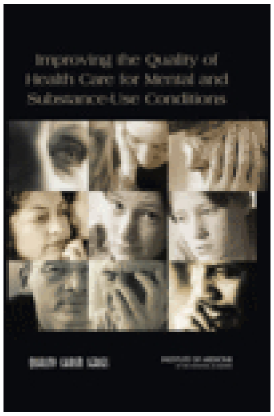

Improving the Quality of Health Care for Mental and Substance-Use Conditions: Quality Chasm Series

Committee on Crossing the Quality Chasm: Adaptation
to Mental Health and Addictive Disorders

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Each year, more than 33 million Americans receive health care for mental or substance-use conditions, or both. Together, mental and substance-useillnesses are the leading cause of death and disability for women, the highestfor men ages 15-44, and the second highest for all men.Effective treatments exist, but services are frequently fragmented and, aswith general health care, there are barriers that prevent many from receivingthese treatments as designed or at all. The consequences of this areserious—for these individuals and their families; their employers and theworkforce; for the nation's economy; as well as the education, welfare, andjustice systems.Improving the Quality of Health Care for Mental and Substance-UseConditions examines the distinctive characteristics of health care for mentaland substance-use conditions, including payment, benefit coverage, andregulatory issues, as well as health care organization and delivery issues. Thisnew volume in the Quality Chasm series puts forth an agenda for improvingthe quality of this care based on this analysis. Patients and their families, primaryhealth care providers, specialty mental health and substance-use treatmentproviders, health care organizations, health plans, purchasers of grouphealth care, and all involved in health care for mental and substance–useconditions will benefit from this guide to achieving better care.

Summary

ABSTRACT

Millions of Americans today receive health care for mental or substance-use problems and illnesses. These conditions are the leading cause of combined disability and death among women and the second highest among men.

Effective treatments exist and continually improve. However, as with general health care, deficiencies in care delivery prevent many from receiving appropriate treatments. That situation has serious consequences—for people who have the conditions; for their loved ones; for the workplace; for the education, welfare, and justice systems; and for the nation as a whole.

A previous Institute of Medicine report, Crossing the Quality Chasm: A New Health System for the 21st Century *(IOM, 2001), put forth a strategy for improving health care overall—a strategy that has attained considerable traction in the United States and other countries. However, health care for mental and substance-use conditions has a number of distinctive characteristics, such as the greater use of coercion into treatment, separate care delivery systems, a less developed quality measurement infrastructure, and a differently structured marketplace. These and other differences raised questions about whether the* Quality Chasm *approach is applicable to health care for mental and substance-use conditions and, if so, how it should be applied.*

This new report examines those differences, finds that the Quality Chasm *framework can be applied to health care for mental and substance-use conditions, and describes a multifaceted and comprehensive strategy for doing so and thereby ensuring that:*

- *Individual patient preferences, needs, and values prevail in the face of residual stigma, discrimination, and coercion into treatment.*
- *The necessary infrastructure exists to produce scientific evidence more quickly and promote its application in patient care.*
- *Multiple providers' care of the same patient is coordinated.*
- *Emerging information technology related to health care benefits people with mental or substance-use problems and illnesses.*
- *The health care workforce has the education, training, and capacity to deliver high-quality care for mental and substance-use conditions.*
- *Government programs, employers, and other group purchasers of health care for mental and substance-use conditions use their dollars in ways that support the delivery of high-quality care.*
- *Research funds are used to support studies that have direct clinical and policy relevance and that are focused on discovering and testing therapeutic advances.*

The strategy addresses issues pertaining to health care for both mental and substance-use conditions and the essential role of health care for both conditions in improving overall health and health care. In so doing, it details the actions required to achieve those ends—actions required of clinicians; health care organizations; health plans; purchasers; state, local, and federal governments; and all parties involved in health care for mental and substance-use conditions.

MILLIONS OF AMERICANS USE HEALTH CARE FOR MENTAL OR SUBSTANCE-USE CONDITIONS

Each year, more than 33 million Americans use health care services for their mental problems and illnesses[1] or conditions resulting from their use

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[1] Whenever possible, this report uses the words "problems" and illnesses," as opposed to "disorders," for reasons explained in the full report. Nonetheless, the word "disorder" appears often in this report because it is used so frequently in the literature. Collectively, this report refers to problems and illnesses as "conditions."

of alcohol, inappropriate use of prescription medications, or illegal drugs. About 28 million Americans aged 18 or older (13 percent of this population) received mental health treatment in an inpatient or outpatient setting in 2003[2] (SAMHSA, 2004a), and more than 6 percent of American children and adolescents aged 5–17 had contact with a mental health professional in a 12-month period according to the 1998–1999 National Health Interview survey (Simpson et al., 2004). The rates are higher still for adolescents and working-age adults: 5 million (20.6 percent) of those aged 12–17 received treatment or counseling for emotional or behavioral problems in 2003 (SAMHSA, 2004a), and a nearly identical proportion (20.1 percent) of those aged 18–54 received treatment for mental and/or substance-use (M/SU)[3] problems and illnesses in 2001–2003 (Kessler et al., 2005). More than 3 million (1.4 percent) of those aged 12 or older reported receiving some kind of treatment during 2003 for a problem related to alcohol or drug use (SAMHSA, 2004a). Millions more reported that they needed treatment for M/SU conditions but did not receive it (Mechanic and Bilder, 2004; SAMHSA, 2004a; Wu et al., 2003). From 2001 to 2003, only 40.5 percent of those aged 18–54 who met a specific definition of severe mental illness received any treatment (Kessler et al., 2005). And, in contrast with the more than 3 million Americans aged 12 or older who received treatment during 2003 for a problem related to alcohol or drug use, more than six times that number (9.1 percent of this age group) reported abusing or being physiologically dependent on alcohol; illicit drugs, such as marijuana, cocaine, heroin, hallucinogens, or stimulants; prescription drugs used for nonmedical purposes; or a combination of these (SAMHSA, 2004a).

We know these people, and we know why they contact health care providers for M/SU treatment. We do so ourselves—for our own M/SU problems and illnesses and for those of our parents, our children, our spouses, our loved ones. We know about these conditions from other family members and from our neighbors, friends, teachers, and coworkers—and from the homeless people we pass on the street. What we can see for ourselves—our teenager's friend battling anorexia, our friend's spouse with a drinking problem, our own family member recovering from depression, or our child with attention deficit hyperactivity disorder (ADHD)—is reflected daily in the first-person accounts of public figures about their own M/SU illnesses and recovery. We hear of newswoman Jane Pauley's treatment for and recovery from bipolar illness; astronaut Buzz Aldrin's recovery from alcoholism and depression; former First Lady Betty Ford's recovery from alcoholism; actress Drew Barrymore's recovery from depression,

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[2] This figure does not include treatment solely for substance use.

[3] Throughout this report, the committee uses the acronym M/SU to refer to "mental and/or substance use."

alcoholism, and other substance-use problems; former National Football League running back Earl Campbell's recovery from panic and anxiety disorder; "60 Minutes" host Mike Wallace's, interviewer Larry King's, and columnist Art Buchwald's recovery from depression; country music singer Charlie Pride's recovery from bipolar illness and alcoholism; Hall of Fame jockey Julie Krone's recovery from posttraumatic stress disorder; television news (ABC's "20/20," "Nightline," and "World News Tonight") producer Bill Lichtenstein's recovery from bipolar illness; CNN founder Ted Turner's recovery from bipolar illness; Nobel prize-winning mathematician and economist John Nash's recovery from schizophrenia; and many other such cases. As articulated in the 1999 surgeon general's report on mental health (Anthony, 1993 cited in DHHS, 1999:98):

> a person with mental illness can recover even though the illness is not "cured". . . . [Recovery] is a way of living a satisfying, hopeful, and contributing life even with the limitations caused by illness.

TREATMENT CAN BE EFFECTIVE

M/SU problems and illnesses occur with a wide array of diagnoses and varied severity. Many people with these conditions require only a short-term intervention to help them cope successfully with a less severe M/SU problem, such as anxiety or distress caused by loss of a loved one, loss of a job, or some other life-changing event; to help them change their unhealthy behaviors, such as heavy drinking or drug experimentation; or to prevent their condition from worsening. People with mental illnesses—such as severe anxiety, depression, posttraumatic stress disorder, or a physiologic dependence on alcohol or some other drug—require treatments of longer duration. Sometimes the illnesses become chronic, as is the case with such diseases as diabetes, asthma, and heart disease. Regardless of the nature of their conditions, what all people with M/SU problems and illnesses have in common is the hope that when they seek help for their condition, they will receive care that enables them either to eliminate it or to manage it successfully so that they can live happy, productive, and satisfying lives—care that enables them to recover.

Research on the interplay among genetic, environmental, biologic, and psychosocial factors in brain function and M/SU illnesses provides the means to accomplish that goal. The results of research to date have revealed our lifelong ability to influence the structure and functioning of our brains through manipulation of environmental and behavioral factors (our brains' "plasticity") and have enabled the development of improved psychotherapies ("talk" therapies), drug therapies, and psychosocial services. Effective mental health interventions range from the use of specific medications (such as clozapine) to treat schizophrenia better in some people (Essock et al., 2000; Rosenheck et al., 1999) to the application of specific models for treating depression in primary care (Pirraglia et al., 2004) and providing supported housing for homeless persons with mental illness (Rosenheck et al., 2003). Those and other mental health interventions have been demonstrated to be cost-effective.

Similarly, advances in understanding the behavioral and social factors that lead to substance use and dependence, in identifying key neuropathways and chemical changes that generate the cravings characteristic of dependence, and in developing means to block these cravings have resulted in a spectrum of evidence-based pharmacologic and psychosocial treatments for people who have problems with or are dependent on substances—treatments that produce results similar to or better than those obtained with treatments for other chronic illnesses (McLellan et al., 2000). New medications, such as buprenorphine, are effective in reducing opioid use (Johnson et al., 2000) and can be prescribed routinely in physicians' offices. Naltrexone and acamprosate show efficacy in treating alcohol dependence (Kranzler and Van Kirk, 2001; O'Malley et al., 2003). The efficacy of nonpharmacologic treatments for drug dependence—such as cognitive behavioral therapy, motivational enhancement treatment, and contingency management—has been demonstrated (Higgins and Petry, 1999). Also effective are 12-step mutual-support groups, such as Alcoholics Anonymous, particularly as an adjunct to treatment and as a form of long-term aftercare (Emrick et al., 1993; Tonigan et al., 2003; Weisner et al., 2003). Brief advice from a physician and office-based counseling interventions can reduce the use of alcohol in problem drinkers (Fleming et al., 1997; Ockene et al., 1999). As a result of these and other advances, patients who remain in treatment for use of alcohol, opioids, or cocaine are less likely to relapse or resume their harmful substance use (Gossop et al., 1999; Miller and Wilbourne, 2002; Miller et al., 2001; Prendergast et al., 2002). Overall, research is increasingly demonstrating that care for M/SU problems and illnesses is both effective (it works) and cost-effective (it is a good value).

QUALITY PROBLEMS HINDER EFFECTIVE TREATMENT AND RECOVERY

As in the case of general health care, despite what is known about effective care for M/SU conditions, numerous studies have documented a discrepancy between M/SU care that is known to be effective and care that is actually delivered. A review of studies published from 1992 through 2000 assessing the quality of care for many different M/SU illnesses (including alcohol withdrawal, bipolar disorder, depression, panic disorder, psychosis, schizophrenia, and substance use) found that only 27 percent of the studies reported adequate rates of adherence to established clinical practice guidelines (Bauer, 2002). Later studies have continued to document departures from evidence-based practice guidelines for illnesses as varied as ADHD (Rushton et al., 2004), anxiety disorders (Stein et al., 2004), comorbid mental and substance-use illnesses (Watkins et al., 2001), depression in adults (Simon et al., 2001) and children (Richardson et al., 2004), opioid dependence (D'Aunno and Pollack, 2002), and schizophrenia (Buchanan et al., 2002). In a landmark study of the quality of a wide variety of health care received by U.S. citizens, people with alcohol dependence were found to receive care consistent with scientific knowledge only about 10.5 percent of the time (McGlynn et al., 2003).

Poor care has serious consequences for the people seeking treatment, especially the most severely ill. One review of the charts of 31 randomly selected patients in a state psychiatric hospital detected 2,194 medication errors during the patients' collective 1,448 inpatient days. Of those errors, 58 percent were judged to have the potential to cause severe harm (Grasso et al., 2003). The use of seclusion and restraints in inpatient mental health facilities is estimated to cause 150 deaths in the United States each year (SAMHSA, 2004b). Moreover, a continuing failure of the health care system in some cases to provide *any* treatment for M/SU illness has been documented (Kessler et al., 2005), even when people are receiving other types of health care and have financial and geographic access to treatment (Jaycox et al., 2003; SAMHSA, 2004a; Watkins et al., 2001). Diagnostic failures and failures to treat can be lethal; M/SU illnesses are leading risk factors for suicide (Maris, 2002).

DEFICIENCIES IN CARE HAVE CONSEQUENCES FOR THE NATION

In addition to the personal consequences of ineffective, unsafe, or no treatment for M/SU illnesses, consequences are felt directly in the workplace; in the education, welfare, and justice systems; and in the nation's economy as a whole. Together, unipolar major depression and drug and alcohol use and dependence are the leading cause of death and disability among American women and the second highest among men (behind heart disease) (Michaud et al., 2001). M/SU problems and illnesses also co-occur with a substantial number of general medical illnesses, such as heart disease and cancer (Katon, 2003; Mertens et al., 2003), and adversely affect the results of treatment for these conditions. About one-fifth of patients hospitalized for a heart attack, for example, suffer from major depression, and evidence from multiple studies makes clear that post–heart attack depression roughly triples one's risk of dying from a future attack or other heart condition (Bush et al., 2005).

Evidence is mounting that M/SU problems and illnesses result in a considerable burden on the workplace and cost to employers owing to absenteeism, "presenteeism" (attending work with symptoms that impair performance), days of disability, and "critical incidents," such as on-the-job accidents (Burton et al., 2004; Goetzel et al., 2002; Kessler et al., 2001).

M/SU problems and illnesses lead to poor educational achievement by children (Green and Goldwyn, 2002; Weinfield et al., 1999; Zeanah et al., 2003), which itself breeds emotional and behavioral problems. Children with poor school achievement are at risk for delinquent and antisocial behavior (Yoshikawa, 1995) and for dropping out of school and rapid, repeated adolescent pregnancies (Linares et al., 1991).

M/SU problems and illnesses also shape the nation's child welfare system. Almost 48 percent of a nationally representative sample of children aged 2–14 who were investigated by child welfare services in 1999–2000 had a clinically significant need for mental health care (Burns et al., 2004). Because of limitations of insurance for mental health care, some families resort to placing their severely mentally ill children in the child welfare system, even though the children are not neglected or abused, to secure mental health services otherwise unavailable (GAO, 2003); parents who take this step must sometimes give up custody of their children (Giliberti and Schulzinger, 2000).

Similarly, children who are not guilty of any offense are often placed in local juvenile justice systems or incarcerated for the same purpose. The U.S. Government Accountability Office counted about 9,000 children who entered state and local juvenile justice systems under those circumstances in 2001 but estimated that the number of such children was likely to be higher (GAO, 2003). The emotional toll on the children is high. Some 48 percent of facilities that hold youths awaiting community mental health services report suicide attempts among them (U.S. House of Representatives, 2004).

The proportion of adult U.S. residents incarcerated has been increasing annually—from a rate of 601 persons in custody per 100,000 U.S. residents in 1995 to 715 per 100,000 in 2003. In the middle of 2003, the nation's prisons and jails held 2,078,570 persons—one in every 140 residents (Harrison and Karberg, 2004). The U.S. Bureau of Justice Statistics estimates that about 16 percent of all persons in jails and prisons report either having a mental disorder or staying overnight in a psychiatric facility (Mumola, 1999). Overall, the costs of providing no or ineffective treatment—as well as the costs of treatment—impose a sizable burden on the nation.

A STRATEGY HAS BEEN DEVELOPED TO IMPROVE OVERALL HEALTH CARE

The inadequacy of M/SU health care is a dimension of the poor quality of *all* health care. The quality problems of overall health care received substantial attention among the health care community and the public at large as a result of two previous Institute of Medicine (IOM) reports: *To Err Is Human: Building a Safer Health System* (IOM, 2000) and *Crossing the Quality Chasm: A New Health System for the 21st Century* (IOM, 2001). The *Quality Chasm* report also garnered consensus around a framework and strategies for achieving substantial improvements in quality. The framework identifies six aims for high-quality health care (see Box S-1) and 10 rules for redesigning the nation's health care system (see Box S-2).

Crossing the Quality Chasm's framework and recommendations have attracted the attention of many health care leaders, including those addressing health care for mental and substance-use conditions. As a result, the Annie E. Casey Foundation, the CIGNA Foundation, the National Institute on Alcohol Abuse and Alcoholism, the National Institute on Drug Abuse, The Robert Wood Johnson Foundation, the Substance Abuse and Mental Health Services Administration (SAMHSA) in the U.S. Department of

BOX S-1 The Six Aims of High-Quality Health Care

Safe—avoiding injuries to patients from the care that is intended to help them.

Effective—providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding underuse and overuse, respectively).

Patient-centered—providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions.

Timely—reducing waits and sometimes harmful delays for both those who receive and those who give care.

Efficient—avoiding waste, including waste of equipment, supplies, ideas, and energy.

Equitable—providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status.

SOURCE: IOM, 2001:5–6.

BOX S-2 The *Quality Chasm's* Ten Rules to Guide the Redesign of Health Care

1. **Care based on continuous healing relationships.** Patients should receive care whenever they need it and in many forms, not just face-to-face visits. This rule implies that the health care system should be responsive at all times (24 hours a day, every day) and that access to care should be provided over the Internet, by telephone, and by other means in addition to face-to-face visits.

2. **Customization based on patient needs and values.** The system of care should be designed to meet the most common types of needs but have the capability to respond to individual patient choices and preferences.

3. **The patient as the source of control.** Patients should be given the necessary information and the opportunity to exercise the degree of control they choose over health care decisions that affect them. The health system should be able to accommodate differences in patient preferences and encourage shared decision making.

4. **Shared knowledge and the free flow of information.** Patients should have unfettered access to their own medical information and to clinical knowledge. Clinicians and patients should communicate effectively and share information.

5. **Evidence-based decision making.** Patients should receive care based on the best available scientific knowledge. Care should not vary illogically from clinician to clinician or from place to place.

6. **Safety as a system property.** Patients should be safe from injury caused by the care system. Reducing risk and ensuring safety require greater attention to systems that help prevent and mitigate errors.

7. **The need for transparency.** The health care system should make information available to patients and their families that allows them to make informed decisions when selecting a health plan, hospital, or clinical practice, or choosing among alternative treatments. This should include information describing the system's performance on safety, evidence-based practice, and patient satisfaction.

8. **Anticipation of needs.** The health system should anticipate patient needs, rather than simply reacting to events.

9. **Continuous decrease in waste.** The health system should not waste resources or patient time.

10. **Cooperation among clinicians.** Clinicians and institutions should actively collaborate and communicate to ensure an appropriate exchange of information and coordination of care.

SOURCE: IOM, 2001:8.

Health and Human Services, and the Veterans Health Administration of the U.S. Department of Veterans Affairs charged the IOM as follows:

> *Crossing the Quality Chasm: A New Health System for the 21st Century* identified six dimensions in which the United States health system functions at far lower levels than it should (i.e., safety, effectiveness, patient-centeredness, timeliness, efficiency and equity) and concluded that the current health care system is in need of fundamental change. The IOM is to explore the implications of that conclusion for the field of mental health and addictive disorders, and identify the barriers and facilitators to achieving significant improvements along all six of these dimensions. The committee will examine both environmental factors such as payment, benefits coverage and regulatory issues, as well as health care organization and delivery issues. Based on a review of the evidence, the committee will develop an "agenda for change."

To respond to this charge, IOM convened the Committee on Crossing the Quality Chasm: Adaptation to Mental Health and Addictive Disorders. This report presents the committee's analysis of the issues and of how the distinctive features of M/SU health care should be addressed in quality improvement initiatives.

THE *QUALITY CHASM* STRATEGY IS APPLICABLE TO HEALTH CARE FOR MENTAL AND SUBSTANCE-USE CONDITIONS

Despite the quality problems shared with health care generally, M/SU health care is distinctive in significant ways. Those distinctive features include the greater stigma attached to M/SU diagnoses; more frequent coercion of patients into treatment, especially for substance-use problems and conditions; a less developed infrastructure for measuring and improving the quality of care; the need for a greater number of linkages among the multiple clinicians, organizations, and systems providing care to patients with M/SU conditions; less widespread use of information technology; a more educationally diverse workforce; and a differently structured marketplace for the purchase of M/SU health care.

Despite these and other differences, the committee found that M/SU health care and general health care share many characteristics. Moreover, evidence of a link between M/SU illnesses and general health (and health care) is very strong, especially with respect to chronic illnesses and injury (Katon, 2003; Kroenke, 2003). The committee concludes that improving the nation's *general* health and resolving the quality problems of the overall health care system will require attending equally to the quality problems of M/SU health care. Accordingly, the committee offers two overarching recommendations.

Overarching Recommendation 1. Health care for general, mental, and substance-use problems and illnesses must be delivered with an understanding of the inherent interactions between the mind/brain and the rest of the body.

With respect to the quality of M/SU health care, the committee's analysis shows that the recommendations set forth in *Crossing the Quality Chasm* for the redesign of health care are as applicable to M/SU as to general health care. Because of its distinctive features, however, the application of those aims, rules, and redesign strategies to M/SU health care must be specially tailored.

Overarching Recommendation 2. The aims, rules, and strategies for redesign set forth in *Crossing the Quality Chasm* should be applied throughout M/SU health care on a day-to-day operational basis, but tailored to reflect the characteristics that distinguish care for these problems and illnesses from general health care.

To implement this overarching recommendation and achieve success in quality improvement, the committee proposes that the agenda for change embodied in recommendations 3.1 through 9.2 below be undertaken by clinicians; organizations; health plans; purchasers; state, local, and federal governments; and all other parties involved in M/SU health care.

Foremost, consumers of health care for M/SU conditions face a number of obstacles to patient-centered care that generally are not encountered by consumers of general health care. As mentioned above, the shame, stigma, and discrimination still experienced by some consumers of M/SU services can prevent them from seeking care (Peter D. Hart Research Associates Inc., 1998; SAMHSA, 2004a) and inappropriately nourish doubts about their competence to make decisions on their own behalf (Bergeson, 2004; Leibfried, 2004; Markowitz, 1998; Wright et al., 2000). Moreover, insurance coverage for M/SU treatment is more limited than that for general health care, so it is more difficult to obtain and continue the care needed. Finally, more M/SU than general health care patients are coerced into treatment and subject to questions about whether they should be allowed to make decisions about their care. To address those issues, the committee makes two recommendations:[4]

Recommendation 3-1. To promote patient-centered care, all parties involved in health care for mental or substance-use conditions should

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[4] The committee's recommendations for improving the quality of M/SU health care are numbered according to the chapter of the main report in which they appear; for example, recommendation 3-1 is the first recommendation in Chapter 3.

support the decision-making abilities and preferences for treatment and recovery of persons with M/SU problems and illnesses.

- Clinicians and organizations providing M/SU treatment services should:
  - Incorporate informed, patient-centered decision making throughout their practices, including active patient participation in the design and revision of patient treatment and recovery plans, the use of psychiatric advance directives, and (for children) informed family decision making. To ensure informed decision making, information on the availability and effectiveness of M/SU treatment options should be provided.
  - Adopt recovery-oriented and illness self-management practices that support patient preferences for treatment (including medications), peer support, and other elements of the wellness recovery plan.
  - Maintain effective, formal linkages with community resources to support patient illness self-management and recovery.
- Organizations providing M/SU treatment should also:
  - Have in place policies that implement informed, patient-centered participation and decision making in treatment, illness self-management, and recovery plans.
  - Involve patients and their families in the design, administration, and delivery of treatment and recovery services.
- Accrediting bodies should adopt accreditation standards that require the implementation of these practices.
- Health plans and direct payers of M/SU treatment services should:
  - For persons with chronic mental illnesses or substance-use dependence, pay for peer support and illness self-management programs that meet evidence-based standards.
  - Provide consumers with comparative information on the quality of care provided by practitioners and organizations, and use this information themselves when making their purchasing decisions.
  - Remove barriers to and restrictions on effective and appropriate treatment that may be created by copayments, service exclusions, benefit limits, and other coverage policies.

Recommendation 3-2. Coercion should be avoided whenever possible. When coercion is legally authorized, patient-centered care is still applicable and should be undertaken by:

- Making the policies and practices used for determining dangerousness and decision-making capacity transparent to patients and their caregivers.

- **Obtaining the best available comparative information on safety, effectiveness, and availability of care and providers, and using that information to guide treatment decisions.**
- **Maximizing patient decision making and involvement in the selection of treatments and providers.**

The infrastructure needed to measure, analyze, publicly report, and improve the quality of M/SU health care is less well developed than that for general health care. As a result, there has been less measurement and improvement of M/SU health care than of general health care (AHRQ, 2003; Garnick et al., 2002). A related issue is that methods used to disseminate evidence-based practice to providers have not always been evidence-based themselves. To build a stronger infrastructure to support the delivery of high-quality care, the committee recommends a five-part strategy: (1) more coordination in filling gaps in the evidence base; (2) a stronger, more coordinated, and evidence-based approach to disseminating evidence to clinicians; (3) improved diagnosis and assessment strategies; (4) a stronger infrastructure for measuring and reporting the quality of M/SU health care; and (5) support for quality improvement practices at the sites of M/SU health care.

Recommendation 4-1. To better build and disseminate the evidence base, the Department of Health and Human Services (DHHS) should strengthen, coordinate, and consolidate the synthesis and dissemination of evidence on effective M/SU treatments and services by the Substance Abuse and Mental Health Services Administration; the National Institute of Mental Health; the National Institute on Drug Abuse; the National Institute on Alcohol Abuse and Alcoholism; the National Institute of Child Health and Human Development; the Agency for Healthcare Research and Quality; the Department of Justice; the Department of Veterans Affairs; the Department of Defense; the Department of Education; the Centers for Disease Control and Prevention; the Centers for Medicare and Medicaid Services; the Administration for Children, Youth, and Families; states; professional associations; and other private-sector entities.

To implement this recommendation, DHHS should charge or create one or more entities to:

- **Describe and categorize available M/SU preventive, diagnostic, and therapeutic interventions (including screening, diagnostic, and symptom-monitoring tools), and develop individual procedure codes and definitions for these interventions and tools for their use in administrative datasets approved under the Health Insurance Portability and Accountability Act.**

- **Assemble the scientific evidence on the efficacy and effectiveness of these interventions, including their use in varied age and ethnic groups; use a well-established approach to rate the strength of this evidence, and categorize the interventions accordingly; and recommend or endorse guidelines for the use of the evidence-based interventions for specific M/SU problems and illnesses.**
- **Substantially expand efforts to attain widespread adoption of evidence-based practices through the use of evidence-based approaches to knowledge dissemination and uptake. Dissemination strategies should always include entities that are commonly viewed as knowledge experts by general health care providers and makers of public policy, including the Centers for Disease Control and Prevention, the Agency for Healthcare Research and Quality, the Centers for Medicare and Medicaid Services, the Office of Minority Health, and professional associations and health care organizations.**

Recommendation 4-2. Clinicians and organizations providing M/SU services should:

- **Increase their use of valid and reliable patient questionnaires or other patient-assessment instruments that are feasible for routine use to assess the progress and outcomes of treatment systematically and reliably.**
- **Use measures of the processes and outcomes of care to continuously improve the quality of the care provided.**

Recommendation 4-3. To measure quality better, DHHS, in partnership with the private sector, should charge and financially support an entity similar to the National Quality Forum to convene government regulators, accrediting organizations, consumer representatives, providers, and purchasers exercising leadership in quality-based purchasing for the purpose of reaching consensus on and implementing a common, continuously improving set of M/SU health care quality measures for providers, organizations, and systems of care. Participants in this consortium should commit to:

- **Requiring the reporting and submission of the quality measures to a performance measure repository or repositories.**
- **Requiring validation of the measures for accuracy and adherence to specifications.**
- **Ensuring the analysis and display of measurement results in formats understandable by multiple audiences, including consumers,**

those reporting the measures, purchasers, and quality oversight organizations.

- **Establishing models for the use of the measures for benchmarking and quality improvement purposes at sites of care delivery.**
- **Performing continuing review of the measures' effectiveness in improving care.**

Recommendation 4-4. To increase quality improvement capacity, DHHS, in collaboration with other government agencies, states, philanthropic organizations, and professional associations, should create or charge one or more entities as national or regional resources to test, disseminate knowledge about, and provide technical assistance and leadership on quality improvement practices for M/SU health care in public- and private-sector settings.

Recommendation 4-5. Public and private sponsors of research on M/SU and general health care should include the following in their research funding priorities:

- **Development of reliable screening, diagnostic, and monitoring instruments that can validly assess response to treatment and that are practicable for routine use. These instruments should include a set of M/SU "vital signs": a brief set of indicators—measurable at the patient level and suitable for screening and early identification of problems and illnesses and for repeated administration during and following treatment—to monitor symptoms and functional status. The indicators should be accompanied by a specified standardized approach for routine collection and reporting as part of regular health care. Instruments should be age- and culture-appropriate.**
- **Refinement and improvement of these instruments, procedures for categorizing M/SU interventions, and methods for providing public information on the effectiveness of those interventions.**
- **Development of strategies to reduce the administrative burden of quality monitoring systems and to increase their effectiveness in improving quality.**

In numerous and complex ways, M/SU care is separated both structurally and functionally from other components of the health care system. Not only is M/SU care separated from general health care, but health care services for mental and substance-use conditions are separated from each other despite these conditions' high rate of co-occurrence. In addition, people with severe M/SU illnesses often must receive care from separate public programs. These disconnected care-delivery arrangements require multiple provider "handoffs" of patients for different services and the transmission of information to and joint planning by all these providers, organizations, and agencies if coordination is to occur. The situation is exacerbated by special legal and organizational prohibitions on sharing M/SU information. To address this situation, the committee makes the following recommendations:

> **Recommendation 5-1. To make collaboration and coordination of patients' M/SU health care services the norm, providers of the services should establish clinically effective linkages within their own organizations and between providers of mental health and substance-use treatment. The necessary communications and interactions should take place with the patient's knowledge and consent and be fostered by:**
>
> - **Routine sharing of information on patients' problems and pharmacologic and nonpharmacologic treatments among providers of M/SU treatment.**
> - **Valid, age-appropriate screening of patients for comorbid mental, substance-use, and general medical problems in these clinical settings and reliable monitoring of their progress.**
>
> **Recommendation 5-2. To facilitate the delivery of coordinated care by primary care, mental health, and substance-use treatment providers, government agencies, purchasers, health plans, and accreditation organizations should implement policies and incentives to continually increase collaboration among these providers to achieve evidence-based screening and care of their patients with general, mental, and/or substance-use health conditions. The following specific measures should be undertaken to carry out this recommendation:**
>
> - **Primary care and specialty M/SU health care providers should transition along a continuum of evidence-based coordination models from (1) formal agreements among mental, substance-use, and primary health care providers; to (2) case management of mental, substance-use, and primary health care; to (3) collocation of mental, substance-use, and primary health care services; and then to (4) delivery of mental, substance-use, and primary health care through clinically integrated practices of primary and M/SU care providers. Organizations should adopt models to which they can most easily transition from their current structure, that best meet the needs of their patient populations, and that ensure accountability.**

- DHHS should fund demonstration programs to offer incentives for the transition of multiple primary care and M/SU practices along this continuum of coordination models.
- Purchasers should modify policies and practices that preclude paying for evidence-based screening, treatment, and coordination of M/SU care and require (with patients' knowledge and consent) all health care organizations with which they contract to ensure appropriate sharing of clinical information essential for coordination of care with other providers treating their patients.
- Organizations that accredit mental, substance-use, or primary health care organizations should use accrediting practices that assess, for all providers, the use of evidence-based approaches to coordinating mental, substance-use, and primary health care.
- Federal and state governments should revise laws, regulations, and administrative practices that create inappropriate barriers to the communication of information between providers of health care for mental and substance-use conditions and between those providers and providers of general care.

Recommendation 5-3. To ensure the health of persons for whom they are responsible, M/SU providers should:

- Coordinate their services with those of other human services and education agencies, such as schools, housing and vocational rehabilitation agencies, and providers of services for older adults.
- Establish referral arrangements for needed services.

Providers of services to high-risk populations—such as child welfare agencies, criminal and juvenile justice agencies, and long-term care facilities for older adults—should use valid, age-appropriate, and culturally appropriate techniques to screen all entrants into their systems to detect M/SU problems and illnesses.

Recommendation 5-4. To provide leadership in coordination, DHHS should create a high-level, continuing entity reporting directly to the secretary to improve collaboration and coordination across its mental, substance-use, and general health care agencies, including the Substance Abuse and Mental Health Services Administration; the Agency for Healthcare Research and Quality; the Centers for Disease Control and Prevention; and the Administration for Children, Youth, and Families. DHHS also should implement performance measures to monitor its progress toward achieving internal interagency collaboration and publicly report its performance on these measures annually. State governments should create analogous linkages across state agencies.

Health care providers' ability to obtain information on a patient's health, health care, and potential treatments quickly and to share this information in a timely manner with other providers caring for the patient is essential to effective and coordinated care. To that end, major public- and private-sector collaborations are under way to develop the essential components of a National Health Information Infrastructure (NHII). However, M/SU health care currently is not well addressed by NHII initiatives, nor are NHII initiatives well incorporated into other public-sector information technology efforts for M/SU health care. M/SU health care also lags behind general health care in its use of information technology. To realize the potential of the NHII for consumers of M/SU health care, the committee makes the following recommendations:

> **Recommendation 6-1. To realize the benefits of the emerging National Health Information Infrastructure (NHII) for consumers of M/SU health care services, the secretaries of DHHS and the Department of Veterans Affairs should charge the Office of the National Coordinator of Health Information Technology and the Substance Abuse and Mental Health Services Administration to jointly develop and implement a plan for ensuring that the various components of the emerging NHII—including data and privacy standards, electronic health records, and community and regional health networks—address M/SU health care as fully as general health care. As part of this strategy:**
>
> - **DHHS should create and support a continuing mechanism to engage M/SU health care stakeholders in the public and private sectors in developing consensus-based recommendations for the data elements, standards, and processes needed to address unique aspects of information management related to M/SU health care. These recommendations should be provided to the appropriate standards-setting entities and initiatives working with the Office of the National Coordinator of Health Information Technology.**
> - **Federal grants and contracts for the development of components of the NHII should require and use as a criterion for making awards the involvement and inclusion of M/SU health care.**
> - **The Substance Abuse and Mental Health Services Administration should increase its work with public and private stakeholders to support the building of information infrastructure components that address M/SU health care and coordinate these information initiatives with the NHII.**
> - **Policies and information technology infrastructure should be used to create linkages (consistent with all privacy requirements) among patient records and other data sources pertaining to M/SU ser-**

vices received from health care providers and from education, social, criminal justice, and other agencies.

Recommendation 6-2. Public- and private-sector individuals, including organizational leaders in M/SU health care, should become involved in, and provide for staff involvement in, major national committees and initiatives working to set health care data and information technology standards to ensure that the unique needs of M/SU health care are designed into these initiatives at their earliest stages.

Recommendation 6-3. National associations of purchasers—such as the National Association of State Mental Health Program Directors, the National Association of State Alcohol and Drug Abuse Directors, the National Association of State Medicaid Directors, the National Association of County Behavioral Health Directors, the American Managed Behavioral Healthcare Association, and the national Blue Cross and Blue Shield Association—should decrease the burden of variable reporting and billing requirements by standardizing requirements at the national, state, and local levels.

Recommendation 6-4. Federal and state governments, public- and private-sector purchasers of M/SU health care, and private foundations should encourage the widespread adoption of electronic health records, computer-based clinical decision-support systems, computerized provider order entry, and other forms of information technology for M/SU care by:

- **Offering financial incentives to individual M/SU clinicians and organizations for investments in information technology needed to participate fully in the emerging NHII.**
- **Providing capital and other incentives for the development of virtual networks to give individual and small-group providers standard access to software, clinical and population data and health records, and billing and clinical decision-support systems.**
- **Providing financial support for continuing technical assistance, training, and information technology maintenance.**
- **Including in purchasing decisions an assessment of the use of information technology by clinicians and health care organizations for clinical decision support, electronic health records, and other quality improvement applications.**

A much greater variety of providers is licensed to diagnose and treat M/SU illnesses than is the case for general medical conditions. Physicians, certain advanced practice nurses, and physician assistants are generally licensed to diagnose and treat general health conditions. By contrast, clinicians licensed to diagnose and treat M/SU conditions include psychologists, psychiatrists, other specialty or primary care physicians, social workers, psychiatric nurses, marriage and family therapists, addiction therapists, and a variety of counselors (such as school counselors, pastoral counselors, guidance counselors, and drug and alcohol counselors). These various types of clinicians are likely to have differing education, training, and therapeutic approaches. As a result, the M/SU workforce is not uniformly equipped with respect to the knowledge and skills needed to provide high-quality services. This situation is compounded by other deficiencies in education that exist across all types of clinicians, as well as long-standing problems in achieving cultural diversity in the workforce and an adequate supply of clinicians for all geographic areas. These problems have persisted despite recurring, short-lived initiatives to address them. The committee recommends a long-term, sustained commitment to developing the M/SU workforce by following a model that provides sustained attention to the nation's physician and nursing workforce.

Recommendation 7-1. To ensure sustained attention to the development of a stronger M/SU health care workforce, Congress should authorize and appropriate funds to create and maintain a Council on the Mental and Substance-Use Health Care Workforce as a public–private partnership. Recognizing that the quality of M/SU services is dependent upon a highly competent professional workforce, the council should develop and implement a comprehensive plan for strengthening the quality and capacity of the workforce to improve the quality of M/SU services substantially by:

- **Identifying the specific clinical competencies that all M/SU professionals must possess to be licensed or certified and the competencies that must be maintained over time.**
- **Developing national standards for the credentialing and licensure of M/SU providers to eliminate differences in the standards now used by the states. Such standards should be based on core competencies and should be included in curriculums and education programs across all the M/SU disciplines.**
- **Proposing programs to be funded by government and the private sector to address and resolve such long-standing M/SU workforce issues as diversity, cultural relevance, faculty development, and continuing shortages of the well-trained clinicians and consumer providers needed to work with children and the elderly; and programs for training competent clinician administrators.**

- **Providing a continuing assessment of M/SU workforce trends, issues, and financing policies.**
- **Measuring the extent to which the plan's objectives have been met and reporting annually to the nation on the status of the M/SU workforce.**
- **Soliciting technical assistance from public–private partnerships to facilitate the work of the council and the efforts of educational and accreditation bodies to implement its recommendations.**

Recommendation 7-2. Licensing boards, accrediting bodies, and purchasers should incorporate the competencies and national standards established by the Council on the Mental and Substance-Use Health Care Workforce in discharging their regulatory and contracting responsibilities.

Recommendation 7-3. The federal government should support the development of M/SU faculty leaders in health professions schools, such as schools of nursing and medicine, and in schools and programs that educate M/SU professionals, such as psychologists and social workers. The aim should be to narrow the gaps among what is known through research, what is taught, and what is done by those who provide M/SU services.

Recommendation 7-4. To facilitate the development and implementation of core competencies across all M/SU disciplines, institutions of higher education should place much greater emphasis on interdisciplinary didactic and experiential learning and should bring together faculty and trainees from their various education programs.

The ease with which several of the above recommendations can be carried out depends on how accommodating the marketplace is to their implementation. The M/SU health care marketplace is distinguished from the general health care marketplace in several ways, including the dominance of government (state and local) purchasers, the frequent purchase of insurance for M/SU health care separately from that for other health care (the use of "carve-out" arrangements), the tendency of the private insurance marketplace to avoid covering or to offer more limited coverage to persons with M/SU illnesses, and government purchasers' greater use of direct provision and purchase of care rather than insurance arrangements. Attending to those differences is essential if the marketplace is to promote quality improvement in M/SU health care. The committee recommends four ways of strengthening the marketplace to that end.

Recommendation 8-1. Health care purchasers that offer enrollees a choice of health plans should evaluate and select one or more available tools for use in reducing selection-related incentives to limit the coverage and quality of M/SU health care. Risk adjustment, payer "carve-outs," risk-sharing or mixed-payment contracts, and benefit standardization across the health plans offered can partially address selection-related incentives. Congress and state legislatures should improve coverage by enacting a form of benefit standardization known as parity for coverage of M/SU treatment.

Recommendation 8-2. State government procurement processes should be reoriented so that the greatest weight is given to the quality of care to be provided by vendors.

Recommendation 8-3. Government and private purchasers should use M/SU health care quality measures (including measures of the coordination of health care for mental, substance-use, and general health conditions) in procurement and accountability processes.

Recommendation 8-4. State and local governments should reduce the emphasis on the grant-based systems of financing that currently dominate public M/SU treatment systems and should increase the use of funding mechanisms that link some funds to measures of quality.

Finally, despite how much is known about ways to improve the quality of M/SU health care, knowledge gaps remain. In particular, there has been much less research to identify how to make treatments effective when given in usual settings of care and in the presence of common confounding problems (such as comorbid conditions and social stressors) than research to determine the efficacy of specific treatments under rigorously controlled conditions. In addition, there are many gaps in knowledge about effective treatment, especially for children and adolescents, and there is a paucity of information about the most effective ways to ensure the consistent application of research findings in routine clinical practice. To fill these knowledge gaps, the committee recommends the formulation of a coordinated research agenda for quality improvement in M/SU health care and the use of more-diverse research approaches.

Recommendation 9-1. The secretary of DHHS should provide leadership, strategic development support, and additional funding for research and demonstrations aimed at improving the quality of M/SU health care. This initiative should coordinate the existing quality improvement re-

search efforts of the National Institute of Mental Health, National Institute on Drug Abuse, National Institute on Alcohol Abuse and Alcoholism, Department of Veterans Affairs, Substance Abuse and Mental Health Services Administration, Agency for Healthcare Research and Quality, and Centers for Medicare and Medicaid Services, and it should develop and fund cross-agency efforts in necessary new research. To that end, the initiative should address the full range of research needed to reduce gaps in knowledge at the clinical, services, systems, and policy levels and should establish links to and encourage expanded efforts by foundations, states, and other nonfederal organizations.

Recommendation 9-2. Federal and state agencies and private foundations should create health services research strategies and innovative approaches that address treatment effectiveness and quality improvement in usual settings of care delivery. To that end, they should develop new research and demonstration funding models that encourage local innovation, that include research designs in addition to randomized controlled trials, that are committed to partnerships between researchers and stakeholders, and that create a critical mass of interdisciplinary research partnerships involving usual settings of care. Stakeholders should include consumers/patients, parents or guardians of children, clinicians and clinical teams, organization managers, purchasers, and policy makers.

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Improving the Quality of Health Care for Mental and Substance-Use Conditions

Committee on Crossing the Quality Chasm: Adaptation to
Mental Health and Addictive Disorders

Board on Health Care Services

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> *Willing is not enough; we must do."*
> —Goethe

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This report has been reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise, in accordance with procedures approved by the NRC's Report Review Committee. The purpose of this independent review is to provide candid and critical comments that will assist the institution in making its published report as sound as possible and to ensure that the report meets institutional standards for objectivity, evidence, and responsiveness to the study charge. The review comments and draft manuscript remain confidential to protect the integrity of the deliberative process. We wish to thank the following individuals for their review of this report:

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Although the reviewers listed above have provided many constructive comments and suggestions, they were not asked to endorse the conclusions or recommendations nor did they see the final draft of the report before its release. The review of this report was overseen by FLOYD BLOOM, The Scripps Research Institute and Neurome, Inc., La Jolla, California, and JUDITH R. LAVE, University of Pittsburgh, Pennsylvania. Appointed by the National Research Council and Institute of Medicine, they were responsible for making certain that an independent examination of this report was carried out in accordance with institutional procedures and that all review comments were carefully considered. Responsibility for the final content of this report rests entirely with the authoring committee and the institution.

Foreword

Improving the Quality of Health Care for Mental and Substance-Use Conditions represents the intersection of two key developments now taking place in health care. One is the increasing attention to improving the quality of health care in ways that take account of patients' preferences and values along with scientific findings about effective care. The second important development comes from scientific research that enables us to better understand and treat mental and substance-use conditions. New technologies such as neuroimaging and genomics, for example, enable us to observe the brain in action and examine the interplay of genetic and environmental factors in mental and substance-use illnesses. These advances are potentially valuable to the more than 10 percent of the U.S. population receiving health care for mental and substance-use conditions; the many millions more who need but do not receive such care; and their families and friends, employers, teachers, and policy makers who encounter the effects of these illnesses in their personal lives, in the workplace, in schools, and in society at large.

This report puts forth an agenda for capitalizing on these two developments. Using the quality improvement framework contained in the predecessor Institute of Medicine report *Crossing the Quality Chasm: A New Health System for the 21st Century,* it calls for action from clinicians, health care organizations, purchasers, health plans, quality oversight organizations, researchers, public policy makers, and others to ensure that individuals with mental and substance-use health conditions receive the care that they need to recover. Importantly, the report's recommendations are not directed solely to clinicians and organizations that specialize in the delivery of health care for mental and substance-use conditions. As the report notes, the link between mental and substance-use problems and illnesses and general health and health care is very strong. This is especially true with respect to chronic illnesses, which now are the leading cause of illness, disability, and death in the United States. As the committee that conducted this study concluded, improving our nation's general health and the quality problems of our general health care system depends upon equally attending to the quality problems in health care for mental and substance-use conditions. The committee calls on primary care providers, other specialty health care providers, and all components of our general health care system to attend to the mental and substance-use health care needs of those they serve.

Dealing equally with health care for mental, substance-use, and general health conditions requires a fundamental change in how we as a society and health care system think about and respond to these problems and illnesses. Mental and substance-use problems and illnesses should not be viewed as separate from and unrelated to overall health and general health care. Building on this integrated concept, this report offers valuable guidance on how all can help to achieve higher-quality health care for people with mental or substance-use problems and illnesses. To this end, the Institute of Medicine will itself seek to incorporate attention to issues in health care for mental and substance-use problems and illnesses into its program of general health studies.

Harvey V. Fineberg, MD, PhD
President, Institute of Medicine

Preface

The charge to the Committee on Crossing the Quality Chasm: Adaptation to Mental Health and Addictive Disorders was broad, encompassing health care for both mental and substance-use conditions, the public and private sectors, and the comprehensive range of issues addressed in the 2001 Institute of Medicine report *Crossing the Quality Chasm: A New Health System for the 21st Century*. The committee was pleased to be asked to address this breadth of issues. Despite the frequent co-occurrence of mental and substance-use conditions, studies and reports that address both are unusual, as are those that cut across both the public and private sectors. We are grateful to our sponsors for having the vision to recognize the need for this study. Although the committee at times found the different histories, vocabularies, and other characteristics of these groups of illnesses and delivery systems challenging, we also acknowledged the unique strengths that each brought to the study, respected each others' positions, and reached consensus on issues that have traditionally been characterized by great disharmony. Having expertise in both mental and substance-use health care and the perspectives of the public and private sectors at the table was essential to the committee's efforts to craft a strategic agenda for improving the quality of health care for mental and substance-use conditions for all. The committee hopes that joint mental and substance-use studies and public–private partnership initiatives will become routine.

Although the focus of this study was on solving the *problems* of health care for mental and substance-use conditions—some of which are more complex than those associated with general health care—the committee also recognized its *strengths*. Health care for mental and substance-use conditions has led the way in promoting patient-centered care (a key quality aim set forth in the *Quality Chasm* report) in a number of ways: through the strong voice of consumers, their families, and consumer advocacy organizations in shaping mental health care; the long-standing use of peer support programs in facilitating recovery from substance-use illnesses; and research on how to enable decision making in the face of cognitive impairment. Moreover, the commitment and strength of the workforce delivering health care for mental and substance-use conditions are remarkable. This workforce has persevered in the face of limited attention to mental and substance-use illnesses by health professions schools, constrained resources at care delivery sites, stigma and discrimination, and an inadequate overall infrastructure to support the delivery of high-quality treatment services. This report identifies what it will take to build the needed infrastructure and fully support the workforce in delivering quality care.

This report also identifies gaps in our knowledge of how to effectively prevent and treat mental and substance-use illnesses. While science has developed a strong armamentarium of effective psychosocial therapies and medications for treating mental and substance-use problems and illnesses, research is still needed to identify how best to meet the special needs of children; older adults; individuals who are members of cultural or ethnic minorities; and those with complex and co-occurring mental, substance-use, and general health care illnesses. Moreover, translational research is needed to determine how to apply existing knowledge in usual settings of care.

The agenda and road map the committee has outlined for building the infrastructure needed to improve the quality of health care for mental and substance-use conditions is comprehensive, demanding, and critically important. It is our hope that the government agencies, purchasers, health plans, health care organizations, and other public- and private-sector leaders called upon to act on these recommendations will do so quickly so that we, our loved ones, friends, coworkers—indeed all Americans—can receive the high quality care for mental and substance-use conditions that is crucial to overall good health.

Mary Jane England
Chair

Acknowledgments

The Committee on Crossing the Quality Chasm: Adaptation to Mental Health and Addictive Disorders thanks the many individuals and organizations who so generously contributed their time, expertise, and sometimes personal experiences to the development of this report. Foremost we thank the consumers and their families who so eloquently testified to the committee about the power of good-quality health care to enable recovery from mental and substance-use problems and illnesses. Nancy Fudge, participant in the Florida Self-Directed Care Program; Michael M. Faenza, President and CEO of the National Mental Health Association; Eileen White, on behalf of the National Alliance for the Mentally Ill; Jane A. Walker, Executive Director of the Maryland Coalition of Families for Children's Mental Health; Johnny W. Allem, President of the Johnson Institute; Tom Leibfried, Program Director at the National Mental Health Consumers' Self-Help Clearinghouse; E. Clark Ross, Chief Executive Officer of CHADD (Children and Adults with Attention-Deficit/Hyperactivity Disorder); and Sue Bergeson, Vice President of the Depression and Bipolar Support Alliance generously shared their knowledge of mental and substance-use problems and illnesses, health care for these conditions, and pathways to improvement based on their own experiences and those of the individuals they represent.

Many other individuals and organizations provided testimony and other assistance to the committee. We thank John Oldham, Chairman of the Council on Quality Care at the American Psychiatric Association; Jalie A. Tucker, Chair of the Board of Professional Affairs at the American Psychological Association; Wilma Townsend, on behalf of the National Alliance of Multiethnic Behavioral Health Organizations; Allen J. Dietrich, representing the American Academy of Family Physicians; Gerry Schmidt, Clinical Affairs Consultant to NAADAC (the Association for Addiction Professionals); Ruth Hughes from the Substance Abuse and Mental Health Services Administration's (SAMHSA) Center for Mental Health Services Human Resources Work Group Alliance; Carolyn Russell, Director of the Florida Self-Directed Care Program; Jonathan Stanley, Assistant Director of the Treatment Advocacy Center; Linda Rosenberg, President and CEO of the National Council for Community Behavioral Healthcare; Frank Ghinassi, representing the National Association of Psychiatric Health Systems; Robert Sheehan, President of the National Association for Children's Behavioral Health; Michael B. Harle, representing Therapeutic Communities of America; Ronald J. Hunsicker, President and CEO of the National Association of Addiction Treatment Providers, Inc.; Marvin D. Seppala, representing the Partnership for Recovery; Wesley Sowers, President of the American Association of Community Psychiatrists; Robert Booth, Executive Director of the American Board of Examiners in Clinical Social Work; Mara Shrek, also representing the American Board of Examiners in Clinical Social Work; Elizabeth J. Clark, Executive Director, and Mickey J. W. Smith, Senior Policy Associate, both of the National Association of Social Workers; William F. Northey, Professional Development and Research Specialist at the American Association for Marriage and Family Therapy; Sandra Talley, President of the American Psychiatric Nurses Association; Thomas W. Nolan, Senior Fellow at the Institute for Healthcare Improvement; David H. Gustafson, Principal Investigator, Network for the Improvement of Addiction Treatment, University of Wisconsin-Madison; Vijay Ganju, Director of the Center for Mental Health Quality and Accountability at the National Association of State Mental Health Program Directors Research Institute, Inc.; Robert Johnson, representing the National Association of State Alcohol and Drug Abuse Directors; Howard B. Shapiro, Executive Director of the State Associations of Addiction Services; Pamela Greenberg, Executive Director of the American Managed Behavioral Healthcare Association; Melissa M. Staats, Executive Director of the National Association of County Behavioral Health Directors; Mark Willenbring, Director of the Division of Treatment and Recovery Research at the National Institute on Alcohol Abuse and Alcoholism; John A. Paton, representing the Software and Technology Vendor's Association; Lisa Teems, representing the Employee Assistance Programs Alliance; Joan M. Pearson, Principal, Towers Perrin; Dale A. Masi, President and CEO of Masi Research Consultants, Inc.; Neal Adams, Medical Director for Adult Services, California Department of Mental Health; Pamela S. Hyde, Secretary of the New Mexico Human Services Department; Joy M. Grossman at the Center for Studying Health System Change; Patricia A. Taylor, Executive Director of Faces & Voices of Recovery; Kevin D. Hennessey, Science to Service Coordinator at SAMHSA;

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