the motivation to engage in treatment regimens to manage psychiatric symptoms or to work toward functional goals such as housing or employment (Drake, Essock et al., 2001).

Motivational interventions emerged in the substance abuse field (Miller and Rollnick, 1991) but have been adapted as part of intervention models for people with severe mental illnesses and co-occurring substance abuse (Drake et al., 1998; Mueser and Noordsy, 1996; Ridgely and Jerrell, 1996). These approaches have been used to help individuals become ready to participate in treatment that includes illness self-management (Mercer-McFadden, 1997; Cary, 1996).

Research in the substance abuse field has demonstrated that motivational enhancement techniques are associated with greater participation in substance abuse treatment and positive treatment outcomes. Such outcomes include reductions in consumption, increased abstinence rates, social adjustment, and successful referrals to treatment (Landry, 1996; Miller et al., 1995). A positive attitude and commitment to change are associated with positive treatment outcomes (Miller and Tonigan, 1996; Prochaska and DiClemente, 1992).

Motivational enhancement techniques must be matched to the client's stage of recovery and are often integrated as part of the Transtheoretical Stages of Change Model (Prochaska and DiClemente, 1992). Interventions include a range of clinical strategies designed to enhance

motivation for change, including counseling, assessment, multiple sessions, or brief interventions. Five key principles of motivational enhancement include: express empathy; note discrepancy between current and desired behavior; avoid argumentation; refrain from directly confronting resistance; and encourage self-efficacy, or the individual's belief that he/she has the ability to change (Swanson et al., 1999, in CSAT, in press).

This approach has been successful with a variety of problems, client populations, and settings, and the methodology appears to be generally applicable, although it was developed primarily with heavy drinkers and cigarette smokers. It can be useful to help instill motivation throughout all phases of recovery and treatment with culturally and economically diverse populations (CSAT, 1999c). Motivational interventions are relatively new but represent a promising approach to facilitating positive behavior change for people with co-occurring substance abuse disorders and mental disorders.

Cognitive/Behavioral Approaches

Cognitive-Behavioral Therapy (CBT) uses cognitive and/or behavioral strategies to identify and replace an individual's irrational beliefs that arise from substance abuse or mental illness (e.g., "The only time I feel comfortable is when I'm high.") with rational beliefs (e.g., "It's hard to learn to be comfortable socially without doing drugs but people do so all the time.") (CSAT, 1999b). CBT approaches have been applied in both the substance abuse and mental health fields, especially as part of relapse prevention programs (Beck et al., 1993). CBT can be conducted as part of individual and group interventions.

CBT has been adapted for individuals with co-occurring substance abuse disorders and mental disorders. For example, Weiss and colleagues (1998) developed a 20-session relapse prevention group for people with co-occurring bi-polar and substance abuse that includes a treatment manual describing the model. Two group therapists, trained in both substance abuse and mental health, use non-confrontational methods to help group participants with ambivalence about complying with treatment, coping with high-risk situations, self-monitoring of moods and thought patterns that trigger drug use, and with life-style modifications that promote better self-care and positive interpersonal relationships. An outcome evaluation of this model will be implemented as part of the National Institute of Drug Abuse's Behavioral Therapies Development Program. The primary goals for this program include:

- Provide education about the nature and treatment of substance abuse and mental disorders.
- Help clients come to terms with their illnesses.
- Encourage clients to offer and receive support from each other as part of their recovery efforts.
- Help clients develop the desire for abstinence, and then attain it.
- Ensure compliance with treatment plans, especially medications.

NIDA's Behavioral Therapies Development Program delineates three stages of behavioral therapy research. Stage 1, the earliest stage of behavioral therapy development research, is viewed as an iterative process involving identifying promising clinical, behavioral, and cognitive science relevant to treatment, generating new behavioral therapies, operationally defining the therapies in manuals, and pilot testing and refining the therapies. Stage II research consists of efficacy testing

of promising therapies and investigation of the mechanisms and key components of behavioral therapies. Stage III research is aimed at understanding if and how an efficacious therapy may be transported to the community, including testing the utility of training procedures and techniques. NIDA's Behavioral Treatment Development program includes the development and testing of behavioral therapies, alone and in combination with pharmacotherapies, for individuals with co-occurring substance abuse disorders and mental disorders.

Another model program that utilizes cognitive-behavioral approaches with this population has been tested by Kavanaugh and colleagues (1998), and three research groups are refining cognitive-behavioral approaches in substance abuse counseling to better serve individuals with cooccurring mental disorders (Barrowclough et al., 2000; Bellack and DiClemente, 1999; Graham, 1998; Carey, 1996).

Modified Therapeutic Communities

The Therapeutic Community (TC) has been addressing the needs of people with substance abuse disorders for more than 30 years and its methods and effectiveness have been well-documented (DeLeon, 2000; Lees et al., 1999; Hubbard et al., 1997; Roberts, 1997; DeLeon, 1993). The concept is based on a clearly defined theoretical model that views drug abuse as a disorder of the entire individual necessitating a focus on conduct, attitudes, moods, values, and emotional management. The approach focuses on creating structures and activities within residential environments to promote personal integration and recovery.

Modified Therapeutic Communities (MTCs) adapt the principles and methods of the TC to the needs of individuals with co-occurring disorders. As with TCs, MTCs promote a culture in which individuals can learn from each other and grow from being a part of a community. Four general areas define the types of interventions provided:

- Community enhancement (to promote affiliation within the community)
- Therapeutic/educative activities (to promote expression and instruction)
- Community/clinical management (to maintain a safe environment)
- Vocational activities (to operate community facilities and prepare for employment)

The key modifications from the formal TC model include increased flexibility, decreased intensity, and greater individualization for people with co-occurring disorders. Activities are adapted in response to the individual's co-occurring disorder, cognitive impairments, and levels of functioning (Sacks, 2000).

The MTC has been implemented not only in community residential programs (Sacks et al., 1998), but also in general hospitals (Galanter et al., 1993), substance abuse treatment programs (Argus community, 1998), and as part of traditional, long-standing TC agencies such as Phoenix House, Walden House, and Gaudenzia, Inc. (Guydish et al., 1994; Sacks et al., 1998). Evaluations of the MTC approach have demonstrated positive outcomes for drug use and employment (DeLeon, 2000), psychological functioning (Rahav et al., 1995), and involvement in criminal activity (Sacks et al., 2001).

Assertive Community Treatment (ACT)

Assertive Community Treatment (ACT) is an outpatient treatment model, adapted from traditional case management methods, for individuals with serious mental illnesses. Designed to provide more intensive, long-term services for individuals requiring assertive outreach and engagement due to their reluctance to engage in traditional treatment approaches (Stein and Test, 1980). ACT's core components include community-based services; assertive engagement with active outreach; high intensity services; small caseloads; continuous 24-hour responsibility; team approach (full team takes responsibility for all clients on the caseload); multi-disciplinary team, reflecting integration of services; close work with other community support systems; and continuity of staffing (Drake et al., 1998).

These programs place a special focus on engaging the person in a positive helping relationship, providing assistance with basic needs such as housing, supporting stable functioning in the community, and providing direct and integrated mental health and substance abuse services. The approach also has been applied with homeless and criminal justice populations.

By adding a substance abuse treatment component, ACT has been modified to address the needs of individuals with co-occurring disorders, particularly those with serious and persistent mental illnesses who have had difficulty engaging in traditional approaches. In addition to the core components of the basic ACT program, a number of specialty activities have been added (Stein and Santos, 1998; Drake, McHugo et al., 1998; Ridgely and Jerrell, 1996).

- Direct substance abuse treatment interventions (often through the inclusion of a substance abuse counselor on the multidisciplinary team).
- A team focus on clients with co-occurring disorders (Drake, McHugo et al., 1998).
- Treatment groups for individuals with co-occurring disorders (Drake, McHugo et al., 1998).
- Modifications of traditional mental health interventions, including a strong focus on the interrelationships between substance abuse and mental health issues (e.g., skills training that addresses social situations involving substance abuse) (Drake and Mueser, 2000).

Growing evidence supports the therapeutic effectiveness of the ACT model for individuals with co-occurring disorders, particularly when both the substance abuse and mental health treatment related services were provided directly by the ACT team (Drake and Mueser, 2000; Drake, McHugo et al., 1998). In fact, little evidence supports the success of ACT in reducing substance abuse when the substance abuse services were brokered to other providers and not provided directly by the ACT team (Morse et al., 1997).

Two recent studies have demonstrated a measure of cost-effectiveness for the ACT approach (McHugo et al., 1998; Drake et al., 1996, Drake, Jerrell et al., 1996; Jerrell et al., 1994), even though the overall costs to implement ACT fully for any single client can be high (CSAT, in press). Nonetheless, based on the evidence collected to date and the accessibility and clinical utility of its methods, ACT has been recommended by clinical experts as an exemplary treatment

model to help meet the needs of individuals with co-occurring substance abuse disorders and mental disorders (CSAT, in press).

Housing and Employment Services

People with co-occurring substance abuse disorders and mental disorders frequently have multiple health, mental health, substance abuse, and social service needs, such as housing and employment. For this reason, treatment providers must be prepared to help clients access a broad array of services to stabilize their living conditions and sustain their recovery. When each of the needs – health, habilitation, housing, and vocation – are met, outcomes for people with co-occurring substance abuse disorders and mental disorders improve.

For example, McLellan and colleagues (1998, 1993) found that clients with substance abuse who also received mental health, vocational, medical, legal, and family services evidenced improved outcomes. Two areas of particular value are housing and work (CSAT, in press). See the discussion of homelessness in the next section of this chapter for more information about housing.

Employment can be an important part of the recovery process, helping people with cooccurring disorders develop the motivation to change, stabilize their psychiatric symptoms, and
attain sobriety (Shaheen et al., 2000; Blankertz et al., 1998, in CSAT, in press). Successful job
training programs for people with co-occurring disorders include comprehensive assessment,
ongoing case management, housing, supportive services, job training and job placement services,
and follow-up. Work and vocational rehabilitation have long been part of the services offered to
individuals recovering from mental illnesses, and to a lesser degree from, in part because in the
past, clients often were expected to first maintain a period of sobriety.

In spite of the special challenges they face, many people with co-occurring disorders do work. Effective employment program models for people with serious mental illnesses and co-occurring substance abuse – including programs of transitional employment, supported employment, and individual placement and support – must be flexible in how they define success and be prepared to work with individuals over the long-term. A "work-first approach," as opposed to extensive pre-vocational training, can motivate a person to address other problems in his or her life including substance abuse (Shaheen et al., 2001).

Consumer Involvement

In addition to involvement in self-help groups, it is critical for consumers and recovering persons and their family members to play a role in every aspect of the development and implementation of both substance abuse and mental health programming (U.S. DHHS, 1999b). The need to enhance consumer participation was also highlighted by SAMHSA constituents (SAMHSA, 2002f).

Consumers and recovering persons may well be their own best advocates, and today, many are engaged actively in the substance abuse treatment and mental health services fields. They bring special characteristics that support the recovery of individuals from both substance abuse and mental disorders: subjective knowledge of the service delivery system, empathy for the struggles

related to the process of recovery, a capacity to build rapport, and fundamental respect for the integrity of each person.

Consumers and recovering persons have also become advocates in the communities where they live and work, and have been involved in initiatives to shape policy at the Federal, State, and local levels. In therapeutic communities and modified therapeutic communities (described above), consumers are an integral part of every feature of programming (Sacks et al., 1998).

In addition, consumers and recovering persons have become active participants in the self-help movements in both substance abuse and mental health fields by developing consumer-run programs from drop-in centers with case-management and recovery support components, to outreach programs, and from housing programs to crisis services. Consumers and recovering persons are also often employed as staff in programs operated by non-consumer professionals (U.S. DHHS, 1999b).

Critically, consumer involvement has provided an effective means to deal with the discrimination and stigma associated with substance abuse and mental disorders. Stigma leads many people to avoid living, socializing, or working with, renting to, or employing people with these disorders (Levey et al., 1995). Stigma also reduces consumer access to resources and opportunities, fuels isolation and hopelessness, and leads to outright discrimination and abuse (U.S. DHHS, 1999b). By becoming directly involved in all aspects of their care, consumers have had increasing success in making change happen. They have helped shape policies and programs that are non-discriminatory, advocated for change at the community level, and supported each other in dealing with the negative consequences of discrimination and stigma.

Dual Recovery/Self-Help Programs

Within the substance abuse treatment community there is a recognition that professional treatment has natural limits and that continuing care beyond formal professional treatment is critical to achieving a satisfactory outcome for individuals affected by substance use disorders. One important and inexpensive form of continuing care is the self-help, peer support or mutual aid program.

Self-help programs are a central feature of most substance abuse treatment programs. More recently, they also have become an important source of support for individuals with mental disorders. During the past decade, recovery/self-help programs specifically for people with cooccurring substance abuse disorders and mental disorders have also emerged as an important adjunct to treatment (Pepper and Ryglewicz, 1996; Dupont, 1994).

Self-help approaches have their genesis in programs like Alcoholics Anonymous and have grown to address a wide variety of addictions. Narcotics Anonymous and Cocaine Anonymous are two of the largest self-help organizations in the area of chemical addictions (CSAT, in press). Recovery Anonymous and Schizophrenics Anonymous support individuals living with mental disorders (Chamberlain and Rogers, 1990).

Self-help programs usually include the "12-step method," with its focus on developing personal responsibility within the context of peer support. Specific applications, however, may vary based on the needs and orientation of agencies/communities sponsoring the programs. Four

key factors have given rise to the creation of recovery/self-help programs specific to the needs of individuals with co-occurring disorders:

- Stigma and Prejudice. Stigma related to both substance abuse and mental illnesses can create significant barriers to establishing trust and safety in traditional self-help groups.
- Inappropriate Advice (Confused Bias). Some members of self-help and mutual-help groups do not support the use of medications to treat the symptoms of mental illnesses. In some situations, people with co-occurring disorders have felt the need to stop taking medications to benefit from the groups. The Alcoholics Anonymous (AA) mutual-help groups have helped address this issue in a brochure, "The AA Member: Medications and Other Drugs" (1984) that supports the appropriate use of medications for co-occurring disorders.
- *Direction for Recovery*. Traditional self-help programs provide support and direction based on years of collective peer experience. Dual recovery programs for people with co-occurring substance abuse disorders and mental disorders provide the opportunity to draw upon collective peer experience with both disorders.
- Acceptance. Traditional self-help programs create environments supporting the experience of safety and security that are central to recovery. Dual recovery programs provide participants with the opportunity to share openly and honestly about their experiences with both disorders (Hamilton, 2001).

Laudet (2000) conducted a survey of about 300 members of Double Trouble in Recovery, a 12-Step oriented self-help group. Three areas of members' difficulty were: (1) dealing with feelings and inner conflicts, (2) work and money problems, and (3) maintaining sobriety. Magura (2002) found that consistent participation in Double Trouble in Recovery was associated with better medication adherence. Individuals who were less adherent to their medication regimen had more severe symptoms of mental disorders at the one-year follow-up point.

Despite the apparent problems that occur for people recovering from co-occurring disorders in traditional 12-Step programs, Laudet (2000) reported that a majority of those attending co-occurring self-help groups also attended either Alcoholics Anonymous or Narcotics Anonymous to focus on their substance use issues or to stay clean.

Interventions for Children and Adolescents with Co-Occurring Disorders

As noted elsewhere in this report, growing evidence suggests that co-occurring substance abuse disorders and mental disorders affect adolescents. In studies of adolescents receiving mental health services, about half had a co-occurring substance abuse disorder (Greenbaum, 1996). The study found that depression and conduct disorders were the most frequent mental disorders diagnosed in the presence of a co-occurring substance abuse disorder.

Available data indicates that adolescents who have a substance abuse disorder have an increased risk of experiencing other mental disorders (Beitchman, 2001). In fact, Wise (2001) points out that the majority of adolescents with substance abuse disorders have a current anxiety,

mood or disruptive disorder. Conduct disorders and mood disorders are the two disorders most consistently reported (Wise, 2001).

In addition to recognizing the relationship between substance abuse disorders and other mental disorders, it is important to note which substances are most likely to be abused by adolescents: alcohol, marijuana, and cocaine. While adolescents use other substances of abuse, the demand for treatment may not be keyed to these other substances. Nevertheless, all substances of abuse should be taken into consideration when addressing the needs of adolescents who present for treatment of either a substance abuse or mental disorder.

Co-occurring disorders among children and adolescents present special challenges and opportunities, not the least of which is engaging in the processes of treatment and recovery. The experience of many youth and their families has been difficult at best, and potentially damaging. Their dilemma is described in the report from a SAMHSA-sponsored work group of the Federation of Families for Children's Mental Health and Key for Networking, Inc. titled, *Blamed and Ashamed* (Federation of Families, 2000). The report notes, "Youth and family members were severely blamed and shamed by providers and systems when what they needed was nonjudgmental recognition of their struggle to find caring help and support." Adolescents with severe emotional or behavioral disorders and substance use problems require careful and thorough assessment, individual treatment plans, and increased supervision in order to prevent risk behaviors and to increase the possibility of discharge placement into the community rather than to another institution (Weiner, et al., 2001). During input meetings, SAMHSA constituents identified the need to better address the care of children and adolescents with co-occurring disorders at the system, program, and research level (SAMHSA, 2002f).

Barriers to Treatment

Children and adolescents with co-occurring substance abuse disorders and mental disorders, and their families face special challenges to treatment. In part, the challenges arise because more knowledge is needed about the prevalence (rates) of co-occurring substance abuse disorders and mental disorders among children and adolescents. Developmentally appropriate assessment standards to help in that effort need to be standardized.

Other factors arise as well. The knowledge base about what services work best to help adolescents with either substance abuse or mental disorders is robust. However, far less is known about what practices are most effective to meet the needs of adolescents with co-occurring substance abuse disorders and mental disorders (CSAT, 1993). For that reason, both substance abuse and mental health services programs designed for adults may not be appropriate for children or adolescents. Certain program elements, such as confrontation, may alienate children or teens. Experts in the field acknowledge the need to differentiate between the needs of adolescents and adults in treatment and engagement approaches, ensuring that developmental issues are addressed for children and adolescents of all ages.

Identifying and securing relevant services for children with co-occurring substance abuse disorders and mental disorders is complicated by the broad web of agencies with which families must contend – schools, juvenile justice system, health care system, substance abuse and mental health services systems, child welfare system, among others. The ability to negotiate these myriad systems also can be frustrated by the stigma that still accompanies mental and substance abuse

disorders. Families choose not to have their child "labeled," or may be concerned about community response. All of these factors combine to suggest that integrated services are especially beneficial for children with co-occurring disorders and their families.

Moreover, too often, children and adolescents receive whatever services are supported by public or private funding, such as health insurance, regardless of their primary need. Thus, adolescents with co-occurring disorders may be hospitalized because payers favor that, though there is little evidence to show its greater efficacy when compared to outpatient or community-based services (Petrila et al., 1996).

Effective Interventions

While children and adolescents with co-occurring substance abuse disorders and mental disorders are not simply small adults, some of the treatment issues are similar. As with adults, co-occurring disorders in children and adolescents vary in level of severity; as with adults, assessment is on ongoing process. Youth should be able to move back and forth across the level of care continuum based on their progress and changes in the environment. In addition, the therapeutic alliance between the child or adolescent and the therapist is a critical component, even in family therapy models (CSAT, 1999a).

However, key differences must be borne in mind. For example, far less is known about the staging of co-occurring disorders in young people – and whether the course of one of the disorders may affect that of the other disorder (Meyer, 1986, in CSAT, 1999a). In addition, unlike treatment for adults, treatment for youth must be appropriate to the individual's developmental stage. Thus, the treatment of a 13-year-old should not be identical to that of an 18-year-old.

While programs for young people with co-occurring disorders vary in setting, length, and intensity, research has found that the most effective interventions are comprehensive –integrating legal, health, recreational, and educational services— and include common elements such as group therapy, family involvement, and the recognition that recovery is a process (Johnson et al., 1995; CSAT, 1991). Involvement of youth in their treatment is key. A study based on in-depth interviews with 150 youth with co-occurring disorders recommended that providers engage youth in designing and evaluating treatments (Federation of Families, 2000).

Interventions by front-line professionals—including family physicians, school psychologists, child welfare workers, and others—can identify problems early and prevent or forestall the need for more intensive and expensive treatment. These professionals need to be suitably trained to assess and treat, or refer for treatment, children and adolescents with co-occurring substance abuse disorders and mental disorders (Federation of Families, 2000). These providers also should become part of the comprehensive service team that participates in or is kept well informed of a diagnosis, treatment, and aftercare provided by others.

SAMHSA's three-year Cannabis Youth Treatment (CYT) program, exemplifies the above (began in October 1997). Compared with adolescents who do not use marijuana, marijuana users were four times more likely to report symptoms related to conduct or attention deficit disorders or to have dropped out of school, been in a fight, or been engaged in illegal activity (the latter not

limited to drug possession or use). Adolescent participants were assigned to one of five manualized treatment conditions: Motivational Enhancement Therapy and Cognitive Behavioral Therapy (MET/CBT) for five sessions; MET/CBT for twelve sessions; Family Support Network (including MET/CBT) for twelve sessions; Adolescent Community Reinforcement Approach; and Multidimensional Family Therapy. Findings show that all five treatments are effective.

Scant work has been done to identify ways in which programs serving either youth with substance abuse disorders *or* children and adolescents with mental disorders can best be adapted to serve youth with co-occurring mental and addictive disorders. Nonetheless, a number of programs and interventions designed specifically for children and youth with co-occurring disorders appear promising.

Case Management

Case management coordinates care for children and their families. As with adults, case management services for children and adolescents include a broad array of activities, ranging from brokered services to the direct provision of clinical care. Because the care needed by children and adolescents with serious emotional disturbances and co-occurring substance abuse disorders spans a broad range of service systems, case management services are of particular relevance and value for this population (U.S. DHHS, 1999b). One such model of services, called Children and Youth Intensive Case Management that provides service coordination, as well as assessment, planning, linkage, and advocacy, has been evaluated for use with children with co-occurring disorders. Initial findings are promising and support the use of intensive case management approaches with children and adolescents who have co-occurring disorders (Evans et al., 1992, in U.S. DHHS, 1999b).

Family Therapy

Family engagement is a critical element in the prevention and treatment of co-occurring disorders among children and adolescents. Family therapy has evolved from a concern that parents were the cause of their children's disorders to a recognition that parents represent one of the two most important influences on adolescents. Contemporary family therapy approaches, often termed multi-systemic or multidimensional therapy, work with adolescents, parents, parent-adolescent combinations, and whole families and include attention to the youth's environment, including peers, schools, and neighborhoods.

Families, peers, schools, and communities are the source of both multiple risk and protective factors, as highlighted in the "Prevention" chapter of this report. Including them in treatment is designed to reduce the risk factors these individuals and systems confer and increase the protective factors they offer. For example, a counselor may discourage association with deviant peers or encourage family members to join church or civic groups (CSAT, 1999a).

Family members should educate themselves and others and be encouraged to attend, as many already do, relevant 12-step or other support programs such as Alcoholics Anonymous, Al-Anon, and Narcotics Anonymous (Federation of Families, 2001; Sciacca and Hatfield, 1995). Basic tenets of the 12-step approach may conflict with adolescent development but can be adapted to younger clients without sacrificing pivotal elements (Petrila et al., 1996).

Multisystemic Therapy

Multisystemic Therapy (MST), a family and community-based intervention for youth with substance abuse disorders and histories of violence, has been cited by SAMHSA, the National Institute on Drug Abuse, and the U.S. Surgeon General (CSAT, 2001) as an evidence-based model. An extensive body of clinical research shows MST's effectiveness at improving family relations, decreasing adolescent substance use, and reducing long-term rates of re-arrest and out-of-home placements. Initial results are promising for youth receiving MST instead of psychiatric hospitalization (Henggeler et al., 1998, in U.S. DHHS, 1999b).

Therapeutic Communities

The therapeutic community model – an intensive, comprehensive adult treatment model – has been modified successfully to treat adolescents with substance abuse disorders. Adolescents entering TCs often have both substance abuse disorders and a behavior problem (e.g., truancy, poor school performance) or diagnosable mental disorder (e.g., ADHD, conduct disorder) (Jainchill, 1997, in CSAT, 1999a). A majority of youth in TCs have been referred by the juvenile justice, family court, or child welfare systems.

In contrast to TCs for adults, those for adolescents are characterized by shorter stays, less confrontational treatment interventions, greater staff supervision and evaluation, treatment that is staged across the behavioral, emotional and developmental dimensions, attention to potential learning disabilities and mental disorders (e.g., ADHD), greater focus on education than on work and preparation for employment, and, critically, family involvement (CSAT, 1999a).

TCs often also provide comprehensive family services programs: family assessments, family counseling and therapy, parent support groups, and family education programs. The ability to integrate families into the TC program for adolescents can be challenging, especially for those TCs serving youth from rural areas. In some cases, the TC itself may provide a surrogate extended family for its residents (CSAT, 1999a).

Relatively few studies have assessed effectiveness of long-term residential treatment for youth. The extant literature suggests that positive outcomes – such as reductions in substance use – occur when a full treatment course is completed (CSAT, 1999a). The need for further research, particularly regarding treatment duration and duration of positive treatment outcomes following program completion, would benefit the field.

The Comprehensive Community Mental Health Services for Children and Their Families Program

The Comprehensive Community Mental Health Services for Children and Their Families Program, administered by SAMHSA's Center for Mental Health Services, was implemented in 1993. It provides grants to States, Territories, American Indian and Alaska Native tribes, and communities in response to the broad range of disparate service needs for children with serious emotional disturbance (including those with co-occurring substance abuse disorders) and their families. The concept of a system of care, the premise on which the program is built, is based on a

set of values and principles first articulated over 15 years ago by Stroul and Friedman (1986). The program consists of a comprehensive and individualized range of mental health and other services, including treatment and supports, which are organized into a coordinated network to meet the needs of children with serious emotional disturbance and their families.

Based on the program's national evaluation, children with co-occurring serious emotional disturbance and substance abuse represent 17 percent of program participants of all ages, but they constitute almost 50 percent of the adolescent participants (Santiago, 2000; CMHS, 1999b). These children with co-occurring disorders face greater challenges, yet they made greater improvements in functioning in the home, school, and community after 1 year than did those without these disorders (CMHS, 1999b). They experienced a 29-point decrease in their overall level of functional impairment as measured by the Child and Adolescent Functional Assessment Scale (CAFAS). Children without a co-occurring disorder experienced a 12-point decrease in their overall levels of impairment (CMHS, 1999b). The CAFAS assesses levels of functional impairment (severe, moderate, mild and minimal) in the areas of role performance in the school, work, home, and community; moods and emotions; behavior toward others; self-harmful behavior; substance use; and thinking.

Circles of Care

The Circles of Care grant program was initiated by CMHS in 1998 to assist federally recognized tribes and urban Indian programs. The program helped these groups to plan, design, and assess systems of care for Native youth with co-occurring substance abuse disorders and mental disorders.

Of the 16 communities that received funding, all addressed the issue of co-occurring disorders. Eight of the programs operate inpatient facilities, eight are funded by CSAT as part of its substance abuse treatment initiatives, and two have received support from the Robert Wood Johnson Healthy Nation substance abuse prevention grants. The grants have been used to improve access to funding for critical programs and to improve cultural understanding among mainstream providers for the Tribal members and organizations.

Interventions for Older Adults with Co-Occurring Disorders

Today, older adults tend to under-utilize mental health and substance abuse services. This may be a generational issue related to the considerably greater stigma that was associated with these disorders in the past. The reliance of older adults on primary care providers also contributes to the under-utilization of services – and to the under-identification and diagnosis of mental and/or substance abuse disorders. Also, many primary care physicians receive insufficient training in geriatric assessment and care, or in the treatment of substance abuse and mental disorders in older adults (Administration on Aging, 2001). As SAMHSA constituents observed, the need is great and the cost of such inattention is high (SAMHSA, 2002f). For example, depression is a known risk factor for suicide in older adults; national rates of suicide are highest among Americans age 65 and older (The Surgeon General's Call to Action to Prevent Suicide, 1999).

Substance abuse, too, is likely to remain undiagnosed in older adults for a number of reasons. Symptoms of substance abuse in older individuals may mimic symptoms of other diseases common in this group, including diabetes, dementia, and depression, leading to potential misdiagnosis (CSAT, 1998). Older adults may be ashamed to seek treatment for substance use, and family members and even providers may not understand that substance abuse can be successfully treated in older adults. Here alcohol testing may be helpful; for the same reason, drug testing among older adults should include attention to prescription drugs that are subject to misuse and abuse. Further, mental health services and substance abuse treatment providers rarely receive sufficient training in the diagnosis and treatment of these disorders in older adults (Schuckit, 1982, in Bartelsand Liberto, 1995).

Older adults often receive care from many different providers – including psychiatrists, elder care workers, mental health case managers, homemakers, visiting nurses, respite care workers, and substance abuse counselors – and they may attend 12-step and other self-help groups and senior citizen center programs (Bartels in Liberto, 1995). Coordinating that care can help contribute to better diagnosis and treatment; it can help avoid the dangers of inadvertent medication misuse that arises so frequently among older adults – the foremost users of both prescription and over-the-counter medications.

Effective Interventions

Few studies have been conducted to assess the efficacy of various treatment models for older adults with co-occurring disorders. What is known, however, is that, successful programs for older adults often involve collaboration between a behavioral health care provider and an aging services provider. One such example is in Adair County, Kentucky. The program – a joint venture of the county government, the community mental health center, and the area agency on aging – provides a broad range of treatment and services that can benefit older adults with co-occurring disorders, such as outreach, assistance with daily activities, nursing services, individual and group counseling, personal care, advocacy, and meals. Referral arrangements exist with the local hospitals, self-help groups, nursing homes, rehabilitation programs, and physicians (SAMHSA, 2002b).

High-Risk Populations

Individuals with co-occurring substance abuse disorders and mental disorders are at particular risk for negative outcomes, including HIV/AIDS, homelessness, and contact with the criminal or juvenile justice systems. Likewise, childhood trauma, and past or ongoing violence put vulnerable individuals at risk for developing substance abuse and mental disorders. SAMHSA constituents identified the need to support treatment for co-occurring disorders in programs that serve populations at particular jeopardy for co-occurring disorders (SAMHSA, 2002f). This section examines challenges and opportunities in serving people with these and other multiple vulnerabilities.

People with Co-Occurring Disorders and HIV/AIDS

HIV infection is a major and growing problem among people who have co-occurring substance abuse disorders and mental disorders; the onset of HIV often adds its own behavioral health complications (Mahler, 1995; Kalichman et al., 1994; Osher, 1996, 2001; Drake, Essock et al., 2001). Up to 15 percent of people with serious mental illnesses may have HIV, and up to 13 percent of those being treated for substance abuse are likely infected (Mahler, 1995).

Individuals with co-occurring substance abuse disorders and mental disorders who also have HIV/AIDS face many of the same barriers to treatment noted throughout this report, but they must deal, not just with two systems of care, but three. The combined stigma of the three illnesses, separate and inadequate funding streams, and professional norms that differ among programs serving those with HIV/AIDS, substance abuse, and mental disorders, make it difficult for individuals with all three illnesses to obtain a full range of needed and appropriate help.

Effective Interventions

If mental disorders, substance abuse and HIV/AIDS each alone pose challenges to the health care system as a whole, the problem is multiplied many-fold for individuals experiencing all three simultaneously. Individuals with these three conditions can be difficult to engage and retain in treatment and to support in the community (SAMHSA, 2002a). They can be helped, generally, with attention to culturally competent outreach and engagement strategies, stress reduction, substance abuse treatment, mental health services, and medical management of the HIV (Mahler, 1995). Some State HIV, mental health, and substance abuse agencies have integrated services. For example, an HIV/AIDS clinic may also offer mental health and substance abuse services. These and other similar ways of coordinating care can help reach people with co-occurring substance abuse disorders and mental disorders and HIV/AIDS.

People with Co-Occurring Disorders Who Have Other Concurrent Medical Conditions

In addition to HIV/AIDS, many individuals with co-occurring disorders experience other medical conditions such as hypertension, chronic liver disease, and hepatitis C. Individuals with substance abuse and mental disorders are about two to three times more likely to be nicotine dependent than the general population (Breslau, 1991; Huges, 1986); they experience medical morbidity and mortality at an increased rate. While smokers with mental illnesses and addictions experience the same smoking-related physical health consequences as the general population, they do so in greater numbers and are more likely to die of smoking caused illnesses (Lasser, 2000; Brown, 2000; Dixon, 1999; Hurt, 1996).

Effective Interventions

Research has found that individuals with substance-related medical conditions benefit from integrated treatment for both disorders. Moreover, those receiving integrated services show a higher rate of abstinence than those in non-integrated services (Weisner et al., 2001). While such an approach appears cost-effective as well, a number of impediments to its adoption by treatment

programs exist. Start-up costs are high, and integrated care can increase utilization as previously undetected or neglected problems are diagnosed and treated (Managed Behavioral Health News, 1999).

At a minimum, screening for physical ailments and brief interventions can be provided to individuals in substance abuse treatment, yielding good outcomes (Fleming et al., 1997). Providing a mental health call service that provides consultation by or referral to a mental health provider within 24 hours of a physician's call can reduce the use of high-cost interventions such as hospitalization (Managed Behavioral Health News, 1999).

People with Co-Occurring Disorders Who Are Homeless

An estimated 637,000 adults in the United States are homeless on any given night, 2.1 million people over the course of a year (Burt et al., 1999). Approximately 39 percent of people who are homeless also have a mental disorder; an estimated 50 percent of adults with serious mental disorders who are homeless experience a substance abuse disorder as well (U.S. DHHS, 1999b; Lehman and Cordray, 1993; Fisher and Breakey, 1991). One-third of veterans experiencing homelessness who were treated in specialized Veterans Affairs programs in 2001 were found to have had co-occurring substance abuse disorders and mental disorders (Kasprow et al., 2002).

People with serious mental illnesses and co-occurring substance abuse disorders who also are homeless experience other medical conditions. Life on the streets makes it difficult for individuals to avoid malnutrition and to receive appropriate care for such chronic conditions as diabetes, HIV/AIDS, tuberculosis, and pulmonary and heart disease. At the same time, homelessness itself is a contributing factor in acute illnesses among people with co-occurring disorders (Federal Task Force, 1992).

People with both of these disorders are at greater risk for homelessness as they tend to have more severe symptoms of their mental illnesses, deny both their mental illnesses and their substance abuse problems, refuse treatment (including medications), and abuse multiple substances. They may be antisocial, aggressive, and, when not receiving treatment, sometimes may be violent. They also have higher than average rates of suicidal behavior and ideation (Burt et al., 1999; Federal Task Force, 1992; Fisher and Breakey, 1991). Individuals with co-occurring disorders who are homeless often have more severe health problems, poorer community adjustment, and poorer one-year outcomes compared to other homeless individuals with serious mental illnesses alone (Gonzalez and Rosenheck, 2002).

Once homeless, people with co-occurring disorders require extensive assistance to reach and receive services they need and are more likely to remain homeless than other groups (Winarski, 1998). They are more likely to be older, male and unemployed; to be homeless longer and living in harsher conditions; and to suffer greater distress, demoralization, and alienation from their families. They tend to be isolated, mistrustful, and resistant to help (Dixon and Osher, 1995).

Currently, the Secretary of Health and Human Services is sponsoring a workgroup to reduce chronic homelessness. The workgroup is identifying the service needs of persons

experiencing chronic homelessness – among them individuals with substance abuse and mental disorders, including those with co-occurring disorders. HHS also is collaborating with the VA and HUD to identify and address the specific needs of homeless veterans as part of its overall effort to reduce chronic homelessness.

Effective Interventions

People with co-occurring disorders who are homeless need to interact with multiple service systems, and often fall through the cracks of fragmented care. As noted previously, integrated treatment for co-occurring substance abuse disorders and mental disorders for people who are homeless yielded fewer days of hospitalization, more days in stable housing, and greater recovery from substance abuse, especially alcoholism, than did non-integrated services (Drake et al., 1997). Successful interventions for this particular population include motivational interviewing; engagement which includes prolonged outreach and provision of basic necessities; assessment that is continuous from the point of engagement; persuasion; active treatment; relapse prevention through on-going services and careful follow-up; evening and weekend hours; and attention to other needs, such as childcare and employment (Winarski, 1998; Dixon and Osher, 1995). Intensive case management and housing vouchers also are effective (Rosenheck et al., 2002).

A "housing-first" approach also may help. Experience and research indicate it can be particularly effective with people who at least initially, are resistant to treatment. The New York City homeless program, Pathways to Housing, for example, provides support services through a team that uses a modified assertive community treatment model. Over 5 years, 88 percent of the program's tenants remained housed, and most clients eventually reduced or stopped their substance abuse and showed other improvements (Tsemberis and Eisenberg, 2000). Programs that add work and housing to day treatment or that use a modified therapeutic community approach also show promise for individuals with co-occurring disorders who are homeless (CSAT, in press).

Women with Co-Occurring Disorders

Approaches to treatment for women with co-occurring disorders cannot be undertaken in the same way as they are for men. Women differ in how their mental disorders may present, the mixture of problems, their response to medication and non-somatic treatments, and even the illnesses they are likely to develop. According to national surveys, women with co-occurring disorders are more likely than men to have affective disorders, while men are more likely to have antisocial disorders. Women are also more likely to suffer from three or more disorders simultaneously (Zweben, 1996). Compared to men, women with co-occurring disorders are more likely to seek help in mental health and out-patient settings; have stressful life situations (e.g., single parenthood, children and other dependents, unsupportive families); have poorer job skills and fewer social networks; and suffer from serious health problems.

Barriers to Treatment

Just as in many other areas of healthcare, when it comes to women's health, research about co-occurring substance abuse disorders and mental disorders in women is severely limited. As a result, little is known about what approaches to outreach and treatment work best. What is known,

however, is that women with co-occurring disorders often have numerous medical and social problems such as homelessness, poverty, hospitalization, and separation from children. Their families often are overwhelmed; their children are more prone to various problems (Jessup, 1996).

When women do seek treatment, it often is geared to men and conducted with little attention to women's special needs. For instance, women often dislike the confrontational approach common in substance abuse treatment. In addition, many programs do not offer day care or parenting education. For these and other reasons, mothers are underrepresented among women in treatment, leading many to postpone getting help until a real crisis occurs (Ringwald, 2002; Zweben, 1996).

Women involved with the child welfare system may resist mental health or substance abuse treatment for fear that they will risk losing custody of their children. This is especially true for women who are being abused and who fear their batterer will use a diagnosis of mental or substance abuse disorders against them (Warshaw, 2001).

Pregnancy can complicate care of women with co-occurring disorders who may find themselves seeking help from three or more clinics or providers, one for each of their conditions. Pregnancy makes women more vulnerable to their other problems, such as domestic violence or caretaking chores, while also making their treatment all the more critical. Research on this topic is sparse (Kessel, 1994).

Effective Interventions

Treatment for women with co-occurring disorders needs to address the issues most critical in their lives. Among the most salient is the history of physical or sexual abuse that has been experienced by (or may still be a fact of life for) many women with co-occurring substance abuse disorders and mental disorders. Trauma and abuse must be addressed both in treatment and in aftercare.

To avoid returning to a dangerous household, women may need specialized residential assistance. The period immediately following treatment often is the most difficult. Clinicians should coach women in the use of 12-step groups, often a critical adjunct to treatment, since these groups or some of their members may appear intimidating or unsympathetic to the needs of members with co-occurring disorders (Zweben, 1996).

While the treatment needs of women with co-occurring disorders may challenge providers, the benefits of treatment often extend beyond the women themselves. Many are mothers, caretakers, or spouses whose well-being and recovery affect many others. Prenatal care for pregnant women with co-occurring disorders offers a window of opportunity to identify other needs for which they may be ready to seek care (Kessel et al., 1994).

Innovative collaborations among mental health, substance abuse, and other services have yielded good results with women (Jessup, 1996). More research is needed on specific interventions for women with co-occurring disorders and how to integrate them into a comprehensive system of care.

Co-Occurring Disorders and Trauma

Present or past trauma – whether sexual, physical, psychological or emotional – is common in the lives of people with co-occurring substance abuse disorders and mental disorders. In studies that ask about lifetime abuse, between 51 and 97 percent of women with serious mental illnesses report some form of physical or sexual abuse (Goodman et al., 1997). Women with co-occurring disorders are even more likely to have experienced abuse than those who have a mental disorder but are not drug dependent (Alexander, 1996).

Forty-one to 71 percent of women in treatment for drug or alcohol disorders report having been sexually abused as children or adults; and 38 percent have been victims of violent crimes (Alexander, 1996). Women who had experienced any form of sexual abuse as children are three times more likely than other women to report drug dependence as adults (Zickler, 2002). Overall, sexual or physical abuse has been associated with post traumatic stress disorder, anxiety, depression, psychotic symptoms, personality disorders, and correlated with suicidal tendencies, risky sex and drug practices, and substance abuse (Goodman et al., 1997).

Though the causal relationship between trauma and either substance abuse and mental disorders is not always clear, a growing body of evidence suggests that PTSD precedes substance abuse or dependence (Jacobsen et al., 2001). People with PTSD are more likely to abuse substances than those without (Jacobsen et al., 2001) and to abuse the more severe illicit drugs such as cocaine and opiates (CSAT, in press). The combination of trauma and co-occurring disorders makes an individual all the more vulnerable to victimization. In a study of veterans in a PTSD assessment unit, 42 percent were found to be using drugs of abuse (excluding alcohol); the diagnosis of substance abuse was significantly associated with greater marijuana and depressant use as compared with stimulant (cocaine and amphetamines) use (Calhoun et al., 2000).

The toll of terrorism is a relatively new concern, though the traumatic past of many political refugees who come to the United States has concerned mental health professionals for years. Terrorism in the homeland is a growing factor. Researchers found that six months after the Oklahoma City bombing, almost half of the 182 survivors had a post-disaster mental disorder, and one-third had full-blown PTSD (North et al., 1999). A recent survey done by NIDA identified that there was an increase in use of cigarettes, alcohol, and other substances among individuals in New York City who experienced PTSD and depression after the September 11, 2001 terrorism attacks. Symptoms of panic attack were associated with this increase in use of all substances (NIDA, 2002).

A more recent survey by the New York Academy of Medicine reveals that Manhattan residents drank more alcohol and smoked more cigarettes and marijuana after the terrorist attacks of September 11. PTSD and depression were more common among those who said their smoking and drinking increased (Galea et al., 2002). The effects of the terrorist attacks and the subsequent war on terrorism are expected to be widespread in terms of mental health and substance abuse repercussions and treatment needs.

Dr. Jacobsen and colleagues have published an excellent literature review of substance use disorders in patients with post traumatic stress disorder. The authors concluded that vigorous control of withdrawal and PTSD-arousal symptoms should be sought during detoxification of individuals with co-occurring PTSD and substance use disorders. NIDA is currently supporting research on the development of effective behavioral treatments for this severely symptomatic population (Jacobsen et al., 2001).

Barriers to Treatment

Since abuse so often is perpetrated by partners or relatives, survivors often are cut off from helping social and support networks already frayed by co-occurring disorders (Harris, 1994). Further, the emotional pain of trauma and abuse alone can deter people from seeking help. Among people with PTSD, a significant portion said emotional pain, shame, and lack of trust deterred them from seeking treatment (DATA, 1999). For these same reasons, many people in treatment avoid talking about their experiences (Goodman et al., 1997). Many providers are uncomfortable or unprepared to raise these issues, as well.

When services are sought and received, recurring trauma may hinder continued engagement in that treatment program (Goodman et al., 1997). Equally, the nature of the services themselves may not meet the special needs of women. For example, since substance abuse treatment was designed predominantly for men, the special needs of women – who suffer higher rates of trauma – may be ignored (Ringwald, 2002).

Effective Interventions

Providers must be prepared to assess and treat the sequalae of trauma in individuals who have co-occurring disorders. To do so, they must be trained to work with trauma survivors. Providers must learn that a graduated approach to addressing trauma and its effects can help (CSAT, in press) as can modification of traditional approaches to care. For example, confrontational methods, so common in substance abuse treatment, must be amended to avoid retraumatizing clients (Harris, 1994).

Women often appreciate gender-specific groups and therapies since the presence of men may remind them of their abusers or create self-consciousness (Alexander, 1996). Likewise, men often benefit from single-sex therapy groups. Further, patients may need to express powerful emotions such as pain, blame, anger, or sadness. Clinicians should see this as part of the healing process and not automatically judge such expressions as psychiatric symptoms in need of medication (Harris, 1994).

Moreover, treatment for the trauma should occur concurrent with the treatment for the mental and substance abuse disorders. In fact, while integrated treatment has gained support with researchers, it also appears to be the preference of patients. For instance, those with PTSD and substance abuse see the two conditions as related and in need of simultaneous treatment (DATA, 1999). As part of that integrated service approach, both treatment and aftercare must include plans to prevent further victimization. Clients can benefit from education about physical and sexual abuse, sexuality, relapse prevention, stress management, personal safety, social and vocational

skills, leisure activities, parenting, healthy relationships, and safe housing, (Alexander, 1996; Harris 1994).

People with Co-Occurring Disorders in the Criminal Justice System

Estimates of the rates of severe mental and substance abuse disorders in jail and prison populations range from 3 percent to 16 percent (Peters and Hills, 1993; Teplin, 1990; Steadman et al., 1987). Offenders report a high incidence of substance abuse, and 6 in 10 were under the influence at the time of their crime (CSAT, in press). One-quarter of veterans with co-occurring disorders discharged from inpatient services were incarcerated during the first year after discharge (Rosenheck et al., 2000).

According to the U.S. Department of Justice, in 1998, nearly 284,000 prisoners –16 percent of State prisoners and local jail inmates and 7 percent of Federal inmates—had a mental illness (Ditton, 1999). Among detainees with mental disorders, 72 percent also have a co-occurring substance abuse disorder.

Compared to others in the justice system, individuals with mental illnesses are more likely to be using drugs or alcohol when they commit a crime, to have been homeless in the prior 12 months, and to have been in jail or prison or on probation prior to their current sentence (Ditton, 1999). Studies indicate that people with mental illnesses have a 64 percent greater chance of being arrested for committing the same offense as a person who does not have a mental illness (Teplin, 1984). People with serious mental illnesses, especially those who are homeless, frequently are arrested for minor felonies or misdemeanors such as trespassing, petty theft, shoplifting, and prostitution. In fact, both homelessness and substance abuse among people with mental illnesses are associated with higher arrest and incarceration rates. Among these individuals, men, young adults, and urban residents have higher arrest rates than women or individuals in rural areas (Clark et al., 1999). Further, many people with serious mental illnesses living on the streets or in shelters are themselves the victims of criminal activity.

Barriers to Treatment

Some jurisdictions may find it easier to incarcerate, rather than treat, a person with cooccurring disorders. This can result in delayed evaluations, leaving a person to languish in jail longer than if they had been formally charged with a crime (Champlain and Herr, 1995). Just as in communities, individuals in the criminal justice system who have co-occurring disorders have poorer chances at treatment; more difficulties with social and family relations, jobs, and housing; and greater chance of relapse.

In some respects, justice systems have become default providers of care, for many people with co-occurring disorders. Police, courts, and corrections departments often lack the resources to assess and treat these problems (National GAINS Center, 1999). Not surprisingly, most jails and prisons, as elsewhere, lack coordinated services for treating both disorders simultaneously if treatment is available at all (National GAINS Center, 1999).

Effective Interventions

Communities are developing innovative ways to connect mental health, substance abuse, and criminal justice systems in an effort to intervene, divert, and treat people with co-occurring disorders. The prevailing theme is one of systems integration, which follows from a shared commitment in all three service sectors (National GAINS Center, 1999). The Bureau of Unified Services in King County (Seattle), Washington, for example, operates under a philosophy that there is "no wrong door" into treatment for those in need – a philosophy shared by SAMHSA.

Effective interventions for defendants/offenders with co-occurring disorders include all of the program elements highlighted elsewhere in this chapter, such as individualized, flexible treatment provided by well-trained staff; a long-term focus; and integrated services (CSAT, in press). Treatments, such as therapeutic communities or cognitive behavioral methods used for other inmate groups, can be adapted.

During probation and parole, people with co-occurring disorders require additional monitoring of abstinence and symptoms. Smaller caseloads will help supervision officers, who should belong to multi-disciplinary teams operating in a flexible and supportive, rather than confrontational, manner (Peters and Hills, 1997).

Certainly the most effective way to address the problem of people with co-occurring disorders in the justice system is to keep them from entering the system in the first place. A three-year study found that effective treatment of substance abuse among people with mental disorders reduced arrests and incarcerations, but not non-arrest encounters with the police. Housing may further reduce these encounters (Clark et al., 1999).

Successful jail, court diversion, and treatment programs must be part of a comprehensive array of other jail services. These include screening, evaluation, short-term treatment, and discharge planning that are integrated with community-based mental health, substance abuse, housing, and social services (CMHS, 1995).

Youth with Co-Occurring Disorders in the Justice System

There is limited data on youth with co-occurring disorders in the criminal justice system in terms of prevalence as well as proper treatment and outcomes. Each year, more than 2 million youth under the age of 18 are arrested. Of these, one-half or 1 million youth will have formal contact (i.e., charges and/or a court appearance) with the justice system, and more than 100,000 will be placed in juvenile detention and correctional facilities (National GAINS Center, 1999).

Preliminary data suggest that two-thirds of the 1 million youth who have formal contact with the justice system, or more than 670,000 youth, have one or more alcohol, drug, and mental disorders (OJJDP, 2001). Youth with serious mental disorders constitute 20 to 30 percent of those in the justice system, and their numbers appear to be increasing (Underwood and Berenson, 2001). These youth may have other problems, as well, such as learning disabilities, histories of abuse, personality disorders, aggression and suicidal tendencies. As many as 50 to 75 percent of youth in

the juvenile justice system have serious substance abuse problems (National GAINS Center, 1999).

As with adults, juveniles in the justice system need integrated and coordinated care that addresses all of their needs. They should, whenever possible, be diverted from the justice system into community-based care that has a multidisciplinary approach. One model is the Persons in Need of Supervision (PINS) Diversion Program in New York State (Cocozza and Skowyra, 2000). Further, Community Assessment Centers help divert and treat youth who are at risk of becoming serious, violent, and chronic offenders by bringing together services in a collaborative, timely, cost-efficient, and comprehensive manner. Key elements include single point of entry, immediate assessment, integrated case management, and comprehensive management information systems (OJJDP, 1999).

Individuals with Co-Occurring Disorders in Rural Areas

According to the 1990 Census (2001), 61.6 million people live in rural area. People with co-occurring disorders who live in rural areas, and those who would treat them, face many of the challenges common to general health care in America's non-urban areas. Rural and frontier areas have disproportionately fewer health and mental health resources despite sizable population (Sawyer, 2002).

Rural Americans have high rates of substance abuse, often higher than in cities and suburbs where rates have dropped off, and comparable or higher rates of co-occurring disorders (Sawyer, 2002). The "individualistic ethic" that still prevails in many rural and frontier communities may serve as an impediment to seeking treatment for co-occurring mental and addictive disorders.

Geographic isolation is a factor in rural health care. Driving 100 miles or more to attend an Alcoholics Anonymous meeting or to visit the doctor is not unusual. There is virtually no access to a specialized program that treats co-occurring disorders unless the individual is willing to travel hundreds of miles from home (Sawyer, 2002).

Treatment for people with co-occurring disorders in rural areas also is complicated by the fact that rural programs often have insufficient professional staff, especially psychiatrists and certified alcohol and drug abuse counselors. In part, for this reason, care often takes place in primary care settings or from church-sponsored programs. Many individuals seek help from family or friends. Clergy, tribal authorities, and other community figures are important to the care of people who have co-occurring disorders in rural areas (NARMH, 1998). In addition, SAMHSA has contributed to staff training in rural or remote areas by means of teletraining courses offered by Addiction Technology Transfer Centers, including offerings in the specialized field of co-occurring disorders.

State Offices of Rural Health are in an excellent position to work closely with State mental health and substance abuse authorities to address the challenges of treating individuals with co-occurring disorders in rural areas. Existing Federal programs, such as HRSA's Rural Health Outreach Grant Program and Rural Telemedicine Grant Program, help improve services for people

with co-occurring substance abuse disorders and mental disorders in rural and frontier communities.

Co-Occurring Disorders in Racial and Ethnic Minorities

Race, culture, ethnicity, gender, sexuality, and identity are associated with variations in prevalence, diagnoses, and treatment of substance abuse and mental disorders, and must be considered in treating co-occurring disorders. As the Surgeon General's report, *Mental Health*, *Culture, Race, and Ethnicity* (U.S. DHHS, 2001b) notes, "racial and ethnic minorities bear a greater burden from unmet mental health needs and thus suffer a greater loss to their overall health and productivity."

Culture determines how individuals describe symptoms and assign meaning to them, how they cope with personal difficulties, whether they are willing or reluctant to seek treatment, and how they confront the stigma associated with both substance abuse and mental disorders (U.S. DHHS, 2001b). For example, a traditionally raised Asian American client may tend to express his or her complaints as physical symptoms and expect the clinician to offer relief. The same client may be offended by too many probing, personal questions early in treatment and never return (CSAT, in press). Likewise, the provider's cultural beliefs will shape his or her interaction with a client, for better or for worse.

Little research has been conducted on how the treatment of co-occurring substance abuse disorders and mental disorders may vary based on cultural differences. However, one study found that, compared to white clients, African American, Asian American, and Hispanic clients tend to self-report a lower level of functioning and to be "viewed by clinical staff as suffering from more severe and persistent symptomatology and as having lower psychosocial functioning" (Jerrell and Wilson, 1997). Nonwhite clients tended to have fewer community resources available to them than white clients, and clinicians had greater difficulty connecting them with needed services.

American Indian and Alaskan Native communities have been found to have disproportionate rates of suicide, alcoholism, illicit drug use, and placements out of the home in behavioral and judicial institutions, according to SAMHSA's National Household Survey on Drug Abuse, the Indian Health Service, and the Federal Bureau of Prisons. Related to these high rates of co-occurring substance abuse disorders and mental disorders are similarly disproportionately high rates of cirrhosis of the liver, accidents, violence, and intentional/unintentional overdoses. Tribal communities also face difficulties recruiting and retaining licensed and certified service providers.

Increasingly, recent immigrants and refugees are being served in mental health and substance abuse treatment programs. Many have entered the country following traumatic circumstances that could lead to PTSD, depression, and self-medication with drugs or alcohol (CSAT, in press). The loss of family structure and community experienced by many refugees also is a common factor in substance abuse.

Sex roles as defined by cultures also may figure in the expression of substance abuse or mental disorders. For example, Hispanic women often model themselves after passive female caretakers, while men may be influenced by *machismo* and its emphasis on aggression, sexual

experience, and protection of women. At the same time, Hispanic emphasis on family and religion may serve as protective factors (Martinez, 1999). Such differences between cultures, age groups, or the sexes serve as both risk and protective factors in regard to mental disorders and substance abuse (Westermeyer, 1995), but more research is needed in this area.

Effective Interventions

Cultural competence – the knowledge, skills, and attitudes to enable administrators and practitioners to provide effective care for diverse populations within each individual's values and reality conditions – ensures that minority clients with co-occurring disorders receive services that are meaningful to them (CMHS, 2000).

Culturally competent services should be consumer-driven, community-based, and accessible. Individuals and their families should be empowered to participate in treatment planning, and those plans should make full use of natural community supports. In addition, service providers need to be sensitive to how inter-generational issues among family members may affect responses to treatment.

Because many minority groups have higher than expected frequencies of physical, mental and substance abuse problems, health care should be integrated to offer comprehensive services (CMHS, 2000). The availability of resources, such as transportation, also can affect an individual's ability to access care. This is especially critical in rural areas and among older adults.

SAMHSA's Substance Abuse Treatment for Persons with Co-Occurring Disorders (CSAT, in press) includes some specific suggestions for working with clients of different ethnic and cultural backgrounds with co-occurring disorders.

- Whenever possible, familiar healing practices meaningful to individuals should be
 integrated in treatment, such as the use of acupuncture to calm a Chinese client or help
 control cravings, or the use of traditional herbal tobacco with some American Indians to
 establish rapport and aid emotional balance.
- Because levels of acculturation may vary, clinicians should avoid making generalizations about clients of different cultures. For the same reason, diagnoses should be as free as possible of cultural, ethnic, sexuality and gender biases. In the past, for example, some African Americans were stereotyped as having paranoid personality disorders, while women have been diagnosed too frequently as being histrionic. American Indians with spiritual visions have been misdiagnosed as delusional or having borderline personality disorders.

System-Level Approaches

Systems of care for people with co-occurring disorders must be comprehensive and appear seamless to the clients. The systems of care that need to be integrated include the substance abuse and mental health systems, as well as the primary care, criminal justice, and social service systems.

The concept of integrating human services to improve outcomes for individuals and families with multiple and complex problems is not new. Called by such names as community integration, comprehensive services, community support systems, and continuum of care (Dennis et al., 1999), services integration has been an integral part of social service reform efforts (Miller, 1996).

More recently, researchers and policy makers have begun to make the important distinction between integrated *services*, designed to improve an individual's access and use of all needed services resources through such techniques as case management (Miller, 1996), and integrated *systems*, designed to change service delivery for a defined population, involving fundamental changes in the way agencies share information, resources, and clients (Dennis et al., 1999).

In particular, systems integration focuses on reducing barriers, and on coordinating and improving existing services at the program level, and on developing new programs to improve the availability, quality, and comprehensiveness of services (Miller, 1996). A report by the National Association of State Mental Health Program Directors (NASMHPD, 2000) underscores several key precepts that underlie the concept of systems integration:

- Successful systems integration can occur only when a comparable emphasis is placed on integrated services (Agranoff 1991).
- Systems integration does not necessarily require the creation of new services or agencies, nor does it require that existing agencies or services be combined.
- Systems integration can be measured by both system-level and client-level outcomes.
- Ultimately, systems integration is about improving peoples' lives.

Many findings about the process and outcomes of systems integration are a product of SAMHSA's Access to Community Care and Effective Services and Supports (ACCESS) program. ACCESS was designed to test promising approaches to service system integration for people with serious mental illnesses, including those with co-occurring substance abuse disorders, who are homeless or at imminent risk of homelessness. Begun in 1993, the 5-year demonstration program was an interdepartmental effort involving the U.S. Departments of Health and Human Services, Labor, Education, Veterans Affairs, Agriculture, and Housing and Urban Development.

Unlike earlier systems integration efforts, ACCESS included an extensive, cross-site evaluation of both system-level and client-level outcomes. Evaluation data reveal that systems integration is both possible and measurable, and that systems integration works best with a salaried coordinator, an interagency coordinating body, strategic planning, and adequate resources (Cocozza et al., 2000). Client-level outcomes included increases in stable housing and use of outpatient psychiatric services and decreases in substance use and criminal activity (Rosenheck, 1998; CMHS, online). The ACCESS evaluation also revealed that outreach and referrals to case management increase access to mental health and other important services for people with serious mental illnesses and/or co-occurring substance abuse disorders (CMHS, online).

Two other national demonstration projects focused on the development and implementation of systems integration strategies to better serve vulnerable populations: the Robert Wood Johnson Program on Chronic Mental Illness and the National Institute on Alcohol Abuse and Alcoholism Community Demonstration Grants Projects for Alcohol and Drug Abuse Treatment of Homeless Individuals. Both included individuals with co-occurring disorders. Empirical data from each suggest that systems integration can improve access to services, client satisfaction, and selected client outcomes (Ridgely et al., 1996; Orwin et al., 1994; Goldman et al., 1990).

Despite growing evidence about the effectiveness of systems integration for people who have multiple, complex disorders, system-level problems remain a significant barrier to effective response for people with co-occurring substance abuse disorders and mental disorders (Osher, 1996). The need to address the problems created by the systemic schism between substance abuse and mental health services has been well documented (Osher, 1996; Minkoff, 2000; Ridgely et al., 1998; Drake et al., 1996). The ability to do so is complicated further by the multifaceted nature of how care for individuals with co-occurring substance abuse disorders and mental disorders is organized and financed.

A Conceptual Framework for System Development and Financing

A comprehensive, coordinated system of care for individuals with co-occurring substance abuse disorders and mental disorders and their families involves a process that evolves over time and begins with strong leadership and consensus among key stakeholders. It also requires flexible funding, the use of evidence-based practices, and a process for developing and monitoring outcomes (NASMHPD/NASADAD, 2000). SAMHSA constituents believe that the Agency should help States and communities develop coalitions and evidence-based approaches to integrating programs and systems (SAMHSA, 2002f).

In Financing and Marketing the New Conceptual Framework for Co-occurring Substance Abuse and Mental Disorders, the NASMHPD/NASADAD Joint Task Force on Co-occurring Disorders outlined a process for organizing and financing a comprehensive system of care as displayed in Table 4.1 (NASMHPD/NASADAD, 2000).

Table 4.1: Organizing and Financing a Comprehensive System of Care for People with Co-Occurring Disorders	
Key System Development Components	Financing Principles
Provide Leadership/Build Consensus	Define the Population/Plan to Purchase Together
Identify Resources	Secure Financing
Develop New Models/Train Staff	Purchase Effective Services
Decide on Outcomes	Purchase Performance
Evaluate Program	Evaluate and Improve

That report and others (e.g., Cocozza et al., 2000) include a wealth of information on how to convene key stakeholders and build consensus for change. This discussion focuses on three issues of specific concern to SAMHSA and its constituents in the development of a comprehensive

system of care for people who have co-occurring disorders: resources/financing, staff training, and outcomes (SAMHSA, 2002f).

Identify Resources/Secure Financing

The availability of flexible funding, often from multiple sources, is a necessary tool if local mental health and substance abuse providers are to be successful in efforts to meet the needs of individuals whose disorders do not fall neatly into one or another categorical funding stream. This requires creativity, persistence, a fair amount of planning, and strategic thinking – the key elements of which include (NASMHPD/NASADAD, 2000):

- Aligning financial incentives with expected outcomes to achieve goals. Financing
 mechanisms should produce performance, not just units of service. The capacity for
 local reallocation of funds from high-cost services to alternative programs is critical.
 For example, communities that reduce the use of higher cost inpatient care should be
 able to redirect the saved dollars to appropriate outpatient options for people with cooccurring disorders.
- Reducing or eliminating statutory and regulatory barriers. Particularly reduce or eliminate those related to facility licensure and certification for the provision of services for people with co-occurring substance abuse disorders and mental disorders.
- Combining funds at the local level. Maintaining separate funding streams at the Federal and/or State level will help ensure that both the mental health and substance abuse systems remain viable and able to complement one another, each retaining and refining its areas of expertise. Coordination of those funding streams, through "pooling" of funds, at the local level by community providers may permit the most effective way to respond to the unique needs of individuals with co-occurring disorders.

Many States depend almost exclusively on their SAPT Block Grant to support the provision of substance abuse services; in contrast, the CMHS Block Grant funding represents a small percentage of a State's mental health services budget. At the same time, the Federal-State Medicaid program funds a significantly larger amount of mental health treatment than substance abuse services. The continuation of the two separate Federal block grant funding streams places the burden of coordination on State and local mental health and substance abuse agencies. SAMHSA constituents who provided their views in the development of this report suggest that the existence of separate finding streams is perhaps the most significant impediment to integrated services for people with co-occurring substance abuse disorders and mental disorders (SAMHSA, 2002f). Ninety percent of respondents— representing both mental health and substance abuse constituencies—believe that some form of "pooled" funding is a key ingredient for success.

Other constituents recommend "blended" funding, that treats mental health services and substance abuse treatment and prevention dollars as indistinguishable from one another. Others in the field adamantly oppose co-mingling funds, suggesting that services for individuals with a single disorder may be shortchanged as a result.

Integrated services do not require blended funding to be successful. In the long-run, disagreements about blended funding may be more of a barrier to developing integrated services than the actual process of combining mental health and substance abuse funds. Indeed, as Drake, Essock et al. (2001) note:

Anecdotal evidence indicates that blending mental health and substance abuse funds appears to have been a relatively unsuccessful strategy, especially early in the course of system change. Fear of losing money to cover nontraditional populations often leads to prolonged disagreements, inability to develop consensus, and abandonment of other plans.

Many States and community providers have chosen yet another option for service funding: aggregated or "braided" funds. This mechanism enables them to create comprehensive systems of care for people with co-occurring disorders by drawing on distinct sources of funds that can be tracked and audited separately. A number of examples of this approach are found in Chapter 2 of this report.

Success stories such as those in Pennsylvania, Arizona and New York that are detailed earlier in this volume support the NASMHPD/NASADAD Task Force (2000) contention that significant improvements can be made within existing delivery systems and financing mechanisms to improve delivery of services to people with co-occurring substance abuse disorders and mental disorders. It is SAMHSA's responsibility to give States and localities the tools and knowledge to accomplish this goal – and accomplish it to the benefit of people with substance abuse and mental disorders.

Train Staff

A significant gap exists between what research shows to be effective for people with co-occurring disorders and what clinicians practice in the field. Both SAMHSA constituencies and the NASMHPD/NASADAD Task Force agree that staff in both the substance abuse and mental health systems must be trained to work with people with co-occurring disorders. In fact, no system can adequately care for people with co-occurring disorders in the absence of appropriate training at all levels of service delivery.

• <u>Clinical competence at all front doors of service</u>. Mental health and substance abuse programs—and other social service programs, as well—should emphasize clinical competence that helps to create a seamless system of care for people with co-occurring disorders. A number of States (e.g., New York, New Mexico, Arizona) are moving toward the establishment of a required basic level of competency for mental health and substance abuse providers who are providing integrated services. These States and others are developing training curricula to help clinicians achieve and update these competencies. Still other States (e.g., Illinois) have created certification ladders and pathways—as well as financial incentives—to encourage clinicians to achieve higher levels of competence in the delivery of integrated co-occurring disorders treatment (CSAT, in press).

- <u>Train primary health care providers</u>. Primary health care providers also would benefit from training in the assessment, diagnosis and treatment of substance abuse and mental disorders. Family practitioners, pediatricians, and emergency room staff may be able to help identify and engage individuals who are not in the formal treatment system.
- <u>Train future providers</u>. Training future providers is equally important. Educational and training programs for physicians (including psychiatrists), psychologists, social workers, counselors, and other clinical staff will help produce a future work force better prepared to serve individuals with multiple disorders.
- <u>Train consumers, recovering persons, and family members</u>. Consumers, recovering persons, and family members all play a critical role in ensuring that services are relevant and are achieving their desired out comes. Training can better prepare them to support both service providers and service recipients in the development and implementation of programs.

Measure Outcomes

The bottom line of any system designed to address the needs of people with co-occurring substance abuse disorders and mental disorders is to provide *quality*, *cost-effective*, and *results-driven* treatment and prevention services that improve client outcomes. Therefore, focusing on improved outcomes is among the highest priorities for system change (NASMHPD/NASADAD, 2000).

However, outcome measures need to document actual changes in client functioning, not just process measures such as the number of client served (Yessian, 1995). Measures of improved client functioning for people with serious mental illnesses, including those with co-occurring substance abuse disorders, may include decreased psychiatric symptoms; decreased substance abuse; improvement in housing and community tenure; increased employment; improved social networks; decreased involvement with the criminal justice system; and improvement in perceived quality of life (NASMHPD/NASADAD, 2000).

The development of performance-based outcome measures specific to people with cooccurring disorders will allow those who contract for services to tie financial incentives to achievement of key outcome measures. Outcomes also may assess reduced costs to clients, their families, and society at large across such measures as decreased involvement with the criminal justice system, decreased use of inappropriate emergency room visits, and less frequent and shorter hospital stays (NASMHPD/NASADAD, 2000).

Collecting and using data related to program effectiveness can help initiate and sustain treatment programs and spark system change (The National Council and SAAS, 2002). For example, data on relapse rates can be an initial and powerful measure of program effectiveness. Programs can use such data to seek additional support for co-occurring disorders treatment. The inclusion of alcohol and drug testing data can be very helpful in assessing program effectiveness, and are widely used in the substance abuse treatment community.

SAMHSA constituents who participated in the development of *Strategies for Developing Treatment Programs for People with Co-occurring Substance Abuse and Mental Disorders* (The National Council and SAAS, 2002), stressed the importance of simple, realistic expectations about the utility of data as a measure of effectiveness, since existing information systems often capture only part of the story. For example, co-occurring disorders treatment programs might not be able to access data on rehospitalization contained within the State mental health data system. Likewise, confidentiality regulations intended to protect the privacy of individuals in substance abuse treatment might limit the amount of data available to a mental health provider. However, substance abuse and child welfare systems have been able to establish working relationships within the rules to collaborate with one another to serve both parents and their children (U.S. DHHS, 1999a). These models may prove useful for the mental health and substance abuse treatment fields.

Systems Integration in Practice

Many States and communities already have begun to implement innovative systems integration strategies, as highlighted in Chapter 2. The most recent NASMHPD/NASADAD Task Force report (2002) has profiled program activities and models implemented in Colorado, Illinois, Maine, Maryland, Ohio, Pennsylvania, Tennessee, Texas, and Virginia.

While approaches varied by State, important commonalities in their efforts can help guide other States interested in developing effective system-level strategies for addressing the needs of individuals with co-occurring disorders, among them (NASMHPD/NASADAD, 2002):

- A shared vision and expectations concerning co-occurring disorders treatment that staff were encouraged, supported, and expected to follow.
- A comprehensive service system based on an integrated services model that has been tailored to respond to local needs that is capable of responding to all or most of the needs of individuals with co-occurring mental and substance abuse disorders, including the presence of other concurrent health issues.
- The State services staff expectation that individuals with co-occurring symptoms and disorders would be the rule rather than the exception among individuals needing services, coupled with the ability to screen and assess for related conditions, such as HIV/AIDS, a full range of physical and/or sexual abuse, brain disorders, physical disabilities, etc.
- Cross trained staff taught to be culturally competent in both mental health and substance abuse disciplines, while continuing to work within their fields of expertise.
 Care delivered as part of a multidisciplinary team that featured shared responsibility for clients.
- Client-centered services that engage individuals who are at various stages of acceptance and recovery.

Special Programs and Demonstrations of Systems Change

Federal, State, and local governments, as well as private funding sources, have supported a range of systems integration initiatives designed to improve the delivery of services for people with co-occurring disorders. Two such efforts are profiled here. A third, the Community Action Grants for Service System Change program, is highlighted in the final section of this chapter.

The Clinical Standards and Workforce Competencies Project

In 1995, SAMHSA's Center for Mental Health Services began a managed care initiative designed to identify systems-level best practices in behavioral healthcare – including issues affecting people with co-occurring substance abuse disorders and mental disorders – that could be integrated into the design of managed care structures.

A consensus panel of experts in co-occurring disorders, including researchers, providers, and consumers and family members, conducted a comprehensive review of the literature on the successful treatment of co-occurring disorders in managed care systems and developed both an annotated bibliography (CMHS, 1997) and a consensus report, *Co-Occurring Disorders in Managed Care Systems: Standards of Care, Practice Guidelines, Workforce Competencies, and Training Curricula* (CMHS, 1998). The report highlights specific tools and supporting materials that could be adapted by systems of any size to initiate systems change in program standards, practice guidelines, and competencies with few, if any, additional resources. Many States and communities have applied these materials as part of systems integration initiatives, including five of the grantees supported by the SAMHSA Community Action Grants for Service System Change program described later in this chapter (Berreira et al., 2000; Minkoff, 2001).

Comprehensive Continuous Integrated System of Care (CCISC)

The Comprehensive Continuous Integrated System of Care (CCISC) is a model designed to join the mental health and substance abuse treatment systems (and other systems, potentially) in an effort to develop a comprehensive, integrated system of care for people with co-occurring disorders (Minkoff, 2001, 1991). This model includes work derived from the Clinical Standards and Workforce Competencies Project cited above (Minkoff, 2001; CMHS, 1998).

CCISC, identified by SAMHSA as an exemplary practice, is at various stages of implementation in no fewer than 15 State and regional systems (CSAT, in press), including Arizona, Maine, New Mexico, Oregon, and Florida. CCISC is applicable to systems of any size ranging from an entire State to a local service network or agency, and may be extended to include linkages with systems such as corrections and homelessness services. The CCISC model is based on two core principles:

(1) *Integrated System Planning*. Because co-occurring disorders are an expectation in all parts of the service system and are associated with poorer outcomes and higher costs, the CCISC model requires that both funding and services be planned specifically based on those assumptions. As a consequence, all services programs are designed to be "co-occurring capable programs," meeting minimum standards of capacity. Some programs are designed to be "co-occurring

enhanced"; e.g., they have the capacity to respond to co-occurring substance abuse disorders and mental disorders in inpatient psychiatry units.

Each program matches services to individuals with co-occurring disorders based on their treatment needs. For example, some programs provide continuity-of-care case management services for substance using individuals with serious mental illnesses. Other programs might include residential addiction programs for individuals with serious addiction and trauma disorders.

Although new resources are always needed, the CCISC helps identify how current resources can work more efficiently by designing programs to be co-occurring disorders capable from their inception. In addition, the CCISC encourages use of any best practice intervention or program for either mental illness or substance disorder, provided that the intervention is designed to be offered routinely in an integrated manner to individuals with co-occurring disorders.

(2) *Integrated Treatment Philosophy*. The CCISC treatment philosophy is based on eight best practice treatment principles that reflect consensus among clinical experts (CMHS, 1998). These principles emphasize the need to acknowledge co-occurring disorders as an expectation, to consider both substance abuse and mental disorders as primary disorders, and to develop program structures and interventions that accommodate each individual's needs.

No one program or intervention is right for all people with co-occurring substance abuse disorders and mental disorders. For any individual at any point in time, interventions must be matched to the status of the individual – from diagnosis to phase of recovery and from needs/strengths/contingencies to level of care requirement (CMHS, 1998). Finally, the measure of success is based on an individual's treatment goals. At any point in time, success may be defined by acute stabilization of symptoms, movement through stages of change, skills development, or reduction in substance use.

Practice guidelines based on this model have been adopted by the State of Arizona and by the Illinois Behavioral Health Recovery Management project. Minkoff has developed a "12-Step Program for the Implementation of the CCISC," and Minkoff and Cline (2001, 2002) have developed a toolkit to facilitate this process, including tools to evaluate system fidelity, program capability, and clinician competency. These tools are beginning to be used and evaluated in systems change initiatives throughout the U.S. and Canada.

SAMHSA's Leadership in Evidence-Based Practices

SAMHSA has played the key Federal role in moving evidence-based practices for cooccurring disorders to the field. With the near doubling of the Federal investment in research, it becomes even more important to shorten the time it takes to bring new clinical findings – including new evidence-based clinical practices – to scale in the community.

SAMHSA has expanded the knowledge base in the treatment of co-occurring disorders, particularly for special populations. Many of the resulting programs have been described in this report. This work includes partnerships with the Agency's colleagues at the National Institutes of

Health and the Agency for Healthcare Research and Quality in developing a comprehensive science-to-services agenda responsive to the needs of the field.

The National Evidence-Based Practices Project

The Implementing Evidence-Based Practices for Severe Mental Illness Project is a collaborative project to develop implementation toolkits to promote the delivery of effective practices, including integrated treatment for co-occurring substance abuse disorders and mental disorders. The project is a joint effort being undertaken by SAMHSA, the Robert Wood Johnson Foundation, the National Alliance for the Mentally Ill (NAMI), and State and local mental health organizations in New Hampshire, Maryland, Ohio, Vermont, Oregon, New York, Indiana, and Kansas. It serves as a catalyst to promote development of evidence-based practices at the State and local level. Each of the eight States participating in this project has developed its own center for implementing evidence-based practices, and all eight are also funded by the respective State mental health authorities (Torrey et al., 2001).

Further, SAMHSA has entered into a partnership with the NASMHPD Research Institute, Inc., to establish the NRI Center for Evidence-Based Practices, Performance Measurement, and Quality Improvement. The Center will support a seven-State demonstration project on the feasibility of implementing evidence-based practices using the six toolkits being developed by the Evidence-Based Practices Project.

NASMHPD/NASADAD Joint Task Force on Co-Occurring Disorders

SAMHSA has brokered a critical dialogue between the National Association of State Mental Health Program Directors and the National Association of State Alcohol and Drug Abuse Directors on the subject of co-occurring substance abuse disorders and mental disorders. As described earlier in this report, outcomes to date have created a strong conceptual foundation on which future efforts can be built.

SAMHSA will continue to support the work of the NASMHPD/NASADAD Task Force as it researches how States respond to the treatment needs of individuals with co-occurring disorders across each of the four quadrants of the agreed-upon conceptual framework for discussing the topic. This work will enhance how States define, develop, and deliver services to these groups, both of which are underrepresented in the current treatment literature.

The National GAINS Center for People with Co-Occurring Disorders in the Justice System

SAMHSA's National GAINS Center was created in 1995 to collect and disseminate information about effective mental health and substance abuse services for people with co-occurring disorders who come in contact with the justice system. The Office of Juvenile Justice and Delinquency Prevention, the Office of Justice Programs, and the National Institute of Corrections, all of the U.S. Department of Justice, are partners in this effort to Gather information, Assess what works, Interpret the facts, Network with key stakeholders, and Stimulate change.

Recently, the Center expanded its efforts to include a focus on youth with co-occurring disorders in the juvenile justice system.

The Women, Co-Occurring Disorders, and Violence Study

In 1998, SAMHSA began the Women, Co-Occurring Disorders, and Violence Study, a 5-year initiative designed to develop, implement, and evaluate integrated systems of care for women with co-occurring substance abuse disorders and mental disorders who have experienced violence and their children. Nine sites are evaluating the effectiveness of comprehensive, integrated service models for women who have co-occurring disorders and histories of physical and/or sexual abuse, and four sites are tailoring and evaluating trauma-informed services for their children. The study is expected to yield significant information about the evidence base for specific interventions and the ways in which services can be integrated across systems. A special Children's Subset Study seeks to reduce risk factors and increase resiliency among children ages 5 to 10 whose mothers have co-occurring disorders and histories of violence.

The Primary Care Research Study in Substance Abuse and Mental Health Services for the Elderly (PRISMe)

The Primary Care Research Study in Substance Abuse and Mental Health Services for the Elderly (PRISMe) – a program collaboration among SAMHSA, HRSA and the Department of Veterans Affairs – is developing and measuring the effectiveness of models to improve the delivery of mental health and substance abuse services to older adults through primary health care. Investigators are collecting data on the most prevalent mental and substance abuse problems (and their co-occurrence) experienced by older adults, measured at baseline, 3-month, and 6-month follow-ups. The study seeks to identify the best tools for screening and assessing older adults with substance abuse and/or mental disorders within primary care settings.

The Targeted Capacity Expansion Program

SAMHSA's Targeted Capacity Expansion (TCE) program for substance abuse treatment helps communities address gaps in treatment capacity by supporting supports rapid and strategic responses to demands for substance abuse treatment, including alcohol and drug use services. Grantees may include communities with serious, emerging drug problems, as well as communities with innovative solutions to unmet needs.

The program, first established in 1998, today funds 33 grants that are focusing on co-occurring substance abuse disorders and mental disorders, providing a wide array of much-needed services. In addition, grantees also are examining questions such as: (1) How do substance abuse and co-occurring mental disorders/other functional disorders affect treatment outcomes? (2) How do client involvement and satisfaction affect treatment outcomes? and (3) What is the relationship between program treatment variables and client outcomes, such as drug use, criminal behavior, service utilization, etc.?

The Co-Occurring Disorders Study

SAMHSA's Co-Occurring Disorders Study is designed to identify existing models of substance abuse treatment for people with co-occurring disorders and evaluate their effectiveness based on client outcomes and costs. Grantees are examining and evaluating such approaches as a model of brief trauma treatment for outpatient substance abuse care; a comparison of outcomes from parallel and integrated treatment approaches for individuals with a mental illness addicted to heroin; specific treatment approaches for persons with substance abuse and post traumatic stress disorder or depression, and the effectiveness of integrated treatment for individuals with co-occurring disorders of mild to moderate severity. Results of these studies, which include rigorous evaluation designs, will further inform the field about evidence-based practices for co-occurring disorders. Results will be available in 2003-2004.

Community Action Grants for Service System Change

SAMHSA's Community Action Grant for Service System Change program operates in both the mental health services and substance abuse treatment domains. The mental health-related grant program supports the adoption and implementation of exemplary services practices for children with serious emotional disturbance or adults with serious mental illness, including those with co-occurring substance abuse disorders. Phase I grants support consensus-building among key stakeholders to adopt an exemplary practice in their community or State; phase II grants support implementation of the practice with funds for training and other non-direct services.

Fourteen grantees have focused specifically on integrated treatment for people who have co-occurring disorders. Seven of the grant programs represent State-level initiatives in Arizona, Louisiana, Maine, Massachusetts, New Hampshire, New York, and Vermont. Another seven are being conducted in local communities.

In addition, several of the grants for co-occurring disorders are designed to serve the particular needs of minority and other underserved groups, among them Latino clients with co-occurring disorders in the justice system; American Indian adults and adolescents at risk for co-occurring disorders and those already in substance abuse treatment; and integrated co-occurring disorders treatment for Asian clients in primary care settings. Results will yield important evidence about consensus building and the adoption of exemplary practices for co-occurring disorders.

Likewise, the substance abuse treatment-related Community Action Grant program provides support for service system change and for the adoption and implementation of exemplary practices for substance abuse treatment, including treatment for co-occurring disorders. Grantees funded to implement changes in services for people with co-occurring disorders have focused on different age populations across the lifespan.

Recovery Community Services Program

SAMHSA's Recovery Community Services Program provides support to allow people in recovery from substance abuse and their family members to design and deliver peer services that

help prevent relapse and promote long-term recovery. This initiative is directed toward individuals with both substance use disorders and co-occurring substance abuse disorders and mental disorders.

One such project is training individuals with co-occurring disorders to develop and conduct self-help support groups designed specifically to meet the special needs of people in recovery who also have a psychiatric disorder. It uses the "Dual Diagnosis Anonymous" model. Another project serves individuals with co-occurring substance abuse and mental illness disorders and their families. It offers peer support, life skills education, alcohol- and drug-free social activities, and leadership development training.

Projects for Assistance in Transition from Homelessness (PATH)

SAMHSA administers the Projects for Assistance in Transition from Homelessness formula grant program, established by Congress in 1991 to help States and Territories provide flexible, community-based services for people who are homeless and have serious mental illnesses, including those who have co-occurring substance abuse disorders. PATH-funded providers must be able to address the needs of people who have co-occurring disorders in a coordinated manner.

In addition to outreach, which is the most frequently funded PATH service, providers offer screening and diagnosis, rehabilitation, mental health and substance abuse treatment, case management, limited housing assistance, and referrals to other services, job training, and education. A PATH-funded technical assistance provider helps States and Territories implement evidence-based practices (Winarski, 1998).

The President pledged additional support in fiscal year 2003 to SAMHSA programs that serve people who are homeless and who have addictive and/or mental disorders, including a proposed \$7 million increase for PATH. Other SAMHSA programs that focus on the special needs of people with serious mental illnesses and/or co-occurring substance abuse disorders who are homeless include the Homeless Families Initiative, described below, and the ACCESS program, highlighted previously in this chapter.

The Homeless Families Initiative

The Homeless Families Initiative is documenting and evaluating the effectiveness of short-term interventions to encourage movement out of homelessness, stability in housing, decreased alcohol and drug use, family preservation, and improvements in mental health and social functioning for women with mental health and/or substance abuse disorders who are homeless and caring for their dependent children. The program interventions include mental health and substance abuse treatment, trauma recovery, housing, support, and family preservation services. Program results will be used to disseminate information on effective interventions to States, counties, and communities to help them address issues affecting homeless families, including the problem of co-occurring disorders.

Addiction Technology Transfer Centers (ATTCs) and Centers for Application of Prevention Technology (CAPTs)

SAMHSA uses regionally based Centers to assist communities in adopting evidence based practices in the prevention and treatment fields. ATTCs are a nationwide, multidisciplinary resource that helps treatment systems adopt or adapt evidence-based practices for people with substance abuse disorders, including those with co-occurring mental disorders by transmitting the latest knowledge and skills in professional addiction treatment practice. CAPTs perform the same functions and are structured similarly to ATTCs except that they provide knowledge around evidence-based prevention strategies.

ATTC resources on co-occurring disorders include an online course, *Assessment of Substance Abuse Related and Mental Disorders*, as well as a variety of curricula on a broad range of topics relating to the treatment of people with co-occurring disorders. Some of these are highlighted in the technical assistance document, *Strategies for Developing Treatment Programs for People with Co-Occurring Substance Abuse and Mental Disorders*.

SAMHSA Education and Training Tools

SAMHSA has developed a series of Treatment Improvement Protocols (TIPs) designed to facilitate the transfer of state-of-the-art protocols and guidelines for the treatment of alcohol and other drug abuse. Each of the 38 separate TIPs to date reflects a careful consideration of all relevant clinical and health services findings, demonstration experience, and implementation requirements. One of the TIPs, Substance Abuse Treatment for Persons with Co-Occurring Disorders, currently in press, features detailed information on the evidence-based practices highlighted in this chapter. Each TIP features specific guidance to help practitioners implement evidence-based practices with clients in the field.

The Center for Mental Health Services, in conjunction with Dartmouth University and the Robert Wood Johnson Foundation, has developed the toolkit on co-occurring substance abuse disorders and mental disorders, within the *Implementing Evidence-Based Practices for Severe Mental Illness Project*, a clinician, consumer, and family oriented education and training module for the implementation of evidence-based practices in providing integrated mental health and substance abuse treatment for individuals with co-occurring disorders in the community-based mental health care system (SAMHSA, in press).

SAMHSA's technical assistance report, *Strategies for Developing Treatment Programs for People with Co-Occurring Substance Abuse and Mental Disorders* (The National Council and SAAS, 2002), includes lessons learned from program and systems-level experts in the development of program-level strategies and systems-level approaches for co-occurring disorders.

TIPs, toolkits, and SAMHSA reports are available through SAMHSA's National Mental Health Information Center. These resources are available online at www.samhsa.gov.

Summary

The evidence base on co-occurring substance abuse disorders and mental disorders is growing as to the effectiveness of interventions that respond to an individual's stage of recovery and motivation to change. Enhanced research is needed on interventions geared to the unique needs of these individuals with both disorders, especially in regard to psychopharmacological interventions. Individuals with co-occurring disorders are at risk for related conditions. For example, they are vulnerable to HIV/AIDS. Without needed treatment, they are also at risk for homelessness and criminalization.

Programs for co-occurring disorders cannot be effective in isolation because individuals with complex, overlapping conditions are ill prepared to negotiate fragmented systems of care. Systemic barriers to the integration of substance abuse and mental health treatment are difficult and longstanding but can be overcome. States and communities that have successful programs build consensus around the need for an integrated response, develop aggregated financing mechanisms, cross-train staff, and measure achievement by improvements in client functioning and quality of life.

CHAPTER 5

Five-Year Blueprint for Action

SAMHSA will lead the national effort to ensure accountability, capacity, and effectiveness in the prevention, diagnosis, and treatment of co-occurring substance abuse disorders and mental disorders. While SAMHSA will focus on this set of co-occurring disorders, the Department of Health and Human Services and SAMHSA recognize the existence of other sets of co-occurring medical and social conditions in this population that are of equal significance, such as HIV/AIDS, hypertension, chronic liver disease, hepatitis C, homelessness and incarceration.

Co-occurring substance abuse disorders and mental disorders are prevalent, affecting millions of Americans of all ages. When substance abuse and mental disorders occur at the same time in an individual, they lead to significant loss of human potential and increased costs for service systems – losses and costs greater than those arising from each of the disorders alone. Moreover, a growing body of evidence suggests that integrated rather than parallel and sequential treatment approaches are especially effective for people with more severe functional impairment due to co-occurring substance abuse disorders and mental disorders. The lesson from the data is clear: *Improving the Nation's public health demands prompt attention to the problem of co-occurring disorders*.

As the lead public mental health and substance abuse services agency in the Federal government, it is SAMHSA's responsibility to lead the Nation's efforts to improve and ensure care for children, adolescents, adults, and older adults living with co-occurring substance abuse disorders and mental disorders of any degree of severity. To extend its reach and to leverage resources to the utmost, SAMHSA will strengthen its partnerships across its constituencies, including consumers/recovering persons, family members, faith-based and community organizations, providers, researchers, advocates, State and local authorities, and our Federal partners whose work also impacts people who have co-occurring disorders. The Agency will work in close collaboration with the President's New Freedom Commission on Mental Health, with sister agencies within the Department of Health and Human Services, and with other agencies of the Federal government that have a role in improving lives of people with co-occurring substance abuse disorders and mental disorders.

At the same time, SAMHSA will continue to emphasize the fact that substance abuse disorders and mental disorders are treatable, and people can and do recover from them. Through these efforts, the Agency will work to reduce, and ultimately eliminate, the stigma of mental disorders and substance abuse disorders that keeps individuals of all ages from seeking treatment and systems from providing appropriate services.

Because the real work in mental health and substance abuse services – including services for people with co-occurring disorders – happens in communities and States, SAMHSA will help States and localities reach consensus about the implementation of evidence-based prevention and treatment services. SAMHSA will collaborate in partnership to support innovations in creative

and flexible funding to meet the needs of individuals with co-occurring substance abuse disorders and mental disorders.

SAMHSA's strategic plan, built on the goals of accountability, capacity, and effectiveness, is guiding the Agency's efforts. By promoting provider and system accountability; by enhancing the involvement of individuals with co-occurring substance abuse disorders and mental disorders and, as appropriate, their family members in the treatment planning process; by further developing system capacity; and by ensuring effective coordination and collaboration of efforts; SAMHSA and its partners can identify and implement meaningful, effective and economically sound strategies to best serve people with co-occurring substance abuse disorders and mental disorders.

Such changes cannot be realized overnight by providers, systems, agencies or offices. It will take a measured, approach, tailored to the unique needs of each State, tribe, or Territory. SAMHSA will work closely with all groups that have a critical role in helping to address these serious disorders including community and faith-based providers, the business community, consumers and family members. With leadership and focus, more effective, accountable and capable services for people with co-occurring substance abuse disorders and mental disorders can be achieved nationwide.

Accountability

Co-Occurring Performance Partnership Measures

SAMHSA will continue to work with the National Association of State Mental Health Program Directors (NASMHPD) and the National Association of State Alcohol and Drug Abuse Directors (NASADAD) to refine, test, and apply consistent process, capacity, and outcome measures for the effectiveness and accountability of treatment for people with co-occurring disorders. This action is consistent with the Performance Partnership requirements under Public Law 106-310, the statute that reauthorized SAMHSA in 2000, and it will build on the significant work in performance measurement already conducted.

SAMHSA will ensure that guiding standards and evidence-based practices support the development of performance measures in helping States become more accountable to SAMHSA, their communities, and the individuals they serve by:

- Using this report to Congress including the goals and action steps highlighted herein, and the process that led to its development to create a formal 5-year plan of action to guide Agency management, funding, and communications efforts in the area of co-occurring disorders. With a focus on accountability, capacity and effectiveness, the plan will reinforce SAMHSA's commitment to the development of integrated treatment, as defined in this report, and to the use of the NASMHPD/NASADAD conceptual framework for co-occurring disorders as a tool to highlight symptom severity, locus of care, and potential funding mechanisms.
- Ensuring accountability for the Blueprint for Action. To do this, SAMHSA's Administrator is strengthening the role of the Executive Leadership Team's co-

occurring disorders leads – the Director of the Center for Mental Health Services and the Director of the Center for Substance Abuse Treatment – and is providing staff coordination and support to these individuals from within the SAMHSA Office of Policy, Planning, and Budget (OPPB).

This will result in cross-Center coordination to address SAMHSA's Blueprint for Action and further the development of "One SAMHSA."

- Furthering collaborations between SAMHSA and its Federal partners.
 - SAMHSA will strengthen its partnership with the Centers for Medicare and Medicaid Services, beginning by convening State mental health commissioners and substance abuse directors, State Medicaid directors, community-based providers, consumers/recovering persons, family members, advocates, researchers, academics, and other key stakeholders to develop State Action Plans for co-occurring substance abuse disorders and mental disorders. This group will examine system planning, innovative service strategies, ways to utilize existing reimbursement mechanisms, use of aggregated funding, and development of State-specific Performance Partnership outcome measures. Conference participants will discuss their need for, and ability to provide, technical assistance and training.
 - SAMHSA will collaborate with the Health Resources and Services Administration to enhance attention to co-occurring disorders within the HRSA/SAMHSA Primary Care Summit initiative.
 - SAMHSA will continue its work with HRSA, the Agency for Healthcare Research and Quality, CDC, NASMHPD, NASADAD, the National Alliance of State and Territorial AIDS Directors, State public health organizations and other State representatives, and community-based providers to develop States' capacities to enhance the integration of services for HIV/AIDS, substance abuse disorders, and mental disorders, including the development of case studies of best practices for funding integrated services for individuals experiencing all three of these disorders.
 - SAMHSA will continue to work closely with the Department of Justice (DOJ), drawing on lessons learned from such programs as the DOJ's Serious and Violent Offender Reentry Initiative and the National GAINS Center, to: (1) promote evidence-based programs that divert individuals with co-occurring substance abuse disorders and mental disorders from correctional settings; (2) enhance treatment for co-occurring disorders when it needs to be provided to persons in jails and prisons; and (3) improve discharge/reentry planning for people with co-occurring substance abuse disorders and mental disorders who are returning to the community from corrections facilities.
 - SAMHSA will continue to work closely with the Department of Education in such activities as the Safe School/Healthy Students Initiative and the Comprehensive Community Mental Health Services for Children and Their Families Program to

enhance partnerships at the State and local levels to help schools and State mental health and substance abuse authorities address the prevention and treatment of co-occurring substance abuse disorders and mental disorders in children and adolescents.

Capacity

Use of Block Grant and Other Funds

To meet the multiple and complex needs of individuals with co-occurring disorders and their families, SAMHSA believes that States must have the capacity to make appropriate use of their Substance Abuse Prevention and Treatment and Community Mental Health Services Block Grant funds – consistent with the statute on Performance Partnerships on which the formula grant programs are now based. In close collaboration with key stakeholders, SAMHSA will continue to clarify how States can best use the resources of both Block Grant programs to serve people with co-occurring substance abuse disorders and mental disorders.

To achieve the goal of creating a community-based system of services that can be individualized to serve persons with co-occurring substance abuse disorders and mental disorders, related and relevant policy issues must be examined. SAMHSA will seek to work with CMS in further examining and clarifying existing Medicare and Medicaid policies to enhance opportunities to effectively serve individuals with co-occurring disorders.

SAMHSA will continue to work with its key constituents and Federal partners to explore these statutory and policy issues as they relate to the prevention and treatment of co-occurring disorders. To that end:

- SAMHSA will explore with CMS, in conjunction with AHRQ, ways to utilize existing
 reimbursement mechanisms for the assessment, diagnosis and treatment of people with
 co-occurring substance abuse disorders and mental disorders. Further, SAMHSA will
 provide State Medicaid directors and mental health and substance abuse authorities
 with information on how co-occurring disorders can be addressed within their
 respective State Medicaid plans.
- SAMHSA will continue to identify and disseminate successful strategies for use of Block Grant funds to treat co-occurring disorders. States with a track record of recognized, statewide, systems-level change – among them New Mexico, Connecticut, Washington, Oregon, Missouri and Arizona – will join with SAMHSA to provide State-to-State peer support.

SAMHSA State Services and Treatment Capacity Building Goals

SAMHSA concurs with the growing consensus in the field that all mental health and substance abuse service providers must be able to screen, assess, and, as needed, provide or refer for treatment to meet the needs of individuals with co-occurring substance abuse disorders and mental disorders without regard to disease severity, duration or symptomatology. SAMHSA's discretionary grant, professional training, and technical assistance activities over the next 5 years

will be designed to help States develop, enhance, and phase in evidence-based practices supported by SAMHSA's State Services and Treatment Capacity Building Goals. This will enhance State flexibility to help mental health and substance abuse providers develop the capacity to:

- *Prevent* co-occurring disorders including delaying onset, reducing severity and preventing relapse.
- *Screen* all individuals that present at primary care, substance abuse, mental health, criminal justice, homeless, and educational facilities for the presence of co-occurring disorders.
- Assess the level of severity of co-occurring disorders.
- *Treat* both the substance abuse disorder and the mental disorder in a comprehensive and coordinated manner that is seamless to the client and, where feasible, that involves the client's family. This may involve consultation/collaboration with other providers, if the provider does not have the ability or expertise to offer integrated treatment.
- *Train* providers to screen, assess, and develop prevention and treatment plans for people who have co-occurring disorders.
- *Evaluate* the impact of prevention and treatment services on individuals who have co-occurring disorders and their families.

SAMHSA has begun a collaboration with NASMHPD and NASADAD and representatives of mental health and substance abuse State authorities to develop a set of unified co-occurring performance measures using the State Services and Treatment Capacity Building Goals to help develop the Performance Partnership Block Grants. SAMHSA will provide training and technical assistance to help States implement the performance measures.

Capacity Building Grants for Co-Occurring Disorders

SAMHSA will use its discretionary grant authority – along with technical assistance and training – as incentives to help States develop the infrastructure and expand capacity to create comprehensive and flexible systems of care for people with co-occurring substance abuse disorders and mental disorders. A new Co-Occurring State Incentive Grant for the treatment of persons with co-occurring substance abuse disorders and mental disorders will begin in fiscal year 2003.

The primary purpose of SAMHSA's Co-Occurring State Incentive Grants is to enable States to develop and enhance their service system infrastructure in order to increase their capacity to serve people with co-occurring substance abuse disorders and mental disorders. Infrastructure enhancement activities may include, for example, network building, aggregated funding planning, integrated management information systems, training and technical assistance to provider organizations, and development of coordinated intake/assessment/placement. States will be expected to select one or more of three capacity expansion goals addressing screening, assessment,

and treatment. States will be expected to define performance measures for expected outcomes related to each of the goals they select. Over time, State experience with these performance measures should lead to development of standard performance measures for use by all States.

The Science-to-Services Agenda: Closing the Gap from Research to Practice

Increased system capacity is necessary but alone is not sufficient to meet the needs of people with co-occurring disorders. Intervention and treatment practices must be evidence-based and state-of-the-science. It is SAMHSA's responsibility to make sure that service providers not only have access to this information, but also are well schooled in it.

To help move new scientific knowledge to the treatment community, SAMHSA has been working with its colleagues at the National Institutes of Health – including the National Institute on Alcohol Abuse and Alcoholism, the National Institute on Drug Abuse, and the National Institute of Mental Health – and the Agency for Healthcare Research and Quality to forge a comprehensive "Science-to-Services" agenda responsive to the needs of the field. As a first step, SAMHSA will work with the Institutes to identify gaps in research on evidence-based prevention and treatment practices and to recommend future research priorities. Among areas for future investigation are:

- The various windows of opportunity across the life span in which co-occurring disorders may be prevented.
- The effectiveness of specific interventions (e.g., group therapy, case management) for people who have co-occurring disorders.
- The identification of validated, reliable, and standardized screening and assessment tools (including testing for drugs and alcohol), for co-occurring disorders that are age, gender and race/ethnicity appropriate and can be used by a range of providers in varying service settings.
- Epidemiological studies regarding cohorts of people with co-occurring substance abuse disorders and mental disorders whose levels of disease severity place them into one of the four quadrants of the conceptual framework developed for co-occurring disorders.
- The cost-effectiveness of varying levels and types of interventions whether prevention or treatment for people with co-occurring disorders, including costs and cost-offsets in other service systems, such as criminal justice, primary health care, child welfare, homeless services, and emergency medicine.
- Service system research to determine how financial incentives and accountability measures affect service system change.

Furthermore, the 'Science-to-Services' agenda will investigate the effectiveness of specific interventions for the following high-risk populations:

- Children and adolescents
- Women and men who have been physically and/or sexually abused
- People who are homeless
- People with HIV/AIDS
- People who are making the transition from the criminal justice system to the community

In addition, SAMHSA will examine the complex issues regarding the use of psychoactive medications to treat mental disorders for individuals who also have co-occurring substance abuse disorders, looking toward the creation of a robust research base on which to make sound clinical judgments in this area. More research needs to be conducted, synthesized, and disseminated regarding: (1) the clinical use of psychotropic medications by a patient actively using substances of abuse; (2) the use of such medications by an individual who has a substance abuse disorder; (3) the effect of prescribed psychotropic medications on patterns of substance abuse; (4) the effect of substance abuse on the effectiveness of psychotherapeutic medications; and (5) the role psychotherapeutic medications may play in relapse-oriented, substance use-related symptoms.

The Science-to-Services Workgroup, co-sponsored by SAMHSA and NIH, will be asked to take up these issues and put them on a faster track for exploration. This should produce a steady flow of information that could help clinicians determine which medication, if any, would be appropriate for a specific individual given the severity of their condition.

Results of this research will be used by SAMHSA to promote implementation of known evidence-based practices in its grant programs. Together, SAMHSA and the Institutes will evaluate the fidelity, ease of implementation, generalizability, costs and cost-offsets, and problems in application of evidence-based practices. Results of these studies will inform the next cycle of research, implementation, and evaluation.

Technical Assistance

SAMHSA will provide technical assistance to States, tribes, Territories, local jurisdictions, and services providers to encourage use of current, state-of-the-science, evidence-based prevention and treatment practices to meet the needs of people with co-occurring substance abuse disorders and mental disorders. The Agency's training and technical assistance centers⁶ will be encouraged to coordinate with one another to facilitate exchange of information and technologies about co-occurring disorders to reach the greatest number of providers possible, making best use of SAMHSA's resources and knowledge dissemination capacity. Evaluations on the impact of these training and technical assistance centers will demonstrate how they have made best use of SAMHSA's resources and knowledge dissemination capacity.

⁶ SAMHSA's training and technical assistance centers include the CSAT Addiction Technology Transfer Centers (ATTCs) and Treatment Improvement Exchange (TIE), the CSAP Centers for the Application of Prevention Technology (CAPTs), and the CMHS Mental Health Services Technical Assistance Centers.

SAMHSA will ensure broad distribution of current and relevant technical assistance materials, including:

- The new Treatment Improvement Protocol for substance abuse services providers, Substance Abuse Treatment for Persons with Co-Occurring Disorders (CSAT, in press).
- The *Integrated Co-Occurring Disorders Treatment Toolkit*, being developed and evaluated for use by mental health administrators and providers, consumers, and family members as part of the SAMHSA Evidence-Based Practices Project.
- The technical assistance report, *Strategies for Developing Treatment Programs for People with Co-Occurring Substance Abuse and Mental Disorders*.

TIPs, toolkits, and SAMHSA reports are available through SAMHSA's clearinghouses, the National Mental Health Information Center and the National Clearinghouse on Alcohol and Drug Information (NCADI), and are available on the SAMHSA website (www.samhsa.gov).

Workforce Development

Constituencies from both the mental health and substance abuse services communities identified the dearth of education and training in the area of co-occurring disorders as one of the single most significant barriers to the provision of effective prevention and treatment services. SAMHSA remains committed to the development and dissemination of appropriate training materials for both mental health and substance abuse staff and will support the work of its training and technical assistance centers in this area.

SAMHSA will ensure development of a workforce educated and trained to address cooccurring disorders by evaluating the impact of the following actions:

- SAMHSA in fiscal year 2003 will create a National Co-Occurring Disorders Prevention
 and Treatment Technical Assistance and Cross-Training Center to develop, coordinate,
 and provide cross-training to mental health, substance abuse, education, homeless,
 criminal justice, and primary care providers. It will address all age groups, including
 youth and older adults. Training and technical assistance will be offered to State
 authorities and providers.
- SAMHSA will support State-to-State technical assistance in the development and implementation of education and training programs. SAMHSA will enhance and disseminate information about these innovative practices already ongoing in a number of States.
- SAMHSA will work with key professional organizations (e.g., National Association of Social Workers, American Psychological Association, American Psychiatric Association, National Association of Alcohol and Drug Abuse Counselors, American Academy of Addiction Psychiatry and the State Association of Addiction Services) and

- encourage them to contribute to and use SAMHSA materials to help inform the content of professional curricula.
- SAMHSA will direct its Minority Fellowship Program (MFP) the only Federal program designed to help increase the number of racial and ethnic minorities entering our Nation's mental health and substance abuse workforce to focus on training about co-occurring substance abuse disorders and mental disorders.

Prevention, Early Identification, and Early Intervention

Prevention and both early identification and intervention of mental and substance abuse disorders are appropriate for individuals of all ages, but are especially critical for young people and those individuals whose mental and/or substance use problems have not risen to the level of seriousness to require substance abuse and/or mental health treatment. SAMHSA will work to ensure availability of evidence-based prevention and early intervention programs by:

- Reaching out to primary care practitioners, pediatricians, obstetrician-gynecologists, homeless providers, school guidance counselors, school-based clinics, and jails/prisons to educate them about the importance of screening and assessing their patients for the presence of mental and substance abuse disorders, and to provide them with information about appropriate screening and assessment methods, including alcohol and drug testing resources.
- Supporting activities to help communities adopt and adapt effective, evidence-based family interventions to reduce the risks for substance abuse and mental disorders. This includes SAMHSA's continued focus on strengthening collaborations with faith-based and community organizations through skills-building sessions.
- Further developing SAMHSA's National Registry of Effective Prevention Programs and broadening the Agency's efforts to identify and disseminate evidence-based programs for the prevention and treatment of co-occurring disorders.
- While ensuring compliance with Section 1956 of the U.S. Public Health Service Act, encouraging States to make concerted and creative use of the 20 percent prevention setaside in the SAPT Block Grant to initiate activities that may forestall or prevent the development of substance abuse disorders in individuals at risk for developing cooccurring mental disorders.
- Working with the U.S. Department of Education to enhance partnerships at the State and local levels to respond to prevention and treatment needs of children and adolescents in schools and in mental health and substance abuse settings.

Effectiveness

Key Partnership Activities

Clearly, SAMHSA alone cannot guarantee the availability of effective services for all Americans with co-occurring substance abuse disorders and mental disorders. To that end, SAMHSA will expand its range of partnerships across organizations, populations, regions, and service systems. For example:

- SAMHSA will continue its active involvement with the NASMHPD/NASADAD Joint Task Force on Co-Occurring Disorders. The Agency has asked the Task Force to examine how States respond to the treatment needs of individuals with co-occurring disorders who have either a serious mental illness and less severe substance abuse disorder (those represented by quadrant II of the conceptual framework), or a severe substance abuse disorder and less serious mental illness (quadrant III). These individuals are currently underrepresented in the research literature.
- Because State Medicaid licensing and certification requirements may pose significant barriers to the development of appropriate treatment for people who have co-occurring disorders, SAMHSA will encourage the NASMHPD/NASADAD Joint Task Force to poll its members on the ways in which these barriers might be overcome. SAMHSA will support State-to-State technical assistance that highlights successful approaches to licensure and certification of programs for co-occurring disorders.
- SAMHSA will continue to promote funding opportunities that recognize the need for
 collaborative efforts on behalf of people who have co-occurring disorders, not
 dissimilar to earlier programs such as the Women, Co-Occurring Disorders, and
 Violence Study; the Homeless Families Initiative; and the Primary Care Research Study
 in Substance Abuse and Mental Health Services for Elderly People.
- SAMHSA will encourage all levels of government State, tribal, county, and municipal – to develop collaborative relationships with their partners to foster coordination of services. SAMHSA will support State-to-State technical assistance to help States share information about the design and implementation of collaborative activities.
- SAMHSA will continue its partnerships with all major constituent organizations and individuals and will encourage them to work together to foster greater awareness and understanding of co-occurring disorders, and to advocate for evidence-based practices, integrated treatment, and comprehensive systems of care.

National Summit on Co-Occurring Disorders

To further broaden its range of partnerships, SAMHSA will convene a National Summit on Co-Occurring Disorders to be held within one year of release of this report. Participants will include representatives of national mental health, substance abuse, faith-based and community

organizations, and primary care constituencies: consumers/recovering persons, family members, providers, researchers, advocates, State and local authorities, and all Federal partners both within and outside the Department of Health and Human Services whose programs affect people who have or are at risk for co-occurring disorders (e.g., the Departments of Housing and Urban Development, Justice, Labor, Education, and Veterans Affairs; the Social Security Administration; the Office of National Drug Control Policy; the Centers for Medicare and Medicaid Services; the Administration on Children and Families; the Agency for Healthcare Research and Quality; the Administration on Aging; the Health Resources and Services Administration; and the National Institutes of Health).

Summit participants will be encouraged to share practices and lessons learned in such areas as prevention, the adoption of evidence-based practices, funding, and service system change. The event will showcase programs that have been effective in addressing co-occurring disorders and will highlight effective prevention and early intervention strategies that address the various windows of opportunity in which co-occurring disorders may be prevented. Participants will have an opportunity to discuss joint initiatives and cross-funding opportunities that contribute to the development of comprehensive systems of care for people with co-occurring disorders. Their discussions will build on the constituent input gathered in preparation for the submission of this report to Congress.

Summary

The collaborative process involved in developing this report to Congress is a key initial step in addressing co-occurring substance abuse disorders and mental disorders. Over the next 5 years, SAMHSA will help States, tribes and communities – together with consumers/recovering persons, family members, providers, advocates, researchers, and Federal partners – promote accountability, capacity, and effectiveness in the prevention and treatment of co-occurring disorders. This report is a call to action for all whose lives are touched by people who have co-occurring substance abuse disorders and mental disorders.

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