



# 18

## Mental Health and Mental Disorders

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Co-Lead Agencies: National Institutes of Health  
Substance Abuse and Mental Health Services  
Administration

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## Goal

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**Improve mental health and ensure access to appropriate, quality mental health services.**

## Overview

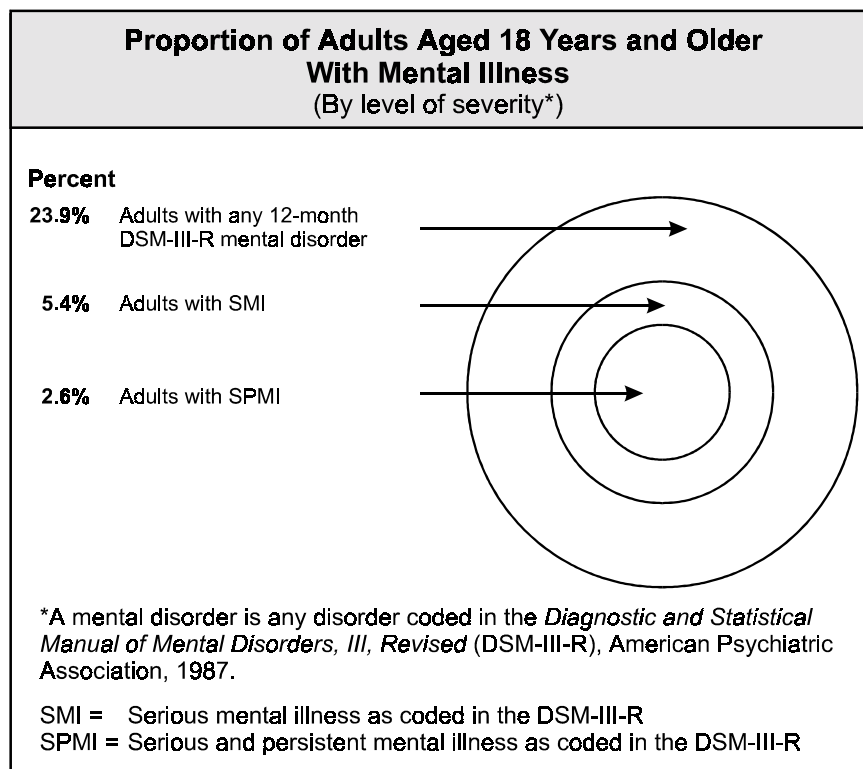
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*Mental health* is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with adversity. Mental health is indispensable to personal well-being, family and interpersonal relationships, and contribution to community or society. *Mental disorders* are health conditions that are characterized by alterations in thinking, mood, or behavior (or some combination thereof), which are associated with distress and/or impaired functioning and spawn a host of human problems that may include disability, pain, or death. *Mental illness* is the term that refers collectively to all diagnosable mental disorders.

## Issues

Mental disorders generate an immense public health burden of disability. The World Health Organization, in collaboration with the World Bank and Harvard University, has determined the “burden of disability” associated with the whole range of diseases and health conditions suffered by peoples throughout the world. A striking finding of the landmark *Global Burden of Disease* study is that the impact of mental illness on overall health and productivity in the United States and throughout the world often is profoundly underrecognized. In established market economies such as the United States, mental illness is on a par with heart disease and cancer as a cause of disability.<sup>1</sup> Suicide—a major public health problem in the United States—occurs most frequently as a consequence of a mental disorder.

Mental disorders occur across the lifespan, affecting persons of all racial and ethnic groups, both genders, and all educational and socioeconomic groups. In the United States approximately 40 million people aged 18 to 64 years, or 22 percent of the population, had a diagnosis of mental disorder alone (19 percent) or of a co-occurring mental and addictive disorder in the past year.<sup>2,3,4</sup> At least one in five children and adolescents between age 9 and 17 years has a diagnosable mental disorder in a given year.<sup>5</sup> Mental and behavioral disorders and serious emotional disturbances (SEDs) in children and adolescents can lead to school failure, alcohol or illicit drug use, violence, or suicide.<sup>6,7,8</sup> About 5 percent of children and adolescents are extremely impaired by mental, behavioral, and emotional disorders.<sup>9</sup> In later life, the majority of people aged 65 years and older cope constructively with the changes associated with aging and maintain mental health, yet an estimated 25 percent of older people (8.6 million) experience specific mental disorders, such as depression, anxiety, substance abuse, and dementia, that are not part



**Source:** Kessler, R.C.; Berglund, P.A.; Zbao, S.; et al. The 12-month prevalence and correlates of serious mental illness. *Mental Health, United States, 1998*. DHHS Publication Number (SMA) 99-8235. Rockville, MD: HHS, PHS, SAMHSA, CMHS, 1999.

of normal aging. Alzheimer's disease strikes 8 to 15 percent of people over age 65 years,<sup>10</sup> with the number of cases in the population doubling every 5 years of age after age 60 years. Alzheimer's disease is thought to be responsible for 60 to 70 percent of all cases of dementia and is one of the leading causes of nursing home placements.<sup>11</sup>

Mental disorders vary in severity and in their impact on people's lives. Mental disorders—such as schizophrenia, major depression and manic depressive or bipolar illness, and obsessive-compulsive disorder and panic disorder—can be enormously disabling.

- *Schizophrenia* will affect more than 2 million people in the United States in 1 year.<sup>3</sup> The disorder tends to follow a long-term course, although the severity of symptoms may wax and wane. With modern treatments, increasing numbers of persons with schizophrenia can and do view recovery as an achievable goal.
- *Affective disorders*, which encompass major depression and manic depressive illness, constitute a second category of severe mental illness. The World Health Organization found major depression to be the leading cause of disability among adults in developed nations such as the United States.<sup>1</sup> About 6.5 percent of women and 3.3 percent of men

will have major depression in any year. Manic depressive illness affects around 1 percent of adults, with comparable rates of occurrence in men and women. A high rate of suicide is associated with such mood disorders.<sup>12</sup>

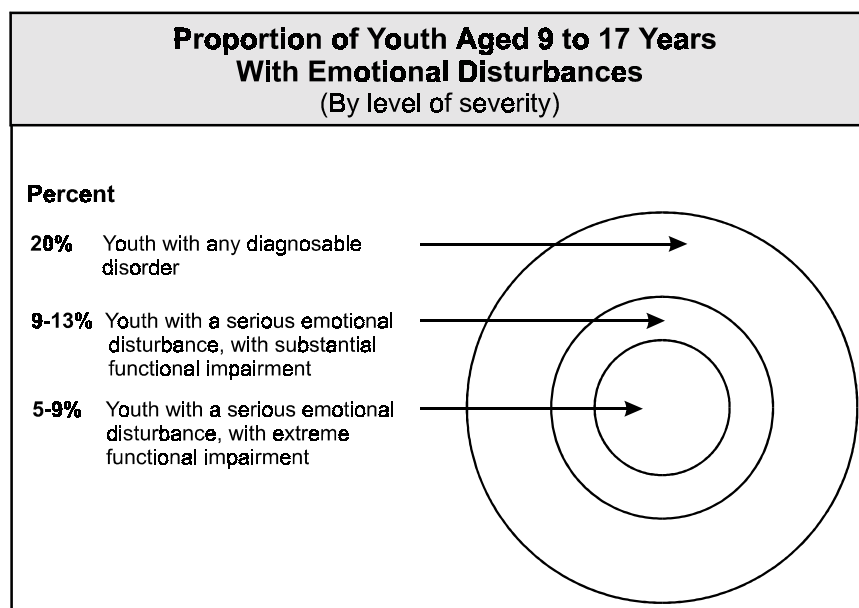
- *Anxiety disorders* encompass several discrete conditions, including panic disorder, obsessive-compulsive disorder, posttraumatic stress disorder, and phobia. More common than other mental disorders, anxiety disorders affect as many as 19 million people in the United States annually.<sup>13</sup>

Modern treatments for mental disorders are highly effective, with a variety of treatment options available for most disorders; there is no “one size fits all” treatment. Similarly, there exists today a diverse array of treatment settings, and a person may have the option of selecting a setting based on health care coverage, the clinical needs associated with a particular type or stage of illness, and personal preference.

Prevention scientists have developed, tested, and structured preventive interventions against depression, conduct disorder, and other adverse outcomes in high-risk groups of children. When applied with fidelity, preventive interventions can decrease risk of onset or delay onset of a disorder.

Rates for the most severe forms of mental disorders have been estimated to be between 2.6 and 2.8 percent of adults aged 18 years and older during any one year.<sup>13, 14</sup> Despite the effectiveness of treatment and the many paths to obtaining a treatment of choice, only 25 percent of persons with a mental disorder obtain help for their illness in the health care system. In comparison, 60 to 80 percent of persons with heart disease seek and receive care.<sup>15</sup> More critically, 40 percent of all people who have a severe mental illness do not seek treatment from either general medical or specialty mental health providers. Indeed, the majority of persons with mental disorders do not receive mental health services. Of those aged 18 years and older getting help, about 15 percent receive help from mental health specialists.<sup>3</sup> Of young people aged 9 to 17 years who have a mental disorder, 27 percent receive treatment in the health sector.<sup>16</sup> However, an additional 20 percent of children and adolescents with mental disorders use mental health services only in their schools.<sup>17</sup>

The direct costs of diagnosing and treating mental disorders totaled approximately \$69 billion<sup>17</sup> in 1996. Lost productivity and disability insurance payments due to illness or premature death accounted for an additional \$74.9 billion.<sup>17</sup> Crime, criminal justice costs, and property loss contributed another \$6 billion to the total cost of mental illness. People with mental illnesses are overrepresented in jail populations; many do not receive treatment.<sup>18</sup> Of the \$69 billion spent for diagnosing and treating mental disorders, nearly 70 percent was for the services of mental health specialty providers, with most of the remainder for general medical services providers. The majority—53 percent—of mental health treatment was



**Source:** Friedman, R.M.; Katz-Leavy, J.W.; Manderscheid, R.W.; et al. Prevalence of serious emotional disturbance: An update. *Mental Health, United States, 1996*. DHHS Publication Number (SMA) 96-3098. Rockville, MD: HHS, PHS, SAMHSA, CMHS, 1996.

paid for by public sector sources, including the States and local governments as well as Medicaid and Medicare and other Federal programs; 47 percent of expenditures were from private sources. Of expenditures from private sources, almost 60 percent were from private insurance.<sup>17</sup> The remainder came from out-of-pocket payments, including insurance copayments, with a small amount from sources such as foundations.

## Trends

Research on the brain and behavior in mental illness and mental health is moving at a rapid pace. An increasingly strong consumers' movement in the mental health field is adding urgency to the tasks of translating new knowledge into clinical practices and refining service delivery systems to use new and emerging information optimally for patient/consumer needs. Consumer and family organizations, which formed out of concern over frequent fragmentation of mental health services and lack of accessibility to such services, have assumed a substantial role in supporting development of mental health services. Diverse groups share overlapping goals, including overcoming stigma and preventing discrimination toward persons with mental illness, promoting self-help groups, and promoting recovery from mental illness.<sup>18</sup>

The co-occurrence of addictive disorders among persons with mental disorders is gaining increasing attention from mental health professionals. Among adults aged 18 years and older with a lifetime history of any mental disorder, 29 percent have a history of an addictive disorder; of those with an alcohol disorder, 37 percent have had a mental disorder; and among those with other drug disorders, 53 per-

cent have had a mental disorder.<sup>17</sup> Having both mental and addictive disorders within the same year is a particularly significant clinical treatment issue, complicating treatment for each disorder. About 3 percent of the population aged 18 years and older has been identified as having co-occurring mental and addictive disorders in 1 year.<sup>3, 14</sup> Of those with a serious mental illness, 15 percent have both types of disorder in 1 year, and of those with a severe and persistent mental illness, 27 percent have both mental and addictive disorders.<sup>14</sup> Co-occurring, or comorbid, mental and addictive disorders are estimated to affect 50 to 60 percent of homeless persons.<sup>19</sup> Comorbid mental and addictive disorders also are evident in children and adolescents.<sup>20</sup> Especially at risk for alcohol use problems are boys diagnosed with so-called externalizing disorders such as conduct problems, oppositional-defiant disorder, and attention deficit/hyperactivity disorder (ADHD).<sup>21</sup> From public health promotion and disease prevention perspectives, it is noteworthy that children and adolescents with mental illnesses often do not become substance abusers until after the mental illness becomes apparent.<sup>22</sup> This time lag creates a window of opportunity when prevention of substance abuse in these children may be possible.<sup>20</sup>

As the life expectancy of individuals continues to grow longer, the sheer number—although not necessarily the proportion—of persons experiencing mental disorders of late life will expand. This trend will present society with unprecedented challenges in organizing, financing, and delivering effective preventive and treatment services for mental health in this population. As recognition continues to grow that depression and certain cognitive losses are treatable disorders and not inevitable concomitants of aging, diagnostic precision in later life and provision of targeted treatment are increasingly urgent.

Health care in the United States continues to undergo fundamental structural changes that require creative and flexible responses from service providers, administrators, researchers, and policymakers alike. Two prominent forces of change are Federal and State efforts to improve access to health care, including mental health care, and the rapid growth and impact of managed care. In 1998, the Mental Health Parity Act (P.L. 104-204) was implemented to help increase access to care. (The term “parity” or “mental health parity” refers generally to insurance coverage for mental health services that includes the same benefits and restrictions as coverage for other health services.) Although the Federal Mental Health Parity Act is quite limited in reducing insurance coverage discrepancies between physical and mental disorders, 53 percent of the U.S. population is now covered by State mental health parity laws.

## Disparities

Although mental illnesses, for the most part, are equal opportunity disorders, there are some marked differences in how they present themselves and how they are prevented, diagnosed, and treated by gender, racial and ethnic group, and age.<sup>17</sup>



Differences between men and women are evident in the number of cases of particular mental disorders. For example, major depression affects approximately twice as many women as men.<sup>23</sup> Women who are poor, have little formal schooling, and are on welfare or are unemployed are more likely to experience depression than women in the general population. Anxiety, panic, and phobic disorders affect two to three times as many women as men.<sup>24, 25, 26</sup>

Risk for engaging in suicidal behaviors also differs by gender. A history of physical or sexual abuse appears to be a serious risk factor for suicide attempts in both women and men.<sup>27, 28</sup> Women attempt suicide more often than men,<sup>29</sup> but men's risk of completed suicide is on average four and one half times higher than women's.<sup>30</sup> This suicide gender gap begins in adolescence and grows through middle and later life.<sup>31</sup>

Specific mental disorders affect men and women at particular stages of life. Schizophrenia occurs more often in young men than in women and usually has its onset in the late teen and early adult years. Eating disorders, affecting up to 2 percent of the population, arise predominantly—but not exclusively—in adolescent and young adult women (90 percent of all cases); the median age of onset is 17 years.<sup>2</sup> Eating disorders often persist into adulthood and have among the highest death rates of any mental disorder.<sup>32</sup> Alzheimer's disease affects equal numbers of women and men, although women's longer average life spans mean that more women than men have Alzheimer's disease at any point in time.<sup>33</sup>

Mental disorders, in aggregate, are as common later in life as they are at other ages, although rates for specific mental disorders vary depending on age and gender.<sup>34</sup> In any one-year period, the number of cases of major depression in people aged 65 years and older is approximately 1 percent, which is about half the rate among persons aged 45 to 64 years.<sup>35</sup> Depression rates are much higher, however, among older people who experience a physical health problem—12 percent for persons hospitalized for problems such as hip fractures or heart disease.<sup>36</sup> Depression rates for older persons in nursing homes range from 15 to 25 percent.<sup>37</sup> The number of cases of dementias, such as Alzheimer's disease and other severe losses of mental abilities, are as high as 12 percent among persons aged 65 years and older.<sup>38</sup> By age 85 years, the rate grows to 25 percent.<sup>39</sup>

In contrast, rates of primary psychotic disorders drop with age;<sup>40</sup> thus, schizophrenia and persistent paranoid disorders affect fewer than 0.5 percent of older adults.<sup>41</sup> Although fewer old persons attempt suicide than do young persons,<sup>42</sup> the rate of completed suicide is highest among elderly men, who account for about 80 percent of suicides among persons aged 65 years and older.<sup>43</sup> Moreover, elderly white men have a suicide rate six times the national average.<sup>44</sup>

Caution is needed, however, when discussing differences among racial and ethnic groups in the rates of mental illness. Studies of the number of cases of mental health problems among racial and ethnic populations, while increasing in number, remain limited and often inconclusive. Discussion of the rates of existing cases

must consider differences in how persons of different cultures and racial and ethnic groups perceive mental illness. Behavioral problems that Western medicine views as signs of mental illness may be assessed differently by individuals in various racial and ethnic groups. With this caution in mind, along with the recognition that sample sizes for racial and ethnic groups may be limited, examination of existing large-scale studies for mental health trends among racial and ethnic groups remains important.

Mental disorders are not only the cause of limitations of various life activities but also can be a secondary problem among people with other disabilities. Depression and anxiety, for example, are seen more frequently among people with disabilities than those without disabilities.<sup>45</sup>

## Opportunities

Promising universal and targeted preventive interventions, implemented according to scientific recommendations, have great potential to reduce the risk for mental disorders and the burden of suffering in vulnerable populations. Also, social and behavioral research is beginning to explore the concept of *resilience* to identify strengths that may promote health and healing. It is generally assumed that resilience involves the interaction of biological, psychological, and environmental processes. With increased understanding of how to identify and promote resilience, it will be possible to design effective programs that draw on such internal capacity.

There is increasing awareness and concern in the public health sector regarding the impact of stress, its prevention and treatment, and the need for enhanced coping skills. Stress may be experienced by any person and provides a clear demonstration of mind-body interaction. Coping skills, acquired throughout the lifespan, are positive adaptations that affect the ability to manage stressful events. Additional research can help quantify the public health burden of stress and identify ways to prevent or alleviate it through environmental or individual strategies.

Progress in fundamental science and an emphasis on translating new knowledge into clinical applications can strengthen opportunities for future clinical and service system innovations. Research-based treatments afford an unprecedented opportunity to achieve a major reduction in the burden of disease associated with mental illness. With enhancements of clinical services and service systems, recovery is an achievable objective of mental health clinical interventions.

Evidence that mental disorders are legitimate and highly responsive to appropriate treatment promises to be a potent antidote to stigma. Stigma creates barriers to providing and receiving competent and effective mental health treatment and can lead to inappropriate treatment, unemployment, and homelessness. The elimination of stigma associated with mental disorders will in turn encourage more individuals to seek needed mental health care.

## Interim Progress Toward Year 2000 Objectives

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Four Healthy People 2000 objectives focus on individual behavior in coping with the symptoms of mental disorders: controlling stress, seeking help with personal and emotional problems, obtaining treatment for depression, and using community support programs for severe and persistent disorders. The least progress was achieved on objectives indicative of chronic stress exposure; that is, controlling stress and seeking treatment for depression showed the least progress. Objectives that involve seeking help for personal and emotional problems that result from disabilities, particularly those associated with severe and persistent mental disorders, showed the most progress. Five Healthy People 2000 objectives focus on the development of service delivery mechanisms for early recognition of symptoms and interventions, as well as reductions in the negative consequences of mental disorders. A slight decline in the proportion of nurse practitioners who typically inquire about the parent-child relationship has been documented (from 55 percent to 51 percent). In addition, large declines have taken place in nurse practitioners who typically inquire about their adult patients' cognitive, emotional, or behavioral functioning (from 35 percent to 19 percent for cognitive functioning and from 40 percent to 26 percent for emotional or behavioral functioning). Some offsetting increases in treatment and referral activity are reported (from 20 percent to 22 percent for cognitive problems, from 23 percent to 33 percent for emotional/behavioral problems).

Six Healthy People 2000 objectives focus on the distress and dysfunction that accompany the cognitive, emotional, and behavioral symptoms of mental disorders. The age-adjusted suicide rate in the total population has slightly declined and by 1997 already had met the target level; the rate for white men aged 65 years and older, who began the decade at highest risk for suicide (44.4 per 100,000), had declined below the year 2000 target in 1994 (38.9 per 100,000) and had declined further by 1997 (35.5 per 100,000).

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

## Healthy People 2010—Summary of Objectives

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### **Mental Health and Mental Disorders**

**Goal:** Improve mental health and ensure access to appropriate, quality mental health services.

<b>Number</b>	<b>Objective Short Title</b>
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<b>Mental Health Status Improvement</b>	
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- |      |  |
|------|--|
| 18-1 | Suicide  |
| 18-2 | Adolescent suicide attempts                        |
| 18-3 | Serious mental illness (SMI) among homeless adults |
| 18-4 | Employment of persons with SMI                     |
| 18-5 | Eating disorder relapses                           |

<b>Treatment Expansion</b>	
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- |       |  |
|-------|--|
| 18-6  | Primary care screening and assessment              |
| 18-7  | Treatment for children with mental health problems |
| 18-8  | Juvenile justice facility screening                |
| 18-9  | Treatment for adults with mental disorders         |
| 18-10 | Treatment for co-occurring disorders               |
| 18-11 | Adult jail diversion programs                      |

<b>State Activities</b>	
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- |       |  |
|-------|--|
| 18-12 | State tracking of consumer satisfaction    |
| 18-13 | State plans addressing cultural competence |
| 18-14 | State plans addressing elderly persons     |

## Healthy People 2010 Objectives

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### Mental Health Status Improvement

#### 18-1. Reduce the suicide rate.

**Target:** 5.0 suicides per 100,000 population.

**Baseline:** 11.3 suicides per 100,000 population occurred in 1998 (age adjusted to the year 2000 standard population).

**Target setting method:** Better than the best.

**Data source:** National Vital Statistics System (NVSS), CDC, NCHS.

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

Total Population, 1998	Suicides
	Rate per 100,000
<b>TOTAL</b>	11.3
<b>Race and ethnicity</b>	
American Indian or Alaska Native	12.6
Asian or Pacific Islander	6.6
Asian	DNC
Native Hawaiian and other Pacific Islander	DNC
Black or African American	5.8
White	12.2
Hispanic or Latino	6.3
Not Hispanic or Latino	11.8
Black or African American	6.0
White	12.8
<b>Gender</b>	
Female	4.3
Male	19.2
<b>Education level (aged 25 to 64 years)</b>	
Less than high school	17.9
High school graduate	19.2
At least some college	10.0

Total Population, 1998	Suicides
	Rate per 100,000
<b>Age (not age adjusted)</b>	
10 to 14 years	1.6
15 to 19 years	8.9
20 to 24 years	13.6

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

Note: Age adjusted to the year 2000 standard population.

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

## 18-2. Reduce the rate of suicide attempts by adolescents.

**Target:** 12-month average of 1 percent.

**Baseline:** 12-month average of 2.6 percent of adolescents in grades 9 through 12 attempted suicide in 1999.

**Target setting method:** Better than the best.

**Data source:** Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.

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

Students in Grades 9 Through 12, 1999	Suicide Attempts
	Percent
<b>TOTAL</b>	2.6
<b>Race and ethnicity</b>	
American Indian or Alaska Native	DSU
Asian or Pacific Islander	DSU
Asian	DSU
Native Hawaiian and other Pacific Islander	DSU
Black or African American	3.1
White	2.2
Hispanic or Latino	3.0
Not Hispanic or Latino	2.6
Black or African American	2.9
White	1.9
<b>Gender</b>	
Female	3.1
Male	2.1

Students in Grades 9 Through 12, 1999	Suicide Attempts
	Percent
<b>Parents' education level</b>	
Less than high school	DNC
High school graduate	DNC
At least some college	DNC
<b>Sexual orientation</b>	DNC

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

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

Suicide is a complex behavior that can be prevented in many cases by early recognition and treatment of mental disorders. It was the ninth leading cause of death in the United States in 1996 and the third leading killer of young persons between age 15 and 24 years.<sup>46, 47, 48, 49</sup> At least 90 percent of all people who kill themselves have a mental or substance abuse disorder, or a combination of disorders. However, most persons with a mental or substance abuse disorder do not kill themselves; thus other factors contribute to suicide risk. In addition to mental and substance abuse disorders, risk factors include prior suicide attempt, stressful life events, and access to lethal suicide methods. Suicide is difficult to predict; therefore, preventive interventions focus on risk factors. Thus, reduction in access to lethal methods and recognition and treatment of mental and substance abuse disorders are among the most promising approaches to suicide prevention. More targeted approaches should consider risk factors most salient and appropriate for select populations.

### **18-3. Reduce the proportion of homeless adults who have serious mental illness (SMI).**

**Target:** 19 percent.

**Baseline:** 25 percent of homeless adults aged 18 years and older had SMI in 1996.

**Target setting method:** 24 percent improvement. (Better than the best will be used when data are available.)

**Data source:** Projects for Assistance in Transition from Homelessness (PATH) Annual Application, SAMHSA, CMHS.

**Data for population groups currently are not collected.**

Approximately one-quarter of homeless persons in the United States have a serious mental illness (SMI).<sup>50</sup> New approaches developed over the past 10 years provide ways to lower the number of persons who are homeless and who also have SMI. Using persistent patient outreach and engagement strategies, service provid-

ers are helping homeless persons with SMI connect with mainstream treatment systems.<sup>51, 52</sup>

Treatment alone, however, is not enough. Once permanent housing is located, appropriate mental health and social supports can help persons with mental illness remain off the street. Much of this support occurs in the form of case management, particularly if it is responsive both to emerging mental health issues and to the skills a person needs to function and thrive in the community.

#### **18-4. Increase the proportion of persons with serious mental illness (SMI) who are employed.**

**Target:** 51 percent.

**Baseline:** 43 percent of persons aged 18 years and older with SMI were employed in 1994.

**Target setting method:** 19 percent improvement. (Better than the best will be used when data are available.)

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

**Data for population groups currently are not analyzed.**

Rehabilitation is an essential part of care for adults with serious mental illness. To promote independent living, rehabilitation programs often evaluate and place these persons in jobs. Rehabilitation programs also provide continuing support and help ensure that the placement is working well. Research shows that working provides both economic and personal benefits for persons with SMI that extend beyond a paycheck and workplace companionship.<sup>53</sup> Employment also improves self-esteem and independence; it helps a person to manage his or her own illness and return to community life.<sup>54, 55</sup> A majority of persons with SMI want to be employed and rank employment as a primary personal goal.<sup>56</sup> Helping persons with mental illness secure employment can reduce the use of mental health services and reduce the number of persons who receive Federal and State disability payments.<sup>56</sup>

#### **18-5. (Developmental) Reduce the relapse rates for persons with eating disorders including anorexia nervosa and bulimia nervosa.**

**Potential data source:** Prospective studies of patients with anorexia or bulimia nervosa, NIH, NIMH.

Anorexia nervosa is the most severe eating disorder, characterized by extreme and often life-threatening<sup>57</sup> weight loss associated with a distorted body image and a pathological fear of gaining weight. In cases of severe weight loss, hospital treatment often is needed. Studies suggest that from 30 to 50 percent of patients treated successfully in the hospital become ill again within 1 year of leaving the



hospital.<sup>58,59</sup> Efforts are under way to develop and test specific interventions that can prevent relapse in these patients. For instance, a particular kind of psychotherapy—called cognitive-behavioral treatment—has been found to lower relapse rates in persons with anorexia nervosa.<sup>60</sup> Treatments using medications also have been tried, both alone and in combination with talking therapy. Preliminary reports suggest that it might be possible to decrease the chance of relapse, resulting in better long-term prospects for persons with severe anorexia nervosa.

Bulimia nervosa is an eating disorder that involves eating a lot of food (binge eating) and then eliminating it (purging), whether through self-induced vomiting or through the use of diuretics or other medications. Effective short-term treatments exist for this serious mental health problem. When “remission” is defined as being symptom-free of binge eating and purging for at least 4 weeks, about 25 percent of those in remission had a relapse in less than 3 months. Around 9 months after remission, fewer than half (49 percent) of the persons remained symptom-free.<sup>61</sup> Risk for relapse seems to drop after 4 years of being symptom-free.<sup>62</sup>

## Treatment Expansion

### **18-6. (Developmental) Increase the number of persons seen in primary health care who receive mental health screening and assessment.**

**Potential data source:** Primary Care Data System/Federally Qualified Health Centers, HRSA.

The general medical and primary care sector consists of health care professionals such as internists, pediatricians, and nurse practitioners in office-based practice, clinics, acute medical and surgical hospitals, and nursing homes. Close to 6 percent of the adult U.S. population use the general medical sector for mental health care, with an average of about 4 mental health visits per year—far lower than the average of 14 visits per year found in the specialty medical sector.<sup>3,4</sup> The general medical sector has long been identified as the initial point of contact for many adults with mental disorders; for some, these providers may be their only source of mental health services. This attention to mental state in primary care can promote early detection and intervention for mental health problems.

### **18-7. (Developmental) Increase the proportion of children with mental health problems who receive treatment.**

**Potential data source:** National Household Survey on Drug Abuse (NHSDA), SAMHSA, OAS.

For many children aged 18 years and under, lifelong mental disorders may start in childhood or adolescence. For many other children, normal development is disrupted by biological, environmental, and psychosocial factors, which impair their

mental health, interfere with education and social interactions, and keep them from realizing their full potential as adults.

Expanding effective services for children, particularly for those with serious emotional disturbance, depends on promoting effective collaboration across critical areas of support: families, social services, health, mental health, juvenile justice, and schools. Better services and collaboration for children with serious emotional disturbance and their families will result in greater school retention, decreased contact with the juvenile justice system, increased stability of living arrangements, and improved educational, emotional, and behavioral development.<sup>63, 64</sup>

**18-8. (Developmental) Increase the proportion of juvenile justice facilities that screen new admissions for mental health problems.**

**Potential data source:** Inventory of Mental Health Services in Juvenile Justice Facilities, SAMHSA.

It is estimated that over 100,000 youth are placed in juvenile justice facilities annually.<sup>65</sup> Although exact numbers of youths with mental disorders among those entering this system are not available, the proportion is considerably higher than in the general population. Not surprisingly, problems of suicide, self-injurious behavior, and other disorders are significant among youths in the juvenile justice system.<sup>66</sup> Screening activities, including parent or caregiver interviews, should be conducted by qualified mental health personnel.<sup>66</sup> This approach can help ensure that all youths entering the juvenile justice system who also have a treatable mental health problem are identified and receive appropriate treatment.

**18-9. Increase the proportion of adults with mental disorders who receive treatment.**

**Target and baseline:**

Objective	Increase in Adults With Mental Disorders Receiving Treatment	1997 Baseline (unless noted)	2010 Target
		<i>Percent</i>	
<b>18-9a.</b>	Adults aged 18 to 54 years with serious mental illness	47 (1991)	55
<b>18-9b.</b>	Adults aged 18 years and older with recognized depression	23	50
<b>18-9c.</b>	Adults aged 18 years and older with schizophrenia	60 (1984)	75
<b>18-9d.</b>	Adults aged 18 years and older with generalized anxiety disorder	38	50

**Target setting method:** 17 percent improvement for 18-9a. (Better than the best will be used when data are available.) Better than the best for 18-9b, 18-9c, and 18-9d.

**Data sources:** Epidemiologic Catchment Area (ECA) Program, NIH, NIMH; National Household Survey on Drug Abuse (NHSDA), SAMHSA, OAS; National Comorbidity Survey, SAMHSA, CMHS; NIH, NIMH.

Adults Aged 18 Years and Older With Mental Disorders, 1997 (unless noted)	Received Treatment			
	18-9a. Serious Mental Illness (aged 18 to 54 years) (1991)	18-9b. Recognized Depression	18-9c. Schizophrenia (1984)	18-9d. Generalized Anxiety Disorder
	Percent			
<b>TOTAL</b>	47	23	60	38
<b>Race and ethnicity</b>				
American Indian or Alaska Native	DNA	DSU	DSU	DSU
Asian or Pacific Islander	DNA	DSU	DSU	DSU
Asian	DNA	DNC	DSU	DNC
Native Hawaiian and other Pacific Islander	DNA	DNC	DSU	DNC
Black or African American	DNA	16	DNC	26
White	DNA	24	DNC	39
Hispanic or Latino	DNA	20	42	DSU
Not Hispanic or Latino	DNA	DNC	DNC	40
Black or African American	DNA	DNA	41	DNA
White	DNA	DNA	63	DNA
<b>Gender</b>				
Female	DNA	24	63	32
Male	DNA	21	51	49
<b>Education level</b>				
Less than high school	DNA	22	48	48
High school graduate	DNA	19	71	34
At least some college	DNA	28	66	32
<b>Sexual orientation</b>	DNC	DNC	DNC	DNC

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

**Serious mental illness.** Untreated mental illnesses have human and economic costs associated with them<sup>67, 68</sup> Lost productivity due to illness, premature death, criminal justice interaction process, and property loss are all part of these costs. Ninety percent of those who complete suicide have a diagnosed mental illness.<sup>3</sup> Helping persons with mental illnesses access appropriate scientifically based treatments is essential.

**Depression.** At some time or another, virtually all adults will experience a tragic or unexpected loss or a serious setback and times of profound sadness, grief, or distress. Major depressive disorder, however, differs both quantitatively and qualitatively from normal sadness or grief, which is typically less pervasive and generally more time-limited. Moreover, some of the symptoms of severe depression, such as anhedonia (the inability to experience pleasure), hopelessness, and loss of mood reactivity (the ability to feel a mood uplift in response to something positive) only rarely accompany normal sadness. Suicidal thoughts and psychotic symptoms such as delusions or hallucinations virtually always signify a pathological state.<sup>69</sup> Depression disrupts the lives of depressed persons and their families and reduces economic productivity. Depression also can result in suicide and has an especially severe impact on women.<sup>12, 23</sup> Treatment can alleviate each of these problems. Available medications and psychological treatments, alone or in combination, can help 80 percent of those with depression.<sup>70</sup>

Depression also has a deleterious impact on the economy, costing the United States over \$40 billion each year, both in diminished productivity and in use of health care resources. In the workplace, depression is a leading cause of absenteeism and diminished productivity.<sup>71</sup> Although only a minority seek professional help to relieve a mood disorder, depressed people are significantly more likely than others to visit a physician for some other reason.<sup>72</sup>

**Schizophrenia** is characterized by profound disruption in cognition and emotion, affecting the most fundamental human attributes: language, thought, perception, affect, and sense of self. Symptoms frequently include hearing internal voices or experiencing other sensations not connected to an obvious source (hallucinations) and assigning unusual significance or meaning to normal events or holding fixed false beliefs. No single symptom is definitive for diagnosis; rather, the diagnosis encompasses a pattern of signs and symptoms, in conjunction with impaired occupational or social functioning. The disorder affects 0.5 to 1 percent of the population over the course of a lifetime. Onset generally occurs during young adulthood (mid-20s for men, late-20s for women), although earlier and later onset do occur.<sup>73</sup>

**Anxiety disorders**, which include generalized anxiety disorder, are not only common in the United States, but they are ubiquitous across human cultures.<sup>3, 4, 74</sup> Twenty-four percent of the population will experience an anxiety disorder, many with overlapping substance abuse disorders.<sup>17, 75, 76</sup> The longitudinal course of anxiety disorders is characterized by relatively early ages of onset, chronicity, relapsing or recurrent episodes of illness, and periods of disability.<sup>77, 78, 79, 80</sup> Panic

disorder and agoraphobia are associated with increased risks of attempted and completed suicide.<sup>24, 81</sup>

**18-10. (Developmental) Increase the proportion of persons with co-occurring substance abuse and mental disorders who receive treatment for both disorders.**

**Potential data sources:** National Health Interview Survey (NHIS), CDC, NCHS; National Household Survey on Drug Abuse (NHSDA), SAMHSA, OAS; Replication of National Comorbidity Survey, NIH, NIMH.

Co-occurring mental and addictive disorders are more common than previously recognized. In general, 19 percent of the adult U.S. population have a mental disorder alone (in 1 year); 3 percent have both mental and addictive disorders; and 6 percent have addictive disorders alone. Consequently, about 28 to 30 percent of the population have either a mental or addictive disorder.<sup>3, 4</sup> The lifetime rates of co-occurrence of mental disorders and addictive disorders are strikingly high. About one in five persons in the United States experience a mental disorder in the course of a year. Nearly one in three adults who have a mental disorder in their lifetime also experiences a co-occurring substance abuse (alcohol or other drugs) disorder, which complicates treatment. Individuals with co-occurring disorders are more likely to experience a chronic course and to use services than are those with either type of disorder alone. Clinicians, program developers, and policymakers need to be aware of these high rates of comorbidity. While an integrated approach may be indicated for persons with SMI and co-occurring addictive disorders, how public health service systems can best address issues of treating the full range of persons with co-occurring mental and substance-related disorders remains a challenge. Treatment protocols continue to be refined as research findings and promising practices are disseminated to programs and practitioners.

**18-11. (Developmental) Increase the proportion of local governments with community-based jail diversion programs for adults with serious mental illness (SMI).**

**Potential data source:** National Survey of Jail Mental Health Diversion Programs, SAMHSA.

Nearly 700,000 persons with active symptoms of serious mental illness are admitted to jails each year. They constitute about 7 percent of the jail population.<sup>82</sup> Individuals with SMI were overrepresented in jails compared to their numbers in the general population. Some people arrested for nonviolent crimes could be better served if diverted from the jail system to a community-based mental health treatment program.<sup>83</sup> Key components of a model diversion program are: (1) identifying specific program elements for diversion with accompanying resources and identified staff, (2) a specific target population, (3) a goal of avoiding or decreasing the time of incarceration, and (4) a way to link target population members with community-based mental health services.<sup>83</sup>

## State Activities

### **18-12. Increase the number of States and the District of Columbia that track consumers' satisfaction with the mental health services they receive.**

**Target:** 50 States and the District of Columbia.

**Baseline:** 36 States tracked consumers' satisfaction with the mental health services they received in 1999.

**Target setting method:** Total coverage.

**Data source:** Mental Health Statistics Improvement Program, SAMHSA.

The health care industry increasingly is using consumer opinion to gain information on service needs and changes. Patient satisfaction studies are becoming standard practice for many health care organizations. Health care executives have indicated that consumers have a major impact on the development of health care products.<sup>84</sup> Nearly 90 percent of health care executives reported that they have expanded both the number and type of services based on consumer preference. The Mental Health Statistics Improvement Program has pioneered the development of a consumer-oriented mental health report card that includes a consumer survey designed to address questions of access, appropriateness, quality, and outcome of care.

### **18-13. (Developmental) Increase the number of States, Territories, and the District of Columbia with an operational mental health plan that addresses cultural competence.**

**Potential data source:** National Technical Assistance Center for State Mental Health Systems, National Association of State Mental Health Program Directors, National Research Institute; SAMHSA, CMHS.

To work effectively, health care providers need to understand the differences in how various populations in the United States perceive mental health and mental illness and treatment services. These factors affect whether people seek mental health care, how they describe their symptoms, the duration of care, and the outcomes of the care received. Research has shown that various select populations use mental health services differently. They may not seek mental health services in the formal system, drop out of care, or seek care at much later stages of illness, driving the service cost higher.<sup>85, 86, 87</sup> This pattern of use appears to be the result of a community-based mental health service system that is not culturally relevant, responsive, or accessible to select populations.<sup>87, 88, 89, 90</sup> Hospitals have become the primary mental health treatment site for a disproportionate number of African Americans.<sup>91, 92, 93, 94</sup>

**18-14. Increase the number of States, Territories, and the District of Columbia with an operational mental health plan that addresses mental health crisis interventions, ongoing screening, and treatment services for elderly persons.**

**Target:** 50 States and the District of Columbia.

**Baseline:** 24 States had an operational mental health plan that addressed mental health crisis interventions, ongoing screening, and treatment services for elderly persons in 1997.

**Target setting method:** Total coverage.

**Data source:** National Technical Assistance Center for State Mental Health Systems, National Association of State Mental Health Program Directors, National Research Institute; SAMHSA, CMHS.

The Nation is growing older; the number and proportion of the population aged 65 years and older will grow rapidly after 2010. As the Nation ages, the mental health needs of elderly persons must be addressed because their needs will continue to grow. Mood disorders affect between 2 and 4 percent of community-living elderly persons.<sup>37</sup> Elderly persons with clinically significant depressive symptoms range from 10 to 15 percent of the U.S. population.<sup>95</sup> State mental health authorities and localities should become increasingly engaged in meeting the mental health needs of this growing population.

## **Related Objectives From Other Focus Areas**

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- 1. Access to Quality Health Services**
  - 1-1. Persons with health insurance
  - 1-2. Health insurance coverage for clinical preventive services
  - 1-3. Counseling about health behaviors
  - 1-4. Source of ongoing care
  - 1-5. Usual primary care provider
  - 1-6. Difficulties or delays in obtaining needed health care
  - 1-7. Core competencies in health provider training
  - 1-8. Racial and ethnic representation in health professions
  - 1-10. Delay or difficulty in getting emergency care
  - 1-11. Rapid prehospital emergency care
  - 1-12. Single toll-free number for poison control centers
  - 1-13. Trauma care systems
  - 1-14. Special needs of children
  - 1-15. Long-term care services
- 2. Arthritis, Osteoporosis, and Chronic Back Conditions**
  - 2-4. Help in coping
- 3. Cancer**
  - 3-10. Provider counseling about cancer prevention

**6. Disability and Secondary Conditions**

- 6-1. Standard definition of people with disabilities in data sets
- 6-2. Feelings and depression among children with disabilities
- 6-3. Feelings and depression interfering with activities among adults with disabilities
- 6-4. Social participation among adults with disabilities
- 6-5. Sufficient emotional support among adults with disabilities
- 6-6. Satisfaction with life among adults with disabilities
- 6-7. Congregate care of children and adults with disabilities
- 6-8. Employment parity
- 6-9. Inclusion of children and youth with disabilities in regular education programs
- 6-10. Accessibility of health and wellness programs
- 6-11. Assistive devices and technology
- 6-12. Environmental barriers affecting participation in activities
- 6-13. Surveillance and health promotion programs

**7. Educational and Community-Based Programs**

- 7-1. High school completion
- 7-2. School health education
- 7-3. Health-risk behavior information for college and university students
- 7-4. School nurse-to-student ratio
- 7-5. Worksite health promotion programs
- 7-6. Participation in employer-sponsored health promotion activities
- 7-7. Patient and family education
- 7-9. Health care organization sponsorship of community health promotion activities
- 7-10. Community health promotion programs
- 7-11. Culturally appropriate and linguistically competent community health promotion programs
- 7-12. Older adult participation in community health promotion activities

**9. Family Planning**

- 9-1. Intended pregnancy
- 9-2. Birth spacing
- 9-3. Contraceptive use
- 9-4. Contraceptive failure
- 9-5. Emergency contraception
- 9-6. Male involvement in pregnancy prevention
- 9-7. Adolescent pregnancy
- 9-8. Abstinence before age 15 years
- 9-9. Abstinence among adolescents aged 15 to 17 years
- 9-10. Pregnancy prevention and sexually transmitted disease (STD) protection
- 9-11. Pregnancy prevention education
- 9-13. Insurance coverage for contraceptive supplies and services

**11. Health Communication**

- 11-1. Households with Internet access
- 11-2. Health literacy
- 11-3. Research and evaluation of communication programs



- 11-4. Quality of Internet health information sources
  - 11-5. Centers for excellence
  - 11-6. Satisfaction with health care providers' communication skills
- 13. HIV**
- 13-1. New AIDS cases
  - 13-5. New HIV cases
  - 13-13. Treatment according to guidelines
  - 13-17. Perinatally acquired HIV infection
- 15. Injury and Violence Prevention**
- 15-10. Emergency department surveillance systems
  - 15-11. Hospital discharge surveillance systems
  - 15-12. Emergency department visits
  - 15-33. Maltreatment and maltreatment fatalities of children
  - 15-34. Physical assault by intimate partners
  - 15-35. Rape or attempted rape
  - 15-36. Sexual assault other than rape
  - 15-37. Physical assaults
  - 15-38. Physical fighting among adolescents
  - 15-39. Weapon carrying by adolescents on school property
- 16. Maternal, Infant, and Child Health**
- 16-2. Child deaths
  - 16-3. Adolescent and young adult deaths
  - 16-4. Maternal deaths
  - 16-5. Maternal illness and complications due to pregnancy
  - 16-6. Prenatal care
  - 16-14. Developmental disabilities
  - 16-17. Prenatal substance exposure
  - 16-18. Fetal alcohol syndrome
  - 16-19. Breastfeeding
  - 16-22. Medical homes for children with special health care needs
  - 16-23. Service systems for children with special health care needs
- 20. Occupational Safety and Health**
- 20-5. Work-related homicides
  - 20-6. Work-related assaults
  - 20-7. Elevated blood lead levels from work exposure
  - 20-9. Worksite stress reduction programs
- 23. Public Health Infrastructure**
- 23-1. Public health employee access to the Internet
  - 23-2. Public access to information and surveillance data
  - 23-3. Use of geocoding in health data systems
  - 23-4. Data for all population groups
  - 23-5. Data for Leading Health Indicators, Health Status Indicators, and Priority Data Needs at Tribal, State, and local levels
  - 23-6. National tracking of Healthy People 2010 objectives
  - 23-7. Timely release of data on objectives
  - 23-8. Competencies for public health workers
  - 23-9. Training in essential public health services
  - 23-10. Continuing education and training by public health agencies
  - 23-11. Performance standards for essential public health services

- 23-12. Health improvement plans
- 23-13. Access to public health laboratory services
- 23-14. Access to epidemiology services
- 23-16. Data on public health expenditures
- 23-17. Population-based prevention research
- 25. Sexually Transmitted Diseases**
  - 25-3. Primary and secondary syphilis
  - 25-8. Heterosexually transmitted HIV infection in women
  - 25-9. Congenital syphilis
  - 25-10. Neonatal STDs
  - 25-11. Responsible adolescent sexual behavior
  - 25-12. Responsible sexual behavior messages on television
  - 25-14. Screening in youth detention facilities and jails
  - 25-15. Contracts to treat nonplan partners of STD patients
  - 25-17. Screening of pregnant women
  - 25-18. Compliance with recognized STD treatment standards
  - 25-19. Provider referral services for sex partners
- 26. Substance Abuse**
  - 26-7. Alcohol- and drug-related violence
  - 26-8. Lost productivity
  - 26-9. Substance-free youth
  - 26-10. Adolescent and adult use of illicit substances
  - 26-11. Binge drinking
  - 26-12. Average annual alcohol consumption
  - 26-13. Low-risk drinking among adults
  - 26-14. Steroid use among adolescents
  - 26-15. Inhalant use among adolescents
  - 26-16. Peer disapproval of substance abuse
  - 26-17. Perception of risk associated with substance abuse
  - 26-18. Treatment gap for illicit drugs
  - 26-22. Hospital emergency department referrals
  - 26-23. Community partnerships and coalitions

## Terminology

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

**Anxiety disorders:** Anxiety disorders have multiple physical and psychological symptoms, but all have in common feelings of apprehension, tension, or uneasiness. Among the anxiety disorders are panic disorder, agoraphobia, obsessive-compulsive disorder, posttraumatic stress disorder, and generalized anxiety disorder.

**Case management:** Practice in which the service recipient is a partner in his or her recovery and self-management of mental illness and life.

**Co-occurring/comorbidity:** In general, the existence of two or more illnesses—whether physical or mental—at the same time in a single individual. In this chapter, comorbidity specifically means the existence of a mental illness and a substance abuse disorder or a mental and a physical illness in the same person at the same time.

**Consumer:** Any person using mental health services.

**Cultural competence:** In this chapter, a group of skills, attitudes, and knowledge that allows persons, organizations, and systems to work effectively with diverse racial, ethnic, and social groups.

**Depression:** A state of low mood that is described differently by people who experience it. Commonly described are feelings of sadness, despair, emptiness, or loss of interest or pleasure in nearly all things. Depression also can be experienced in other disorders such as bipolar disorder (manic-depressive disorder).

**Diagnosable mental illness:** Includes all people with a mental illness in a specified population group, whether or not they have received a formal diagnosis from a medical or mental health professional.

**Homeless person:** A person who lacks housing. The definition also includes a person living in transitional housing or a person who spends most nights in a supervised public or private facility providing temporary living quarters.

**Juvenile justice facility:** Includes detention centers, shelters, reception or diagnostic centers, training schools, ranches, forestry camps or farms, halfway houses and group homes, and residential treatment centers for young offenders.

**Mental health services:** Diagnostic, treatment, and preventive care that helps improve how persons with mental illness feel both physically and emotionally as well as how they interact with other persons. These services also help persons who have a strong risk of developing a mental illness.

**Mental illness:** The term that refers collectively to all diagnosable mental disorders. *Mental disorders* are health conditions characterized by alterations in thinking, mood, or behavior (or some combination thereof) that are all mediated by the brain and associated with distress or impaired functioning or both. Mental disorders spawn a host of human problems that may include personal distress, impaired functioning and disability, pain, or death. These disorders can occur in men and women of any age and in all racial and ethnic groups. They can be the result of family history, genetics, or other biological, environmental, social, or behavioral factors that occur alone or in combination.

**Parity, mental health parity:** Equivalent benefits and restrictions in insurance coverage for mental health services and for other health services.

**Resilience:** Manifested competence in the context of significant challenges to adaptation or development.

**Schizophrenia:** A mental disorder lasting for at least 6 months, including at least 1 month with two or more active-phase symptoms. Active-phase symptoms include delusions, hallucinations, disorganized speech, and grossly disorganized or catatonic behavior. Schizophrenia is accompanied by marked impairment in social or occupational functioning.

**Screening for mental health problems:** A brief formal or informal assessment to identify persons who have mental health problems or are likely to develop such problems. The screening process helps determine whether a person has a problem and, if so, the most appropriate mental health services for that person.

**Serious emotional disturbance (SED):** A diagnosable mental disorder found in persons from birth to age 18 years that is so severe and long lasting that it seriously interferes with functioning in family, school, community, or other major life activities.

**Serious mental illness (SMI):** A diagnosable mental disorder found in persons aged 18 years and older that is so long lasting and severe that it seriously interferes with a person's ability to take part in major life activities.

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