CHAPTER 1
INTRODUCTION AND THEMES

Contents

CHAPTER 1
INTRODUCTION AND THEMES

This first Surgeon General's Report on Mental Health is issued at the culmination of a half-century that has witnessed remarkable advances in the understanding of mental disorders and the brain and in our appreciation of the centrality of mental health to overall health and well-being. The report was prepared against a backdrop of growing awareness in the United States and throughout the world of the immense burden of disability associated with mental illnesses. In the United States, mental disorders collectively account for more than 15 percent of the overall burden of disease from *all* causes and slightly more than the burden associated with all forms of cancer (Murray & Lopez, 1996). These data underscore the importance and urgency of treating and preventing mental disorders and of promoting mental health in our society.

The report in its entirety provides an up-to-date review of scientific advances in the study of mental health and of mental illnesses that affect at least one in five Americans. Several important conclusions may be drawn from the extensive scientific literature summarized in the report. One is that a variety of treatments of well-documented efficacy exist for the array of clearly defined mental and behavioral disorders that occur across the life span. Every person should be encouraged to seek help when questions arise about mental health, just as each person is encouraged to seek help when questions arise about health. Research highlighted in the report demonstrates that mental health is a facet of health that evolves throughout the lifetime. Just as each person can do much to promote and maintain overall health regardless of age, each also can do much to promote and strengthen mental health at every stage of life.

Much remains to be learned about the causes, treatment, and prevention of mental and behavioral disorders. Obstacles that may limit the availability or accessibility of mental health services for some Americans are being dismantled, but disparities persist. Still, thanks to research and the experiences of millions of individuals who have a mental disorder, their family members, and other advocates, the Nation has the power today to tear down the most formidable obstacle to future progress in the arena of mental illness and health. That obstacle is stigma. Stigmatization of mental illness is an excuse for inaction and discrimination that is inexcusably outmoded in 1999. As evident in the chapters that follow, we have acquired an immense amount of knowledge that permits us, as a Nation, to respond to the needs of persons with mental illness in a manner that is both effective and respectful.

Overarching Themes

Mental Health and Mental Illness: A Public Health Approach

The Nation's contemporary mental health enterprise, like the broader field of health, is rooted in a population-based public health model. The public health model is characterized by concern for the health of a population in its entirety and by awareness of the linkage between health and the physical and psychosocial environment. Public health focuses not only on traditional areas of diagnosis, treatment, and etiology, but also on epidemiologic surveillance of the health of the population at large, health promotion, disease prevention, and access to and evaluation of services (Last & Wallace, 1992).

Just as the mainstream of public health takes a broad view of health and illness, this Surgeon General's Report on Mental Health takes a wide-angle lens to *both* mental health and mental illness. In years

past, the mental health field often focused principally on mental illness in order to serve individuals who were most severely affected. Only as the field has matured has it begun to respond to intensifying interest and concerns about disease prevention and health promotion. Because of the more recent consideration of these topic areas, the body of accumulated knowledge regarding them is not as expansive as that for mental illness.

Mental Disorders are Disabling

The burden of mental illness on health and productivity in the United States and throughout the world has long been profoundly underestimated. Data developed by the massive Global Burden of Disease study,[1] conducted by the World Health Organization, the World Bank, and Harvard University, reveal that mental illness, including suicide,[2] ranks second in the burden of disease in established market economies, such as the United States (Table 1-1).

Mental illness emerged from the Global Burden of Disease study as a surprisingly significant contributor to the burden of disease. The measure of calculating disease burden in this study, called Disability Adjusted Life Years (DALYs), allows comparison of the burden of disease across many different disease conditions. DALYs account for lost years of healthy life regardless of whether the years were lost to premature death or disability. The disability component of this measure is weighted for severity of the disability. For example, major depression is equivalent in burden to blindness or paraplegia, whereas active psychosis seen in schizophrenia is equal in disability burden to quadriplegia.

By this measure, major depression alone ranked second only to ischemic heart disease in magnitude of disease burden (see Table 1-2). Schizophrenia, bipolar disorder, obsessive-compulsive disorder, panic disorder, and post-traumatic stress disorder also contributed significantly to the burden represented by mental illness.

Table 1-1. Disease burden by selected illness categories in established market economies, 1990

	Percent of Total DALYs*
All cardiovascular conditions	18.6
All mental illness**	15.4
All malignant diseases (cancer)	15.0
All respiratory conditions	4.8
All alcohol use	4.7
All infectious and parasitic diseases	2.8
All drug use	1.5

*Disability-adjusted life year (DALY) is a measure that expresses years of life lost to premature death and years lived with a disability of specified severity and duration (Murray & Lopez, 1996).

**Disease burden associated with "mental illness" includes suicide.

Table 1-2. Leading sources of disease burden in established market economies, 1990

		Total DALYs (millions)	Percent of Total
	All causes	98.7	
1	Ischemic heart disease	8.9	9.0
2	**Unipolar major depression**	**6.7**	**6.8**
3	Cardiovascular disease	5.0	5.0
4	Alcohol use	4.7	4.7
5	Road traffic accidents	4.3	4.4

Source: Murray & Lopez, 1996.

Mental Health and Mental Illness: Points on a Continuum

As will be evident in the pages that follow, "mental health" and "mental illness" are not polar opposites but may be thought of as points on a continuum. *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. It is easy to overlook the value of mental health until problems surface. Yet from early childhood until death, mental health is the springboard of thinking and communication skills, learning, emotional growth, resilience, and self-esteem. These

[1] Murray & Lopez, 1996.

[2] The Surgeon General issued a Call to Action on Suicide in 1999, reflecting the public health magnitude of this consequence of mental illness. The Call to Action is summarized in Figure 4-1.

are the ingredients of each individual's successful contribution to community and society. Americans are inundated with messages about *success*—in school, in a profession, in parenting, in relationships—without appreciating that successful performance rests on a foundation of mental health.

Many ingredients of mental health may be identifiable, but mental health is not easy to define. In the words of a distinguished leader in the field of mental health prevention, ". . . built into any definition of wellness . . . are overt and covert expressions of values. Because values differ across cultures as well as among subgroups (and indeed individuals) within a culture, the ideal of a uniformly acceptable definition of the constructs is illusory" (Cowen, 1994). In other words, what it means to be mentally healthy is subject to many different interpretations that are rooted in value judgments that may vary across cultures. The challenge of defining mental health has stalled the development of programs to foster mental health (Secker, 1998), although strides have been made with wellness programs for older people (Chapter 5).

Mental illness is the term that refers collectively to all diagnosable mental disorders. Mental disorders are health conditions that are characterized by alterations in thinking, mood, or behavior (or some combination thereof) associated with distress and/or impaired functioning. Alzheimer's disease exemplifies a mental disorder largely marked by alterations in thinking (especially forgetting). Depression exemplifies a mental disorder largely marked by alterations in mood. Attention-deficit/hyperactivity disorder exemplifies a mental disorder largely marked by alterations in behavior (overactivity) and/or thinking (inability to concentrate). Alterations in thinking, mood, or behavior contribute to a host of problems—patient distress, impaired functioning, or heightened risk of death, pain, disability, or loss of freedom (American Psychiatric Association, 1994).

This report uses the term "mental health problems" for signs and symptoms of insufficient intensity or duration to meet the criteria for any mental disorder. Almost everyone has experienced mental health problems in which the distress one feels matches some of the signs and symptoms of mental disorders. Mental health problems may warrant active efforts in health promotion, prevention, and treatment. Bereavement symptoms in older adults offer a case in point. Bereavement symptoms of less than 2 months' duration do not qualify as a mental disorder, according to professional manuals for diagnosis (American Psychiatric Association, 1994). Nevertheless, bereavement symptoms can be debilitating if they are left unattended. They place older people at risk for depression, which, in turn, is linked to death from suicide, heart attack, or other causes (Zisook & Shuchter, 1991, 1993; Frasure-Smith et al., 1993, 1995; Conwell, 1996). Much can be done—through formal treatment or through support group participation—to ameliorate the symptoms and to avert the consequences of bereavement. In this case, early intervention is needed to address a mental health problem before it becomes a potentially life-threatening disorder.

Mind and Body are Inseparable

Considering health and illness as points along a continuum helps one appreciate that neither state exists in pure isolation from the other. In another but related context, everyday language tends to encourage a misperception that "mental health" or "mental illness" is unrelated to "physical health" or "physical illness." In fact, the two are inseparable.

Seventeenth-century philosopher Rene Descartes conceptualized the distinction between the mind and the body. He viewed the "mind" as completely separable from the "body" (or "matter" in general). The mind (and spirit) was seen as the concern of organized religion, whereas the body was seen as the concern of physicians (Eisendrath & Feder, in press). This partitioning ushered in a separation between so-called "mental" and "physical" health, despite advances in the 20th century that proved the interrelationships between mental and physical health (Cohen & Herbert, 1996; Baum & Posluszny, 1999).

Although "mind" is a broad term that has had many different meanings over the centuries, today it refers to the totality of mental functions related to thinking, mood, and purposive behavior. The mind is generally

seen as deriving from activities within the brain but displaying emergent properties, such as consciousness (Fischbach, 1992; Gazzaniga et al., 1998).

One reason the public continues to this day to emphasize the difference between mental and physical health is embedded in language. Common parlance continues to use the term "physical" to distinguish some forms of health and illness from "mental" health and illness. People continue to see mental and physical as separate functions when, in fact, mental functions (e.g., memory) are physical as well (American Psychiatric Association, 1994). Mental functions are carried out by the brain. Likewise, mental disorders are reflected in physical changes in the brain (Kandel, 1998). Physical changes in the brain often trigger physical changes in other parts of the body too. The racing heart, dry mouth, and sweaty palms that accompany a terrifying nightmare are orchestrated by the brain. A nightmare is a mental state associated with alterations of brain chemistry that, in turn, provoke unmistakable changes elsewhere in the body.

Instead of dividing physical from mental health, the more appropriate and neutral distinction is between "mental" and "somatic" health. Somatic is a medical term that derives from the Greek word *soma* for the body. Mental health refers to the successful performance of mental functions in terms of thought, mood, and behavior. Mental disorders are those health conditions in which alterations in mental functions are paramount. Somatic conditions are those in which alterations in nonmental functions predominate. While the brain carries out all mental functions, it also carries out some somatic functions, such as movement, touch, and balance. That is why not all brain diseases are mental disorders. For example, a stroke causes a lesion in the brain that may produce disturbances of movement, such as paralysis of limbs. When such symptoms predominate in a patient, the stroke is considered a somatic condition. But when a stroke mainly produces alterations of thought, mood, or behavior, it is considered a mental condition (e.g., dementia). The point is that a brain disease can be seen as a mental disorder or a somatic disorder depending on the functions it perturbs.

The Roots of Stigma

Stigmatization of people with mental disorders has persisted throughout history. It is manifested by bias, distrust, stereotyping, fear, embarrassment, anger, and/or avoidance. Stigma leads others to avoid living, socializing or working with, renting to, or employing people with mental disorders, especially severe disorders such as schizophrenia (Penn & Martin, 1998; Corrigan & Penn, 1999). It reduces patients' access to resources and opportunities (e.g., housing, jobs) and leads to low self-esteem, isolation, and hopelessness. It deters the public from seeking, and wanting to pay for, care. In its most overt and egregious form, stigma results in outright discrimination and abuse. More tragically, it deprives people of their dignity and interferes with their full participation in society.

Explanations for stigma stem, in part, from the misguided split between mind and body first proposed by Descartes. Another source of stigma lies in the 19th-century separation of the mental health treatment system in the United States from the mainstream of health. These historical influences exert an often immediate influence on perceptions and behaviors in the modern world.

Separation of Treatment Systems

In colonial times in the United States, people with mental illness were described as "lunaticks" and were largely cared for by families. There was no concerted effort to treat mental illness until urbanization in the early 19th century created a societal problem that previously had been relegated to families scattered among small rural communities. Social policy assumed the form of isolated asylums where persons with mental illness were administered the reigning treatments of the era. By the late 19th century, mental illness was thought to grow "out of a violation of those physical, mental and moral laws which, properly understood and obeyed, result not only in the highest development of the race, but the highest type of civilization" (cited in Grob, 1983). Throughout the history of institutionalization in asylums (later renamed mental hospitals), reformers strove to improve treatment and curtail abuse. Several waves of reform culminated in

the deinstitutionalization movement that began in the 1950s with the goal of shifting patients and care to the community.

Public Attitudes About Mental Illness: 1950s to 1990s

Nationally representative surveys have tracked public attitudes about mental illness since the 1950s (Star, 1952, 1955; Gurin et al., 1960; Veroff et al., 1981). To permit comparisons over time, several surveys of the 1970s and the 1990s phrased questions exactly as they had been asked in the 1950s (Swindle et al., 1997).

In the 1950s, the public viewed mental illness as a stigmatized condition and displayed an unscientific understanding of mental illness. Survey respondents typically were not able to identify individuals as "mentally ill" when presented with vignettes of individuals who would have been said to be mentally ill according to the professional standards of the day. The public was not particularly skilled at distinguishing mental illness from ordinary unhappiness and worry and tended to see only extreme forms of behavior—namely psychosis—as mental illness. Mental illness carried great social stigma, especially linked with fear of unpredictable and violent behavior (Star, 1952, 1955; Gurin et al., 1960; Veroff et al., 1981).

By 1996, a modern survey revealed that Americans had achieved greater scientific understanding of mental illness. But the increases in knowledge did not defuse social stigma (Phelan et al., 1997). The public learned to define mental illness and to distinguish it from ordinary worry and unhappiness. It expanded its definition of mental illness to encompass anxiety, depression, and other mental disorders. The public attributed mental illness to a mix of biological abnormalities and vulnerabilities to social and psychological stress (Link et al., in press). Yet, in comparison with the 1950s, the public's perception of mental illness more frequently incorporated violent behavior (Phelan et al., 1997). This was primarily true among those who defined mental illness to include psychosis (a view held by about one-third of the entire sample). Thirty-one percent of this group mentioned violence in its descriptions of mental illness, in comparison with 13 percent in the 1950s. In other words, the perception of people with psychosis as being dangerous is stronger today than in the past (Phelan et al., 1997).

The 1996 survey also probed how perceptions of those with mental illness varied by diagnosis. The public was more likely to consider an individual with schizophrenia as having mental illness than an individual with depression. All of them were distinguished reasonably well from a worried and unhappy individual who did not meet professional criteria for a mental disorder. The desire for social distance was consistent with this hierarchy (Link et al., in press).

Why is stigma so strong despite better public understanding of mental illness? The answer appears to be fear of violence: people with mental illness, especially those with psychosis, are perceived to be more violent than in the past (Phelan et al., 1997).

This finding begs yet another question: Are people with mental disorders truly more violent? Research supports some public concerns, but the overall likelihood of violence is low. The greatest risk of violence is from those who have dual diagnoses, i.e., individuals who have a mental disorder as well as a substance abuse disorder (Swanson, 1994; Eronen et al., 1998; Steadman et al., 1998). There is a small elevation in risk of violence from individuals with severe mental disorders (e.g., psychosis), especially if they are noncompliant with their medication (Eronen et al., 1998; Swartz et al., 1998). Yet the risk of violence is much less for a stranger than for a family member or person who is known to the person with mental illness (Eronen et al., 1998). *In fact, there is very little risk of violence or harm to a stranger from casual contact with an individual who has a mental disorder*. Because the average person is ill-equipped to judge whether someone who is behaving erratically has any of these disorders, alone or in combination, the natural tendency is to be wary. Yet, to put this all in perspective, the overall contribution of mental disorders to the total level of violence in society is exceptionally small (Swanson, 1994).

Because most people should have little reason to fear violence from those with mental illness, even in its most severe forms, *why* is fear of violence so entrenched? Most speculations focus on media coverage and deinstitutionalization (Phelan et al., 1997; Heginbotham, 1998). One series of surveys found that selective media reporting reinforced the public's stereotypes linking violence and mental illness and encouraged people to distance themselves from those with mental disorders (Angermeyer & Matschinger, 1996). And yet, deinstitutionalization made this distancing impossible over the 40 years as the population of state and county mental hospitals was reduced from a high of about 560,000 in 1955 to well below 100,000 by the 1990s (Bachrach, 1996). Some advocates of deinstitutionalization expected stigma to be reduced with community care and commonplace exposure. Stigma might have been greater today had not public education resulted in a more scientific understanding of mental illness.

Stigma and Seeking Help for Mental Disorders

Nearly two-thirds of all people with diagnosable mental disorders do not seek treatment (Regier et al., 1993; Kessler et al., 1996). Stigma surrounding the receipt of mental health treatment is among the many barriers that discourage people from seeking treatment (Sussman et al., 1987; Cooper-Patrick et al., 1997). Concern about stigma appears to be heightened in rural areas in relation to larger towns or cities (Hoyt et al., 1997). Stigma also disproportionately affects certain age groups, as explained in the chapters on children and older people.

The surveys cited above concerning evolving public attitudes about mental illness also monitored how people would cope with, and seek treatment for, mental illness if they became symptomatic. (The term "nervous breakdown" was used in lieu of the term "mental illness" in the 1996 survey to allow for comparisons with the surveys in the 1950s and 1970s.) The 1996 survey found that people were likelier than in the past to approach mental illness by coping with, rather than by avoiding, the problem. They also were more likely now to want *informal* social supports (e.g., self-help groups). Those who now sought *formal* support increasingly preferred counselors, psychologists, and social workers (Swindle et al., 1997).

Stigma and Paying for Mental Disorder Treatment

Another manifestation of stigma is reflected in the public's reluctance to pay for mental health services. Public willingness to pay for mental health treatment, particularly through insurance premiums or taxes, has been assessed largely through public opinion polls. Members of the public report a greater willingness to pay for insurance coverage for individuals with severe mental disorders, such as schizophrenia and depression, rather than for less severe conditions such as worry and unhappiness (Hanson, 1998). While the public generally appears to support paying for treatment, its support diminishes upon the realization that higher taxes or premiums would be necessary (Hanson, 1998). In the lexicon of survey research, the willingness to pay for mental illness treatment services is considered to be "soft." The public generally ranks insurance coverage for mental disorders below that for somatic disorders (Hanson, 1998).

Reducing Stigma

There is likely no simple or single panacea to eliminate the stigma associated with mental illness. Stigma was expected to abate with increased knowledge of mental illness, but just the opposite occurred: stigma in some ways intensified over the past 40 years even though understanding improved. Knowledge of mental illness appears by itself insufficient to dispel stigma (Phelan et al., 1997). Broader knowledge may be warranted, especially to redress public fears (Penn & Martin, 1998). Research is beginning to demonstrate that negative perceptions about severe mental illness can be lowered by furnishing empirically based information on the association between violence and severe mental illness (Penn & Martin, 1998). Overall approaches to stigma reduction involve programs of advocacy, public education, and contact with persons with mental illness through schools and other societal institutions (Corrigan & Penn, 1999).

Another way to eliminate stigma is to find causes and effective treatments for mental disorders (Jones, 1998). History suggests this to be true. Neurosyphilis and pellagra are illustrative of mental disorders for which stigma has receded. In the early part of this century, about 20 percent of those admitted to mental hospitals had "general paresis," later identified as tertiary syphilis (Grob, 1994). This advanced stage of syphilis occurs when the bacterium invades the brain and causes neurological deterioration (including psychosis), paralysis, and death. The discoveries of an infectious etiology and of penicillin led to the virtual elimination of neurosyphilis. Similarly, when pellagra was traced to a nutrient deficiency, and nutritional supplementation with niacin was introduced, the condition was eventually eradicated in the developed world. Pellagra's victims with delirium had been placed in mental hospitals early in the 20th century before its etiology was clarified. Although no one has documented directly the reduction of public stigma toward these conditions over the early and later parts of this century, disease eradication through widespread acceptance of treatment (and its cost) offers indirect proof.

Ironically, these examples also illustrate a more unsettling consequence: that the mental health field was adversely affected when causes and treatments were identified. As advances were achieved, each condition was transferred from the mental health field to another medical specialty (Grob, 1991). For instance, dominion over syphilis was moved to dermatology, internal medicine, and neurology upon advances in etiology and treatment. Dominion over hormone-related mental disorders was moved to endocrinology under similar circumstances. The consequence of this transformation, according to historian Gerald Grob, is that the mental health field became over the years the repository for mental disorders whose etiology was unknown. This left the mental health field "vulnerable to accusations by their medical brethren that psychiatry was not part of medicine, and that psychiatric practice rested on superstition and myth" (Grob, 1991).

These historical examples signify that stigma dissipates for individual disorders once advances render them less disabling, infectious, or disfiguring. Yet the stigma surrounding *other* mental disorders not only persists but may be inadvertently reinforced by leaving to mental health care only those behavioral conditions without known causes or cures. To point this out is not intended to imply that advances in mental health should be halted; rather, advances should be nurtured and heralded. The purpose here is to explain some of the historical origins of the chasm between the health and mental health fields.

Stigma must be overcome. Research that will continue to yield increasingly effective treatments for mental disorders promises to be an effective antidote. When people understand that mental disorders are not the result of moral failings or limited will power, but are legitimate illnesses that are responsive to specific treatments, much of the negative stereotyping may dissipate. Still, fresh approaches to disseminate research information and, thus, to counter stigma need to be developed and evaluated. Social science research has much to contribute to the development and evaluation of anti-stigma programs (Corrigan & Penn, 1999). As stigma abates, a transformation in public attitudes should occur. People should become eager to seek care. They should become more willing to absorb its cost. And, most importantly, they should become far more receptive to the messages that are the subtext of this report: mental health and mental illness are part of the mainstream of health, and they are a concern for all people.

The Science Base of the Report

Reliance on Scientific Evidence

The statements and conclusions throughout this report are documented by reference to studies published in the scientific literature. For the most part, this report cites studies of empirical—rather than theoretical—research, peer-reviewed journal articles including reviews that integrate findings from numerous studies, and books by recognized experts. When a study has been accepted for publication but the publication has not yet appeared, owing to the delay between acceptance and final publication, the study is referred to as "in press." The

report refers, on occasion, to unpublished research by means of reference to a presentation at a professional meeting or to a "personal communication" from the researcher, a practice that also is used sparingly in professional journals. These personal references are to acknowledged experts whose research is in progress.

Research Methods

Quality research rests on accepted methods of testing hypotheses. Two of the more common research methods used in the mental health field are experimental research and correlational research. Experimental research is the preferred method for assessing causation but may be too difficult or too expensive to conduct. Experimental research strives to discover cause and effect relationships, such as whether a new drug is effective for treating a mental disorder. In an experimental study, the investigator deliberately introduces an intervention to determine its consequences (i.e., the drug's efficacy). The investigator sets up an experiment comparing the effects of giving the new drug to one group of people, the experimental group, while giving a placebo (an inert pill) to another group, the so-called control group. The incorporation of a control group rules out the possibility that something other than the experimental treatment (i.e., the new drug) produces the results. The difference in outcome between the experimental and control group—which, in this case, may be the reduction or elimination of the symptoms of the disorder—then can be causally attributed to the drug. Similarly, in an experimental study of a psychological treatment, the experimental group is given a new type of psychotherapy, while the control or comparison group receives either no psychotherapy or a different form of psychotherapy. With both pharmacological and psychological studies, the best way to assign study participants, called subjects, either to the treatment or the control (or comparison) group is by assigning them randomly to different treatment groups. Randomization reduces bias in the results. An experimental study in humans with randomization is called a randomized controlled trial.

Correlational research is employed when experimental research is logistically, ethically, or financially impossible. Instead of deliberately introducing an intervention, researchers observe relationships to uncover whether two factors are associated, or correlated. Studying the relationship between stress and depression is illustrative. It would be unthinkable to introduce seriously stressful events to see if they cause depression. A correlational study in this case would compare a group of people already experiencing high levels of stress with another group experiencing low levels of stress to determine whether the high-stress group is more likely to develop depression. If this happens, then the results would indicate that high levels of stress are associated with depression. The limitation of this type of study is that it only can be used to establish associations, not cause and effect relationships. (The positive relationship between stress and depression is discussed most thoroughly in Chapter 4.)

Controlled studies—that is, studies with control or comparison groups—are considered superior to uncontrolled studies. But not every question in mental health can be studied with a control or comparison group. Findings from an uncontrolled study may be better than no information at all. An uncontrolled study also may be beneficial in generating hypotheses or in testing the feasibility of an intervention. The results presumably would lead to a controlled study. In short, uncontrolled studies offer a good starting point but are never conclusive by themselves.

Levels of Evidence

In science, no single study by itself, however well designed, is generally considered sufficient to establish causation. The findings need to be replicated by other investigators to gain widespread acceptance by the scientific community.

The strength of the evidence amassed for any scientific fact or conclusion is referred to as "the level of evidence." The level of evidence, for example, to justify the entry of a new drug into the marketplace has to be substantial enough to meet with approval by the U.S. Food and Drug Administration (FDA). According to U.S. drug law, a new drug's safety and efficacy must be established through controlled clinical trials

conducted by the drug's manufacturer or sponsor (FDA, 1998). The FDA's decision to approve a drug represents the culmination of a lengthy, research-intensive process of drug development, which often consumes years of animal testing followed by human clinical trials (DiMasi & Lasagna, 1995). The FDA requires three phases of clinical trials[3] before a new drug can be approved for marketing (FDA, 1998).

With psychotherapy, the level of evidence similarly must be high. Although there are no formal Federal laws governing which psychotherapies can be introduced into practice, professional groups and experts in the field strive to assess the level of evidence in a given area through task forces, review articles, and other methods for evaluating the body of published studies on a topic. This Surgeon General's report is replete with references to such evaluations. One of the most prominent series of evaluations was set in motion by a group within the American Psychological Association (APA), one of the main professional organizations of psychologists. Beginning in the mid-1990s, the APA's Division of Clinical Psychology convened task forces with the objective of establishing which psychotherapies were of proven efficacy. To guide their evaluation, the first task force created a set of criteria that also was used or adapted by subsequent task forces. The first task force actually developed two sets of criteria: the first, and more rigorous, set of criteria was for *Well-Established Treatments*, while the other set was for *Probably Efficacious Treatments* (Chambless et al., 1996). For a psychotherapy to be well established, at least two experiments with group designs or similar types of studies must have been published to demonstrate efficacy. Chapters 3 through 5 of this report describe the findings of the task forces in relation to psychotherapies for children, adults, and older adults. Some types of psychotherapies that do not meet the criteria might be effective but may not have been studied sufficiently.

[3] The first phase is to establish safety (Phase I), while the latter two phases establish efficacy through small and then large-scale randomized controlled clinical trials (Phases II and III) (FDA, 1998).

Another way of evaluating a collection of studies is through a formal statistical technique called a meta-analysis. A meta-analysis is a way of combining results from multiple studies. Its goal is to determine the size and consistency of the "effect" of a particular treatment or other intervention observed across the studies. The statistical technique makes the results of different studies comparable so that an overall "effect size" for the treatment can be identified. A meta-analysis determines if there is consistent evidence of a statistically significant effect of a specified treatment and estimates the size of the effect, according to widely accepted standards for a small, medium, or large effect.

Overview of the Report's Chapters

The preceding sections have addressed overarching themes in the body of the report. This section provides a brief overview of the entire report, including a description of its general orientation and a summary of key conclusions drawn from each chapter.

Chapter 2 begins with an overview of research under way today that is focused on the brain and behavior in mental health and mental illness. It explains how newer approaches to neuroscience are mending the mind-body split, which for so long has been a stumbling block to understanding the relationship of the brain to behavior, thought, and emotion. Modern integrative neuroscience offers a means of linking research on broad "systems-level" aspects of brain function with the remarkably detailed tools and findings of molecular genetics. There follows an overview of mental illness that highlights topics including symptoms, diagnosis, epidemiology (i.e., research having to do with the distribution and determinants of mental disorders in population groups), and cost, all of which are discussed in the context of specific disorders throughout the report. The section on etiology reviews research that is seeking to define, with ever greater precision, the causes of mental illnesses. As will be seen, etiology research must examine fundamental biological and behavioral processes, as well as a necessarily broad array of life events. No less than research on normal healthy development, etiological research underscores the inextricability of

nature and nurture, or biological and psychosocial influences, in mental illness. The section on development of temperament reveals how mental health research has attempted over much of the past century to understand how biological, psychological, and sociocultural factors meld in health as well as illness. The chapter then reviews research approaches to the prevention and treatment of mental disorders and provides an overview of mental health services and their delivery. Final sections cover the growing influence on the mental health field of cultural diversity, the importance of consumerism, and new optimism about recovery from mental illness.

Chapters 3, 4, and 5 capture the breadth, depth, and vibrancy of the mental health field. The chapters probe mental health and mental illness in children and adolescents, in adulthood (i.e., in persons up to ages 55 to 65), and in older adults, respectively. This life span approach reflects awareness that mental health, and the brain and behavioral disorders that impinge upon it, are dynamic, ever-changing phenomena that, at any given moment, reflect the sum total of every person's genetic inheritance and life experiences. The brain is extraordinarily "plastic," or malleable. It interacts with and responds—both in its function and in its very structure—to multiple influences continuously, across every stage of life. Variability in expression of mental health and mental illness over the life span can be very subtle or very pronounced. As an example, the symptoms of separation anxiety are normal in early childhood but are signs of distress in later childhood and beyond. It is all too common for people to appreciate the impact of developmental processes in children yet not to extend that conceptual understanding to older people. In fact, older people continue to develop and change. Different stages of life are associated with distinct forms of mental and behavioral disorders and with distinctive capacities for mental health.

With rare exceptions, few persons are destined to a life marked by unremitting, acute mental illness. The most severe, persistent forms of mental illness tend to be amenable to treatment, even when recurrent and episodic. As conditions wax and wane, opportunities exist for interventions. The goal of an intervention at any given time may vary. The focus may be on recovery, prevention of recurrence, or the acquisition of knowledge or skills that permit more effective management of an illness. Chapters 3 through 5 cover a uniform list of topics most relevant to each age cluster. Topics include mental health; prevention, diagnosis, and treatment of mental illness; service delivery; and other services and supports.

It would be impractical for a report of this type to attempt to address every domain of mental health and mental illness; therefore, this report casts a spotlight on selected topics in each of Chapters 3 through 5. The various disorders featured in depth in a given chapter were selected on the basis of their prevalence and the clinical, societal, and economic burden associated with each. To the extent that data permit, the report takes note of how gender and culture, in addition to age, influence the diagnosis, course, and treatment of mental illness. The chapters also note the changing role of consumers and families, with attention to informal support services (i.e., unpaid services) with which patients are so comfortable (Phelan et al., 1997) and upon which they depend for information. Patients and families welcome a proliferating array of support services—such as self-help programs, family self-help, crisis services, and advocacy—that help them cope with the isolation, family disruption, and possible loss of employment and housing that may accompany mental disorders. Support services can help dissipate stigma and guide patients into formal care as well.

Although the chapters that address stages of development afford a sense of the breadth of issues pertinent to mental health and illness, the report is not exhaustive. The neglect of any given disorder, population, or topic should not be construed as signifying a lack of importance.

Chapter 6 discusses the organization and financing of mental health services. The first section provides an overview of the current system of mental health services, describing where people get care and how they use services. The chapter then presents information on the costs of care and trends in spending. Only within recent decades have the dynamics of

insurance financing become a significant issue in the mental health field; these are discussed, as is the advent of managed care. The chapter addresses both positive and adverse effects of managed care on access and quality and describes efforts to guard against untoward consequences of aggressive cost-containment policies. The final section documents some of the inequities between general health care and mental health care and describes efforts to correct them through legislative regulation and financing changes.

The confidentiality of all health care information has emerged as a core issue in recent years, as concerns regarding the accessibility of health care information and its uses have risen. As Chapter 7 illustrates, privacy concerns are particularly keenly felt in the mental health field, beginning with the importance of an assurance of confidentiality in individual decisions to seek mental health treatment. The chapter reviews the legal framework governing confidentiality and potential problems with that framework, and policy issues that must be addressed by those concerned with the confidentiality of mental health and substance abuse information.

Chapter 8 concludes, on the basis of the extensive literature that the Surgeon General's report reviews and summarizes, that ***the efficacy of mental health treatment is well-documented***. Moreover, there exists a range of treatments from which people may choose a particular approach to suit their needs and preferences. Based on this finding, the report's principal recommendation to the American people is to ***seek help if you have a mental health problem or think you have symptoms of mental illness***. The chapter explores opportunities to overcome barriers to implementing the recommendation and to have seeking help lead to effective treatment.

Chapter Conclusions

Chapter 2: The Fundamentals of Mental Health and Mental Illness

The past 25 years have been marked by several discrete, defining trends in the mental health field. These have included:

1. The extraordinary pace and productivity of scientific research on the brain and behavior;
2. The introduction of a range of effective treatments for most mental disorders;
3. A dramatic transformation of our society's approaches to the organization and financing of mental health care; and
4. The emergence of powerful consumer and family movements.

Scientific Research. The brain has emerged as the central focus for studies of mental health and mental illness. New scientific disciplines, technologies, and insights have begun to weave a seamless picture of the way in which the brain mediates the influence of biological, psychological, and social factors on human thought, behavior, and emotion in health and in illness. Molecular and cellular biology and molecular genetics, which are complemented by sophisticated cognitive and behavioral sciences, are preeminent research disciplines in the contemporary neuroscience of mental health. These disciplines are affording unprecedented opportunities for "bottom-up" studies of the brain. This term refers to research that is examining the workings of the brain at the most fundamental levels. Studies focus, for example, on the complex neurochemical activity that occurs within individual nerve cells, or neurons, to process information; on the properties and roles of proteins that are expressed, or produced, by a person's genes; and on the interaction of genes with diverse environmental influences. All of these activities now are understood, with increasing clarity, to underlie learning, memory, the experience of emotion, and, when these processes go awry, the occurrence of mental illness or a mental health problem.

Equally important to the mental health field is "top-down" research; here, as the term suggests, the aim is to understand the broader behavioral context of the brain's cellular and molecular activity and to learn how individual neurons work together in well-delineated neural circuits to perform mental functions.

Effective Treatments. As information accumulates about the basic workings of the brain, it is the task of translational research to transfer new knowledge into clinically relevant questions and targets of research

opportunity—to discover, for example, what specific properties of a neural circuit might make it receptive to safer, more effective medications. To elaborate on this example, theories derived from knowledge about basic brain mechanisms are being wedded more closely to brain imaging tools such as functional Magnetic Resonance Imaging (MRI) that can observe actual brain activity. Such a collaboration would permit investigators to monitor the specific protein molecules intended as the "targets" of a new medication to treat a mental illness or, indeed, to determine how to optimize the effect on the brain of the learning achieved through psychotherapy.

In its entirety, the new "integrative neuroscience" of mental health offers a way to circumvent the antiquated split between the mind and the body that historically has hampered mental health research. It also makes it possible to examine scientifically many of the important psychological and behavioral theories regarding normal development and mental illness that have been developed in years past. The unswerving goal of mental health research is to develop and refine clinical treatments as well as preventive interventions that are based on an understanding of specific mechanisms that can contribute to or lead to illness but also can protect and enhance mental health.

Mental health clinical research encompasses studies that involve human participants, conducted, for example, to test the efficacy of a new treatment. A noteworthy feature of contemporary clinical research is the new emphasis being placed on studying the effectiveness of interventions in actual practice settings. Information obtained from such studies increasingly provides the foundation for services research concerned with the cost, cost-effectiveness, and "deliverability" of interventions and the design—including economic considerations—of service delivery systems.

Organization and Financing of Mental Health Care. Another of the defining trends has been the transformation of the mental illness treatment and mental health services landscapes, including increased reliance on primary health care and other human service providers. Today, the U.S. mental health system is multifaceted and complex, comprising the public and private sectors, general health and specialty mental health providers, and social services, housing, criminal justice, and educational agencies. These agencies do not always function in a coordinated manner. Its configuration reflects necessary responses to a broad array of factors including reform movements, financial incentives based on who pays for what kind of services, and advances in care and treatment technology. Although the hybrid system that exists today serves diverse functions well for many people, individuals with the most complex needs and the fewest financial resources often find the system fragmented and difficult to use. A challenge for the Nation in the near-term future is to speed the transfer of new evidence-based treatments and prevention interventions into diverse service delivery settings and systems, while ensuring greater coordination among these settings and systems.

Consumer and Family Movements. The emergence of vital consumer and family movements promises to shape the direction and complexion of mental health programs for many years to come. Although divergent in their historical origins and philosophy, organizations representing consumers and family members have promoted important, often overlapping goals and have invigorated the fields of research as well as treatment and service delivery design. Among the principal goals shared by much of the consumer movement are to overcome stigma and prevent discrimination in policies affecting persons with mental illness; to encourage self-help and a focus on recovery from mental illness; and to draw attention to the special needs associated with a particular disorder or disability, as well as by age or gender or by the racial and cultural identity of those who have mental illness.

Chapter 2 of the report was written to provide background information that would help persons from outside the mental health field better understand topics addressed in subsequent chapters of the report. Although the chapter is meant to serve as a mental health primer, its depth of discussion supports a range of conclusions:

1. The multifaceted complexity of the brain is fully consistent with the fact that it supports all behavior and mental life. Proceeding from an acknowledgment that all psychological experiences are recorded ultimately in the brain and that all psychological phenomena reflect biological processes, the modern neuroscience of mental health offers an enriched understanding of the inseparability of human experience, brain, and mind.
2. Mental functions, which are disturbed in mental disorders, are mediated by the brain. In the process of transforming human experience into physical events, the brain undergoes changes in its cellular structure and function.
3. Few lesions or physiologic abnormalities define the mental disorders, and for the most part their causes remain unknown. Mental disorders, instead, are defined by signs, symptoms, and functional impairments.
4. Diagnoses of mental disorders made using specific criteria are as reliable as those for general medical disorders.
5. About one in five Americans experiences a mental disorder in the course of a year. Approximately 15 percent of all adults who have a mental disorder in one year also experience a co-occurring substance (alcohol or other drug) use disorder, which complicates treatment.
6. A range of treatments of well-documented efficacy exists for most mental disorders. Two broad types of intervention include psychosocial treatments—for example, psychotherapy or counseling—and psychopharmacologic treatments; these often are most effective when combined.
7. In the mental health field, progress in developing preventive interventions has been slow because, for most major mental disorders, there is insufficient understanding about etiology (or causes of illness) and/or there is an inability to alter the *known* etiology of a particular disorder. Still, some successful strategies have emerged in the absence of a full understanding of etiology.
8. About 10 percent of the U.S. adult population use mental health services in the health sector in any year, with another 5 percent seeking such services from social service agencies, schools, or religious or self-help groups. Yet critical gaps exist between those who need service and those who receive service.
9. Gaps also exist between optimally effective treatment and what many individuals receive in actual practice settings.
10. Mental illness and less severe mental health problems must be understood in a social and cultural context, and mental health services must be designed and delivered in a manner that is sensitive to the perspectives and needs of racial and ethnic minorities.
11. The consumer movement has increased the involvement of individuals with mental disorders and their families in mutual support services, consumer-run services, and advocacy. They are powerful agents for changes in service programs and policy.
12. The notion of recovery reflects renewed optimism about the outcomes of mental illness, including that achieved through an individual's own self-care efforts, and the opportunities open to persons with mental illness to participate to the full extent of their interests in the community of their choice.

Mental Health and Mental Illness Across the Lifespan

The Surgeon General's report takes a lifespan approach to its consideration of mental health and mental illness. Three chapters that address, respectively, the periods of childhood and adolescence, adulthood, and later adult life beginning somewhere between ages 55 and 65, capture the contributions of research to the breadth, depth, and vibrancy that characterize all facets of the contemporary mental health field.

The disorders featured in depth in Chapters 3, 4, and 5 were selected on the basis of the frequency with which they occur in our society, and the clinical, societal, and economic burden associated with each. To the extent that data permit, the report takes note of how

gender and culture, in addition to age, influence the diagnosis, course, and treatment of mental illness. The chapters also note the changing role of consumers and families, with attention to informal support services (i.e., unpaid services), with which many consumers are comfortable and upon which they depend for information. Persons with mental illness and, often, their families welcome a proliferating array of support services—such as self-help programs, family self-help, crisis services, and advocacy—that help them cope with the isolation, family disruption, and possible loss of employment and housing that may accompany mental disorders. Support services can help to dissipate stigma and to guide patients into formal care as well.

Mental health and mental illness are dynamic, ever-changing phenomena. At any given moment, a person's mental status reflects the sum total of that individual's genetic inheritance and life experiences. The brain interacts with and responds—both in its function and in its very structure—to multiple influences continuously, across every stage of life. At different stages, variability in expression of mental health and mental illness can be very subtle or very pronounced. As an example, the symptoms of separation anxiety are normal in early childhood but are signs of distress in later childhood and beyond. It is all too common for people to appreciate the impact of developmental processes in children, yet not to extend that conceptual understanding to older people. In fact, people continue to develop and change throughout life. Different stages of life are associated with vulnerability to distinct forms of mental and behavioral disorders but also with distinctive capacities for mental health.

Even more than is true for adults, children must be seen in the context of their social environments—that is, family and peer group, as well as that of their larger physical and cultural surroundings. Childhood mental health is expressed in this context, as children proceed along the arc of development. A great deal of contemporary research focuses on developmental processes, with the aim of understanding and predicting the forces that will keep children and adolescents mentally healthy and maintain them on course to become mentally healthy adults. Research also focuses on identifying what factors place some at risk for mental illness and, yet again, what protects some children but not others despite exposure to the *same* risk factors. In addition to studies of normal development and of risk factors, much research focuses on mental disorders in childhood and adolescence and what can be done to prevent or treat these conditions and on the design and operation of service settings best suited to the needs experienced by children.

For about one in five Americans, adulthood—a time for achieving productive vocations and for sustaining close relationships at home and in the community—is interrupted by mental illness. Understanding why and how mental disorders occur in adulthood, often with no apparent portents of illness in earlier years, draws heavily on the full panoply of research conducted under the aegis of the mental health field. In years past, the onset, or occurrence, of mental illness in the adult years, was attributed principally to observable phenomena—for example, the burden of stresses associated with career or family, or the inheritance of a disease viewed to run in a particular family. Such explanations now may appear naive at best. Contemporary studies of the brain and behavior are racing to fill in the picture by elucidating specific neurobiological and genetic mechanisms that are the platform upon which a person's life experiences can either strengthen mental health or lead to mental illness. It now is recognized that factors that influence brain development prenatally may set the stage for a vulnerability to illness that may lie dormant throughout childhood and adolescence. Similarly, no single gene has been found to be responsible for any specific mental disorder; rather, variations in multiple genes contribute to a disruption in healthy brain function that, under certain environmental conditions, results in a mental illness. Moreover, it is now recognized that socioeconomic factors affect individuals' vulnerability to mental illness and mental health problems. Certain demographic and economic groups are more likely than others to experience mental health problems and some mental disorders. Vulnerability alone may not be sufficient to cause a mental disorder; rather, the causes of most mental disorders lie in some combination of

genetic and environmental factors, which may be biological or psychosocial.

The fact that many, if not most, people have experienced mental health problems that mimic or even match some of the symptoms of a diagnosable mental disorder tends, ironically, to prompt many people to underestimate the painful, disabling nature of severe mental illness. In fact, schizophrenia, mood disorders such as major depression and bipolar illness, and anxiety often are devastating conditions. Yet relatively few mental illnesses have an unremitting course marked by the most acute manifestations of illness; rather, for reasons that are not yet understood, the symptoms associated with mental illness tend to wax and wane. These patterns pose special challenges to the implementation of treatment plans and the design of service systems that are optimally responsive to an individual's needs during every phase of illness. As this report concludes, enormous strides are being made in diagnosis, treatment, and service delivery, placing the productive and creative possibilities of adulthood within the reach of persons who are encumbered by mental disorders.

Late adulthood is when changes in health status may become more noticeable and the ability to compensate for decrements may become limited. As the brain ages, a person's capacity for certain mental tasks tends to diminish, even as changes in other mental activities prove to be positive and rewarding. Well into late life, the ability to solve novel problems can be enhanced through training in cognitive skills and problem-solving strategies.

The promise of research on mental health promotion notwithstanding, a substantial minority of older people are disabled, often severely, by mental disorders including Alzheimer's disease, major depression, substance abuse, anxiety, and other conditions. In the United States today, the highest rate of suicide—an all-too-common consequence of unrecognized or inappropriately treated depression—is found in older males. This fact underscores the urgency of ensuring that health care provider training properly emphasizes skills required to differentiate accurately the causes of cognitive, emotional, and behavioral symptoms that may, in some instances, rise to the level of mental disorders, and in other instances be expressions of unmet general medical needs.

As the life expectancy of Americans continues to extend, the sheer number—although not necessarily the proportion—of persons experiencing mental disorders of late life will expand, confronting our society with unprecedented challenges in organizing, financing, and delivering effective mental health services for this population. An essential part of the needed societal response will include recognizing and devising innovative ways of supporting the increasingly more prominent role that families are assuming in caring for older, mentally impaired and mentally ill family members.

Chapter 3: Children and Mental Health

1. Childhood is characterized by periods of transition and reorganization, making it critical to assess the mental health of children and adolescents in the context of familial, social, and cultural expectations about age-appropriate thoughts, emotions, and behavior.
2. The range of what is considered "normal" is wide; still, children and adolescents can and do develop mental disorders that are more severe than the "ups and downs" in the usual course of development.
3. Approximately one in five children and adolescents experiences the signs and symptoms of a DSM-IV disorder during the course of a year, but only about 5 percent of all children experience what professionals term "extreme functional impairment."
4. Mental disorders and mental health problems appear in families of all social classes and of all backgrounds. No one is immune. Yet there are children who are at greatest risk by virtue of a broad array of factors. These include physical problems; intellectual disabilities (retardation); low birth weight; family history of mental and addictive disorders; multigenerational poverty; and caregiver separation or abuse and neglect.
5. Preventive interventions have been shown to be effective in reducing the impact of risk factors for

mental disorders and improving social and emotional development by providing, for example, educational programs for young children, parent-education programs, and nurse home visits.

6. A range of efficacious psychosocial and pharmacologic treatments exists for many mental disorders in children, including attention-deficit/hyperactive disorder, depression, and the disruptive disorders.
7. Research is under way to demonstrate the effectiveness of most treatments for children in actual practice settings (as opposed to evidence of "efficacy" in controlled research settings), and significant barriers exist to receipt of treatment.
8. Primary care and the schools are major settings for the potential recognition of mental disorders in children and adolescents, yet trained staff are limited, as are options for referral to specialty care.
9. The multiple problems associated with "serious emotional disturbance" in children and adolescents are best addressed with a "systems" approach in which multiple service sectors work in an organized, collaborative way. Research on the effectiveness of systems of care shows positive results for system outcomes and functional outcomes for children; however, the relationship between changes at the system level and clinical outcomes is still unclear.
10. Families have become essential partners in the delivery of mental health services for children and adolescents.
11. Cultural differences exacerbate the general problems of access to appropriate mental health services. Culturally appropriate services have been designed but are not widely available.

Chapter 4: Adults and Mental Health

1. As individuals move into adulthood, developmental goals focus on productivity and intimacy including pursuit of education, work, leisure, creativity, and personal relationships. Good mental health enables individuals to cope with adversity while pursuing these goals.
2. Untreated, mental disorders can lead to lost productivity, unsuccessful relationships, and significant distress and dysfunction. Mental illness in adults can have a significant and continuing effect on children in their care.
3. Stressful life events or the manifestation of mental illness can disrupt the balance adults seek in life and result in distress and dysfunction. Severe or life-threatening trauma experienced either in childhood or adulthood can further provoke emotional and behavioral reactions that jeopardize mental health.
4. Research has improved our understanding of mental disorders in the adult stage of the life cycle. Anxiety, depression, and schizophrenia, particularly, present special problems in this age group. Anxiety and depression contribute to the high rates of suicide in this population. Schizophrenia is the most persistently disabling condition, especially for young adults, in spite of recovery of function by some individuals in mid to late life.
5. Research has contributed to our ability to recognize, diagnose, and treat each of these conditions effectively in terms of symptom control and behavior management. Medication and other therapies can be independent, combined, or sequenced depending on the individual's diagnosis and personal preference.
6. A new recovery perspective is supported by evidence on rehabilitation and treatment as well as by the personal experiences of consumers.
7. Certain common events of midlife (e.g., divorce or other stressful life events) create mental health problems (not necessarily disorders) that may be addressed through a range of interventions.
8. Care and treatment in the real world of practice do not conform to what research determines is best. For many reasons, at times care is inadequate, but there are models for improving treatment.
9. Substance abuse is a major co-occurring problem for adults with mental disorders. Evidence supports combined treatment, although there are substantial

gaps between what research recommends and what typically is available in communities.

10. Sensitivity to culture, race, gender, disability, poverty, and the need for consumer involvement are important considerations for care and treatment.
11. Barriers of access exist in the organization and financing of services for adults. There are specific problems with Medicare, Medicaid, income supports, housing, and managed care.

Chapter 5: Older Adults and Mental Health

1. Important life tasks remain for individuals as they age. Older individuals continue to learn and contribute to the society, in spite of physiologic changes due to aging and increasing health problems.
2. Continued intellectual, social, and physical activity throughout the life cycle are important for the maintenance of mental health in late life.
3. Stressful life events, such as declining health and/or the loss of mates, family members, or friends often increase with age. However, persistent bereavement or serious depression is not "normal" and should be treated.
4. Normal aging is not characterized by mental or cognitive disorders. Mental or substance use disorders that present alone or co-occur should be recognized and treated as illnesses.
5. Disability due to mental illness in individuals over 65 years old will become a major public health problem in the near future because of demographic changes. In particular, dementia, depression, and schizophrenia, among other conditions, will all present special problems in this age group:
   a. Dementia produces significant dependency and is a leading contributor to the need for costly long-term care in the last years of life;
   b. Depression contributes to the high rates of suicide among males in this population; and
   c. Schizophrenia continues to be disabling in spite of recovery of function by some individuals in mid to late life.
6. There are effective interventions for most mental disorders experienced by older persons (for example, depression and anxiety), and many mental health problems, such as bereavement.
7. Older individuals can benefit from the advances in psychotherapy, medication, and other treatment interventions for mental disorders enjoyed by younger adults, when these interventions are modified for age and health status.
8. Treating older adults with mental disorders accrues other benefits to overall health by improving the interest and ability of individuals to care for themselves and follow their primary care provider's directions and advice, particularly about taking medications.
9. Primary care practitioners are a critical link in identifying and addressing mental disorders in older adults. Opportunities are missed to improve mental health and general medical outcomes when mental illness is underrecognized and undertreated in primary care settings.
10. Barriers to access exist in the organization and financing of services for aging citizens. There are specific problems with Medicare, Medicaid, nursing homes, and managed care.

Chapter 6: Organization and Financing of Mental Health Services

In the United States in the late 20th century, research-based capabilities to identify, treat, and, in some instances, prevent mental disorders is outpacing the capacities of the service system the Nation has in place to deliver mental health care to all who would benefit from it. Approximately 10 percent of children and adults receive mental health services from mental health specialists or general medical providers in a given year. Approximately one in six adults, and one in five children, obtain mental health services either from health care providers, the clergy, social service agencies, or schools in a given year.

Chapter 6 discusses the organization and financing of mental health services. The chapter provides an overview of the current system of mental health services, describing where people get care and how they use services. The chapter then presents information on the costs of care and trends in spending.

Only within recent decades, in the face of concerns about discriminatory policies in mental health financing, have the dynamics of insurance financing become a significant issue in the mental health field. In particular, policies that have emphasized cost containment have ushered in managed care. Intensive research currently is addressing both positive and adverse effects of managed care on access and quality, generating information that will guard against untoward consequences of aggressive cost-containment policies. Inequities in insurance coverage for mental health and general medical care—the product of decades of stigma and discrimination—have prompted efforts to correct them through legislation designed to produce financing changes and create parity. Parity calls for equality between mental health and other health coverage.

1. Epidemiologic surveys indicate that one in five Americans has a mental disorder in any one year.
2. Fifteen percent of the adult population use some form of mental health service during the year. Eight percent have a mental disorder; 7 percent have a mental health problem.
3. Twenty-one percent of children ages 9 to 17 receive mental health services in a year.
4. The U.S. mental health service system is complex and connects many sectors (public–private, specialty–general health, health–social welfare, housing, criminal justice, and education). As a result, care may become organizationally fragmented, creating barriers to access. The system is also financed from many funding streams, adding to the complexity, given sometimes competing incentives between funding sources.
5. In 1996, the direct treatment of mental disorders, substance abuse, and Alzheimer's disease cost the Nation $99 billion; direct costs for mental disorders alone totaled $69 billion. In 1990, indirect costs for mental disorders alone totaled $79 billion.
6. Historically, financial barriers to mental health services have been attributable to a variety of economic forces and concerns (e.g., market failure, adverse selection, moral hazard, and public provision). This has accounted for differential resource allocation rules for financing mental health services.
   a. "Parity" legislation has been a partial solution to this set of problems.
   b. Implementing parity has resulted in negligible cost increases where the care has been managed.
7. In recent years, managed care has begun to introduce dramatic changes into the organization and financing of health and mental health services.
8. Trends indicate that in some segments of the private sector per capita mental health expenditures have declined much faster than they have for other conditions.
9. There is little direct evidence of problems with quality in well-implemented managed care programs. The risk for more impaired populations and children remains a serious concern.
10. An array of quality monitoring and quality improvement mechanisms has been developed, although incentives for their full implementation has yet to emerge. In addition, competition on the basis of quality is only beginning in the managed care industry.
11. There is increasing concern about consumer satisfaction and consumers' rights. A Consumers Bill of Rights has been developed and implemented in Federal Employee Health Benefit Plans, with broader legislation currently pending in the Congress.

Chapter 7: Confidentiality of Mental Health Information: Ethical, Legal, and Policy Issues

In an era in which the confidentiality of all health care information, its accessibility, and its uses are of concern to all Americans, privacy issues are particularly keenly felt in the mental health field. An assurance of confidentiality is understandably critical in individual decisions to seek mental health treatment. Although an extensive legal framework governs confidentiality of consumer-provider interactions, potential problems exist and loom ever larger.

1. People's willingness to seek help is contingent on their confidence that personal revelations of mental distress will not be disclosed without their consent.
2. The U.S. Supreme Court recently has upheld the right to the privacy of these records and the therapist-client relationship.
3. Although confidentiality issues are common to health care in general, there are special concerns for mental health care and mental health care records because of the extremely personal nature of the material shared in treatment.
4. State and Federal laws protect the confidentiality of health care information but are often incomplete because of numerous exceptions which often vary from state to state. Several states have implemented or proposed models for protecting privacy that may serve as a guide to others.
5. States, consumers, and family advocates take differing positions on disclosure of mental health information without consent to family caregivers. In states that allow such disclosure, information provided is usually limited to diagnosis, prognosis, and information regarding treatment, specifically medication.
6. When conducting mental health research, it is in the interest of both the researcher and the individual participant to address informed consent and to obtain certificates of confidentiality before proceeding. Federal regulations require informed consent for research being conducted with Federal funds.
7. New approaches to managing care and information technology threaten to further erode the confidentiality and trust deemed so essential between the direct provider of mental health services and the individual receiving those services. It is important to monitor advances so that confidentiality of records is enhanced, instead of impinged upon, by technology.
8. Until the stigma associated with mental illnesses is addressed, confidentiality of mental health information will continue to be a critical point of concern for payers, providers, and consumers.

Chapter 8: A Vision for the Future—Actions for Mental Health in the New Millennium

The extensive literature that the Surgeon General's report reviews and summarizes leads to the conclusion that ***a range of treatments of documented efficacy exists for most mental disorders***. Moreover, a person may choose a particular approach to suit his or her needs and preferences. Based on this finding, the report's principal recommendation to the American people is to ***seek help if you have a mental health problem or think you have symptoms of a mental disorder***. As noted earlier, stigma interferes with the willingness of many people—even those who have a serious mental illness—to seek help. And, as documented in this report, those who do seek help will all too frequently learn that there are substantial gaps in the availability of state-of-the-art mental health services and barriers to their accessibility. Accordingly, the final chapter of the report goes on to explore opportunities to overcome barriers to implementing the recommendation and to have seeking help lead to effective treatment.

The final chapter identifies the following courses of action.

1. ***Continue to Build the Science Base***: Today, integrative neuroscience and molecular genetics present some of the most exciting basic research opportunities in medical science. A plethora of new pharmacologic agents and psychotherapies for mental disorders afford new treatment opportunities but also challenge the scientific community to develop new approaches to clinical and health services interventions research. Because the vitality and feasibility of clinical research hinges on the willing participation of clinical research volunteers, it is important for society to ensure that concerns about protections for vulnerable research subjects are addressed. Responding to the calls of managed mental and behavioral health care systems for evidence-based interventions will have a much needed and discernible impact on practice. Special effort is required to address pronounced gaps in the mental

health knowledge base. Key among these are the urgent need for evidence which supports strategies for mental health promotion and illness prevention. Additionally, research that explores approaches for reducing risk factors and strengthening protective factors for the prevention of mental illness should be encouraged. As noted throughout the report, high-quality research and the effective services it promotes are a potent weapon against stigma.

2. ***Overcome Stigma***: Powerful and pervasive, stigma prevents people from acknowledging their own mental health problems, much less disclosing them to others. For our Nation to reduce the burden of mental illness, to improve access to care, and to achieve urgently needed knowledge about the brain, mind, and behavior, stigma must no longer be tolerated. Research on brain and behavior that continues to generate ever more effective treatments for mental illnesses is a potent antidote to stigma. The issuance of this Surgeon General's Report on Mental Health seeks to help reduce stigma by dispelling myths about mental illness, by providing accurate knowledge to ensure more informed consumers, and by encouraging help seeking by individuals experiencing mental health problems.
3. ***Improve Public Awareness of Effective Treatment***: Americans are often unaware of the choices they have for effective mental health treatments. In fact, there exists a constellation of several treatments of documented efficacy for most mental disorders. Treatments fall mainly under several broad categories—counseling, psychotherapy, medication therapy, rehabilitation—yet within each category are many more choices. All human services professionals, not just health professionals, have an obligation to be better informed about mental health treatment resources in their communities and should encourage individuals to seek help from any source in which they have confidence.
4. ***Ensure the Supply of Mental Health Services and Providers***: The fundamental components of effective service delivery, which include integrated community-based services, continuity of providers and treatments, family support services (including psychoeducation), and culturally sensitive services, are broadly agreed upon, yet certain of these and other mental health services are in consistently short supply, both regionally and, in some instances, nationally. Because the service system as a whole, as opposed to treatment services considered in isolation, dictates the outcome of recovery-oriented mental health care, it is imperative to expand the supply of effective, evidence-based services throughout the Nation. Key personnel shortages include mental health professionals serving children/adolescents and older people with serious mental disorders and specialists with expertise in cognitive-behavioral therapy and interpersonal therapy, two forms of psychotherapy that research has shown to be effective for several severe mental disorders. For adults and children with less severe conditions, primary health care, the schools, and other human services must be prepared to assess and, at times, to treat individuals who come seeking help.
5. ***Ensure Delivery of State-of-the-Art Treatments***: A wide variety of effective, community-based services, carefully refined through years of research, exist for even the most severe mental illnesses yet are not being translated into community settings. Numerous explanations for the gap between what is known from research and what is practiced beg for innovative strategies to bridge it.
6. ***Tailor Treatment to Age, Gender, Race, and Culture***: Mental illness, no less than mental health, is influenced by age, gender, race, and culture as well as additional facets of diversity that can be found within all of these population groups—for example, physical disability or a person's sexual orientation choices. To be effective, the diagnosis and treatment of mental illness must be tailored to all characteristics that shape a person's image and identity. The consequences of not understanding these influences can be profoundly deleterious. "Culturally competent" services incorporate understanding of racial and ethnic groups, their histories, traditions, beliefs, and value systems. With appropriate training and a fundamental respect for

clients, any mental health professional can provide culturally competent services that reflect sensitivity to individual differences and, at the same time, assign validity to an individual's group identity. Nonetheless, the preference of many members of ethnic and racial minority groups to be treated by mental health professionals of similar background underscores the need to redress the current insufficient supply of mental health professionals who are members of racial and ethnic minority groups.

7. ***Facilitate Entry Into Treatment***: Public and private agencies have an obligation to facilitate entry into mental health care and treatment through the multiple "portals of entry" that exist: primary health care, schools, and the child welfare system. To enhance adherence to treatment, agencies should offer services that are responsive to the needs and preferences of service users and their families. At the same time, some agencies receive inappropriate referrals. For example, an alarming number of children and adults with mental illness are in the criminal justice system inappropriately. Importantly, assuring the small number of individuals with severe mental disorders who pose a threat of danger to themselves or others ready access to adequate and appropriate services promises to reduce significantly the *need* for coercion in the form of involuntary commitment to a hospital and/or certain outpatient treatment requirements that have been legislated in most states and territories. Coercion should not be a substitute for effective care that is sought voluntarily; consensus on this point testifies to the need for research designed to enhance adherence to treatment.
8. ***Reduce Financial Barriers to Treatment***: Concerns about the cost of care—concerns made worse by the disparity in insurance coverage for mental disorders in contrast to other illnesses—are among the foremost reasons why people do not seek needed mental health care. While both access to and use of mental health services increase when benefits for those services are enhanced, preliminary data show that the effectiveness—and, thus, the value—of mental health care also has increased in recent years, while expenditures for services, under managed care, have fallen. Equality between mental health coverage and other health coverage—a concept known as parity—is an affordable and effective objective.

Scope of Coverage of the Report

This report is comprehensive but not exhaustive in its coverage of mental health and mental illness. It considers mental health facets of some conditions which are not always associated with the mental disorders and does not consider all conditions which can be found in classifications of mental disorders such as DSM-IV. The report includes, for example, a discussion of autism in Chapter 3 and provides an extensive section on Alzheimer's disease in Chapter 5. Although DSM-IV lists specific mental disorder criteria for both of these conditions, they often are viewed as being outside the scope of the mental health field. In both cases, mental health professionals are involved in the diagnosis and treatment of these conditions, often characterized by cognitive and behavioral impairments. The developmental disabilities and mental retardation are not discussed except in passing in this report. These conditions were considered to be beyond its scope with a care system all their own and very special needs. The same is generally true for the addictive disorders, such as alcohol and other drug use disorders. The latter, however, co-occur with such frequency with the other mental disorders, which are the focus of this report, that the co-occurrence is discussed throughout. The report covers the epidemiology of addictive disorders and their co-occurrence with other mental disorders as well as the treatment of co-occurring conditions. Brief sections on substance abuse in adolescence and late life also are included in the report.

Preparation of the Report

In September 1997, the Office of the Surgeon General, with the approval of the Secretary of the Department of Health and Human Services, authorized the Substance Abuse and Mental Health Services Administration (SAMHSA) to serve as lead operating division for

preparing the first Surgeon General's Report on Mental Health. SAMHSA's Center for Mental Health Services worked in partnership with the National Institute of Mental Health of the National Institutes of Health to develop this report under the guidance of Surgeon General David Satcher. These Federal partners established a Planning Board comprising individuals representing a broad range of expertise in mental health, including academicians, mental health professionals, researchers in neuroscience and service delivery, and self-identified consumers of mental health services and family members of consumers of mental health services. Also included on the Planning Board were individuals representing Federal operating divisions, offices, centers, and institutes and private nonprofit foundations with interests in mental health.

References

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.

Angermeyer, M. C., & Matschinger, H. (1996). The effect of violent attacks by schizophrenic persons on the attitude of the public towards the mentally ill. *Social Science Medicine, 43*, 1721–1728.

Bachrach, L. L. (1996). The state of the state mental hospital 1996. *Psychiatric Services, 47*, 1071–1078.

Baum, A., & Posluszny, D. M. (1999). Health psychology: Mapping biobehavioral contributions to health and illness. *Annual Review of Psychology, 50*, 137–163.

Chambless, D. L., Sanderson, W. C., Shohman, V., Bennett, J. S., Pope, K. S., Crits-Cristoph, P., Baker, M., Johnson, B., Woody, S. R., Sue, S., Beutler, L., Williams, D. A., & McMurry, S. (1996). An update on empirically validated therapies. *Clinical Psychologist, 49*, 5–18.

Cohen, S., & Herbert, T. B. (1996). Health psychology: Psychological factors and physical disease from the perspective of human psychoneuroimmunology. *Annual Review of Psychology, 47*, 113–142.

Conwell, Y. (1996). *Diagnosis and treatment of depression in late life.* Washington, DC: American Psychiatric Press.

Cooper-Patrick, L., Powe, N. R., Jenckes, M. W., Gonzales, J. J., Levine, D. M., & Ford, D. E. (1997). Identification of patient attitudes and preferences regarding treatment of depression. *Journal of General Internal Medicine, 12*, 431–438.

Corrigan, P. W. & Penn, D. L. (1999). Lessons from social psychology on discrediting psychiatric stigma. *American Psychologist, 54,* 765–776.

Cowen, E. L. (1994). The enhancement of psychological wellness: Challenges and opportunities. *American Journal of Community Psychology, 22,* 149–179.

DiMasi, J. A., & Lasagna, L. (1995). The economics of psychotropic drug development. In F. E. Bloom & D. J. Kupfer (Eds.), *Psychopharmacology: The fourth generation of progress.* (pp. 1883–1895). New York: Raven Press.

DSM-IV. See American Psychiatric Association (1994).

Eisendrath, S. J., & Feder, A. (in press). The mind and somatic illness: Psychological factors affecting physical illness. In H. H. Goldman (Ed.), *Review of general psychiatry* (5th ed.). Norwalk, CT: Appleton & Lange.

Eronen, M., Angermeyer, M. C., & Schulze, B. (1998). The psychiatric epidemiology of violent behaviour. *Social Psychiatry and Psychiatric Epidemiology, 33*(Suppl. 1), S13–S23.

Fischbach, G. D. (1992). Mind and brain. *Scientific American, 267*, 48–57.

Food and Drug Administration. (1998). *Center for Drug Evaluation and Research handbook* [On-line]. Available: http://www.fda.gov/cder/ handbook-/index.htm

Frasure-Smith, N., Lesperance, F., & Talajic, M. (1993). Depression following myocardial infarction. Impact on 6-month survival. *Journal of the American Medical Association, 270*, 1819–1825.

Frasure-Smith, N., Lesperance, F., & Talajic, M. (1995). Depression and 18-month prognosis after myocardial infarction. *Circulation, 91*, 999–1005.

Gazzaniga, M. S., Ivry, R. B., & Mangun, G. R. (1998). *Cognitive neuroscience: The biology of the mind.* New York: W. W. Norton.

Grob, G. N. (1983). *Mental illness and American society, 1875–1940.* Princeton, NJ: Princeton University Press.

Grob, G. N. (1991). *From asylum to community. Mental health policy in modern America.* Princeton, NJ: Princeton University Press.

Grob, G. N. (1994). *The mad among us: A history of the care of America's mentally ill.* New York: Free Press.

Gurin, J., Veroff, J., & Feld, S. (1960). *Americans view their mental health: A nationwide interview survey* (A report to the staff director, Jack R. Ewalt). New York: Basic Books.

Hanson, K. W. (1998). Public opinion and the mental health parity debate: Lessons from the survey literature. *Psychiatric Services, 49*, 1059–1066.

Heginbotham, C. (1998). UK mental health policy can alter the stigma of mental illness. *Lancet, 352*, 1052–1053.

Hoyt, D. R., Conger, R. D., Valde, J. G., & Weihs, K. (1997). Psychological distress and help seeking in rural America. *American Journal of Community Psychology, 25*, 449–470.

Jones, A. H. (1998). Mental illness made public: Ending the stigma? *Lancet, 352*, 1060.

Kandel, E. R. (1998). A new intellectual framework for psychiatry. *American Journal of Psychiatry, 155*, 457–469.

Kessler, R. C., Nelson, C. B., McKinagle, K. A., Edlund, M. J., Frank, R. G., & Leaf, P. J. (1996). The epidemiology of co-occurring addictive and mental disorders: Implications for prevention and service utilization. *American Journal of Orthopsychiatry, 66,* 17–31.

Last, J. M., & Wallace, R. B. (Eds.). (1992). *Maxcy-Rosenau-Last public health and preventive medicine* (13th ed.). Norwalk, CT: Appleton and Lange.

Link, B., Phelan, J., Bresnahan, M., Stueve, A., & Pescosolido, B. (in press). Public conceptions of mental illness: The labels, causes, dangerousness and social distance. *American Journal of Public Health*.

Murray, C. J. L., & Lopez, A. D. (Eds.). (1996). *The global burden of disease. A comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020.* Cambridge, MA: Harvard School of Public Health.

Penn, D. L., & Martin, J. (1998). The stigma of severe mental illness: Some potential solutions for a recalcitrant problem. *Psychiatric Quarterly, 69*, 235–247.

Phelan, J., Link, B., Stueve, A., & Pescosolido, B. (1997, August). *Public conceptions of mental illness in 1950 in 1996: Has sophistication increased? Has stigma declined?* Paper presented at the meeting of the American Sociological Association, Toronto, Ontario.

Regier, D. A., Narrow, W. E., Rae, D. S., Manderscheid, R. W., Locke, B. Z., & Goodwin, F. K. (1993). The de facto US mental and addictive disorders service system. Epidemiologic Catchment Area prospective 1-year prevalence rates of disorders and services. *Archives of General Psychiatry, 50,* 85–94.

Secker, J. (1998). Current conceptualizations of mental health and mental health promotion. *Health Education Research, 13,* 57–66.

Star, S. A. (1952). *What the public thinks about mental health and mental illness.* Paper presented at the annual meeting of the National Association for Mental Health.

Star, S. A. (1955). *The public's ideas about mental illness.* Paper presented at the annual meeting of the National Association for Mental Health.

Steadman, H. J., Mulvey, E. P., Monahan, J., Robbins, P. C., Appelbaum, P. S., Grisso, T., Roth, L. H., & Silver, E. (1998). Violence by people discharged from acute psychiatric inpatient facilities and by others in the same neighborhoods. *Archives of General Psychiatry, 55*, 393–401.

Sussman, L. K., Robins, L. N., & Earls, F. (1987). Treatment-seeking for depression by black and white Americans. *Social Science and Medicine, 24*, 187–196.

Swanson, J. W. (1994). Mental disorder, substance abuse, and community violence: An epidemiological approach. In J. Monahan & H. J. Steadman (Eds.), *Violence and mental disorder: Developments in risk assessment* (pp. 101–136). Chicago: University of Chicago Press.

Swartz, M. S., Swanson, J. W., & Burns, B. J. (1998). Taking the wrong drugs: The role of substance abuse and medication noncompliance in violence among severely mentally ill individuals. *Social Psychiatry and Psychiatric Epidemiology, 33*(Suppl. 1), S75–S80.

Swindle, R., Heller, K., & Pescosolido, B. (1997, August). *Responses to "nervous breakdowns" in America over a 40-year period: Mental health policy implications.* Paper presented at the meeting of American Sociological Association, Toronto, Ontario.

Veroff, J., Douvan, E., & Kulka, R. A. (1981). *Mental health in America: Patterns of help-seeking from 1957 to 1976.* New York: Basic Books.

Zisook, S., & Shuchter, S. R. (1991). Depression through the first year after the death of a spouse. *American Journal of Psychiatry, 148*, 1346–1352.

Zisook, S., & Shuchter, S. R. (1993). Major depression associated with widowhood. *American Journal of Geriatric Psychiatry, 1*, 316–326.