Assessing the Quality of Care for Substance Use Disorder Conditions – Implications for the State of California

Report to the California Department of Alcohol and Drug Programs

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Executive Summary

The purpose of this white paper is to summarize the current knowledge and research findings on assessing the quality of care for the treatment of substance use disorder (SUD) conditions and to provide policy recommendations to the State of California within the context of health care reform. We examine the relevant published literature, written materials not published commercially, and information from Internet sources to present the existing and emerging knowledge on a topic that is at the forefront of many national and state efforts.

As the work on quality of care for SUD conditions continues to evolve, the addiction field, at this time, lacks consensus on the terminology used to talk about quality care as well as standard measures or measurement instruments to assess it. Nevertheless, this paper attempts to present the state of quality-of-care assessment for SUDs to inform and facilitate policy decision-making.

The Background and Significance section provides the context and rationale for focusing on the quality of care for SUD conditions, including health care reform and passage of the federal Affordable Care Act (ACA) and other recent relevant initiatives and efforts at the national level. The second section describes some of the major Conceptual Frameworks and Approaches for Assessing Quality of Health Care. The third section is Quality of Treatment for Substance Use Disorder Conditions, which includes goals of treatment, and descriptions and research findings on types and categories of measures in widespread use to assess the effectiveness of SUD treatments. The fourth and fifth sections discuss Recovery Support Services and Culturally/Linguistically Appropriate Services, respectively, and linkages to quality of care. The paper concludes with Policy Recommendations for Assessing the Quality of Treatment for Substance Use Disorder Conditions for the State of California:

- **Provide leadership at the state level in assessing and improving the quality of care for SUD conditions.** This includes providing guidance and resources for developing an infrastructure for performance measurement and management that is sustainable and accommodates the data needs for quality improvement efforts. Institute incentives for performance.

- **Select a framework, set of measures and indicators, and data based on the needs, goals, and settings of the agency or system that will effectively and efficiently provide the**
amount and detail of information needed to assess and improve quality of care. The measures chosen should be in alignment with the agency’s vision and mission. No single measure or indicator by itself is sufficient evidence for quality, as each has benefits and limitations. Measures must be meaningful and feasible to collect.

- **Select measures at different levels (e.g., client, organization, system), and for diverse stakeholders (e.g., payers, providers, policy makers), specifying the purpose of the measures (e.g., to guide individual client care, assess quality of treatment programs).** Select measures that have been validated for particular settings and populations, as appropriate, to meet the needs of the state and other stakeholders. Examine data on measures by subgroups (e.g., age, gender, type of substance used) to help inform quality improvement efforts targeted to specific populations with SUD conditions. Use case-mix adjustment tools when appropriate. Avoid the assumption that client-level outcomes and program-level performance will be identical.

- **Periodically and routinely revisit measures in use.** Re-evaluate and modify measures and indicators as new evidence emerges, needs and goals of the system change, and conceptualizations of addiction and recovery evolve. Consider how new data sources, advances in information technology, and integration efforts (e.g., SUD services, mental health, and primary care) may affect assessment and quality of care, given the changes prompted by the Affordable Care Act.

- **Consider providing timely and detailed data to providers so that they can track their own performance and improvement efforts.** The work already begun with stakeholders to develop and implement some initial program-performance and client-outcome indicator reports and dashboard templates should continue and progress to automation of such information-sharing with counties and providers, within given resource constraints.

- **Consider providing public access to reports on performance and client outcomes at different levels (e.g., system, county, program), which is consistent with the client-centered care approach to providing quality health care.** The “dashboards” developed through the Evaluation Services to Enhance the Data Management System in California (EnCAL) project might serve as initial reporting templates.
Introduction

Substance abuse and dependence continues to be a major public health concern, with negative consequences for individuals, families, communities, and the country as a whole. Untreated or poorly treated substance use disorders (SUDs) can jeopardize public health and safety. Increasingly, state agencies have been under scrutiny to demonstrate that ever-scarce public funds are being used effectively and efficiently when providing health and related care to individuals, including people who suffer from SUDs. The focus on assessing and improving the quality of care for substance-using population follows the national trend seen in medical care as underscored by the Institute of Medicine’s “Crossing the Quality Chasm: A New Health System for the 21st Century” (IOM, 2001) report, which proposed a strategy that was subsequently adapted for improving mental health and addictive disorders (IOM, 2006). In addition, the passage of the Patient Protection and Accordable Care Act of 2010 (ACA; http://www.healthcare.gov/law/full/index.html), which is expected to expand Medicaid coverage and SUD services, along with the passage of other health care reform legislation, further highlights the importance of quality care on the national agenda.

Purpose

The purpose of this white paper is to summarize the current knowledge and research findings on assessing the quality of care for SUD conditions and to provide policy recommendations to the State of California within the context of health care reform. We examine the relevant published literature, written materials not published commercially (e.g., government and research group reports), and information from Internet sources (e.g., government Web sites) to present the existing and emerging knowledge on a topic that is at the forefront of many national and state efforts. (Portions of the content have been adapted from a previous Continuum of Services System Re-engineering [COSSR] report.) As the work on quality of care for SUD conditions continues to evolve, the addiction field, at this time, lacks consensus on the terminology used to talk about quality care as well as standard measures or measurement instruments to assess it. Nevertheless, this paper attempts to present the state of quality-of-care assessment for SUDs to inform and facilitate policy decision-making.

Organization of the Paper

The Background and Significance section provides the context and rationale for focusing on the quality of care for SUD conditions, including health care reform and passage of the ACA
Background and Significance

The environment within which publicly funded SUD treatment is delivered is dynamic and complex. A confluence of factors impacting agencies at the federal and state levels has heightened the urgency of and attention on measuring and improving the quality of health care. Since the Institute of Medicine issued its “Crossing the Quality Chasm: A New Health System for the 21st Century” (IOM, 2001) and subsequent “Improving the Quality of Healthcare for Mental and Substance Use Conditions” (IOM, 2006) reports, numerous initiatives and efforts have been underway at the federal level to improve the quality of care in the United States. For example, the U.S. Department of Health and Human Services recently released the National Quality Strategy for the health care system. In an effort to advance the measurement and improvement of health and health care quality, the strategy has three broad aims:

- **Better care:** improve the overall quality of health care by making it more client-centered, reliable, accessible, and safe
- **Healthy people and communities:** improve the health of the U.S. population by supporting proven interventions to address behavioral, social, and environmental determinants of health in addition to delivering higher-quality care
- **Affordable care:** reduce the cost of quality health care for individuals, families, employers, and government.

The Current Context: Health Care Reform and the Affordable Care Act

Notably, within the era of health care reform and the recent passage of the ACA, numerous efforts related to, or required under, the Act are underway, including the establishment of a National Strategy for Quality Improvement in Health Care (Agency for Healthcare Research and Quality [AHRQ], 2012), which involves (1) national priorities and a strategic plan for improving the delivery of health care services, (2) achieving better client outcomes, and (3) improving health in the United States. Further, the anticipated expansion of insurance coverage for SUD services, along with Medicaid eligibility under the ACA, may have deep and far-reaching effects on the services delivered, and how, where, and by whom those services are provided (Buck, 2011; Pating, Miller, Goplerud, Martin, & Ziedonis, 2012).

As required under the ACA, the Secretary of Health and Human Services (HHS) issued a notice in the Federal Register identifying an initial core set of health quality measures recommended for Medicaid-eligible adults, two of which focus on substance use disorders:

- alcohol misuse (screening, brief intervention, referral for treatment [SBIRT]), and
- initiation of and engagement in alcohol and other drug-dependence treatment (Office of the Secretary, Department of Health and Human Services, 2010).

In addition, the Agency for Healthcare Research and Quality (AHRQ), under the HHS, has identified 26 measures endorsed by the National Quality Forum for inclusion in the Initial Core Set of Adult Health Care Quality Measures for Medicaid-Eligible Adults. The measure that applies directly to SUDs is the National Committee for Quality Assurance’s (NCQA) initiation and engagement of alcohol and other drug dependence treatment measure. Also, the National Quality Measures Clearinghouse (NQMC), an initiative of the AHRQ, has created a database and Web site that provides information on evidence-based health care quality measures and measure sets for use by diverse stakeholder groups (e.g., practitioners, health care providers, purchasers) to inform their health care decisions. This list includes 182 measures on a comprehensive array of health conditions (See http://www.qualitymeasures.ahrq.gov/browse/nqf-endorsed.aspx.) As of the writing of this report, 82 measures were included in the NQMC for substance-related disorders. (See Appendix A.) Meanwhile, the Center for Medicare & Medicaid Services is providing funding opportunities through competitive grants to support state Medicaid agencies in building their capacity to collect, report, and analyze data on the initial core set of measures. Requirements for greater efficiency, use of evidence-based practices, and integration of health care services will likely increase in importance under the ACA. Measuring the quality of care for SUDs using evidence-based measures for performance
and client outcomes is imperative in determining both areas of successful treatment and areas needing improvement on the path toward health care reform.

Against the backdrop of the ACA and related health care reform efforts at the federal level, State of California agencies responsible for delivering publicly funded SUD services have the added challenge of having to do so within constrained budgets. Further, these agencies are increasingly under pressure and scrutiny to ensure and demonstrate that public funds are being spent effectively and efficiently to provide quality care that improves outcomes and has an overall positive impact on public health and safety. Diverse stakeholder groups, including consumers, purchasers, government agencies, national organizations, accreditation bodies, and professional societies are all calling for better information on quality of care to help inform and guide decision-making and quality improvement efforts. Thus, within this dynamic and information rich environment, state alcohol and other drug agencies must stay apprised of the most current research findings and evidence-based tools to inform their decision-making and enable their leadership in the delivery of quality care for SUD conditions.

**Conceptual Frameworks and Approaches for Assessing Quality of Health Care**

The Institute of Medicine’s definition of quality of care—“the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge” (IOM, 2001, p. 44)—is widely accepted. According to the National Roundtable on Health Care Quality, assessing the quality of health care services supports an array of objectives, including:

- providing data for quality improvement efforts;
- certifying that a facility or individual meets previously established standards;
- comparing groups (e.g., providers) for various purposes;
- informing consumers about their health care decisions and choices;
- identifying substandard performers;
- highlighting, rewarding, and disseminating best practices;
- monitoring and reporting changes in quality over time; and
- addressing the health needs of communities (Donaldson, 1999).
Quality of care can be assessed at the individual (e.g., client, clinician), program/facility, system, or population levels. Each stakeholder group has specific reasons for measuring the quality of care. For example, consumers might find the information useful in selecting a provider or program in which to enroll. Accreditation agencies require quality-of-care measurement to identify and monitor provider performance. State agencies use performance measures to (1) facilitate comparisons among counties, providers, and populations; (2) inform decision-making; and (3) identify areas in which to provide leadership and guidance in terms of the current and emerging knowledge on assessing and improving the quality of care.

Numerous conceptual frameworks and approaches are in use or have been proposed for evaluating the quality of health care. Donabedian (1980) laid the foundation for the dimensions of quality of care more than 40 years ago as outcomes, structure, and processes of care. Outcomes are considered “the ultimate validation of the effectiveness and quality of medical care” (Donabedian, 1966). Outcome measures assess the results of health service delivery, such as services and interventions (Mangione-Smith & McGlynn, 1998), typically including clinical (e.g., symptom severity) and functional status, and quality of life (Hermann et al., 2000). Structural measures assess how characteristics of clients, professional staff, geographic location, organizations/programs, and systems affect quality (Donaldson, 1999; Kilbourne, Keyse, & Pincus, 2010; Mangione-Smith & McGlynn, 1998). This type of measure determines the organization’s capacity to provide care (Garnick, Horgan, & Chalk, 2006) and can predict variations in processes or outcomes of care. Process measures collect data on the juncture between the structural aspects of care, namely the type, duration, and intensity of care, including procedural and interpersonal aspects (Hermann, Regner, Erickson, & Yang, 2000). They describe client care rather than status at the organizational level or individual-client level, and are used to determine the extent to which the care delivered to a client corresponds with clinical practice guidelines, which are typically based on research or expert consensus (Garnick, et al., 2006).

While it is often not feasible to measure outcomes and effectiveness (posttreatment follow-up) of clients to determine the quality of care provided (due to, e.g., the prohibitive costs, time-consuming nature, and specialized skills required for such measures), process measures have been developed to assess quality of care. Process measures, usually stated as rates, can more readily be compared than outcomes, can be observed during the period of care, and can be used to identify specific areas for improvement. They also can guide process improvement
efforts, particularly those over which the providers and organizations have more control and, thus, can change (Mangione-Smith & McGlynn, 1998).

However, according to Donabedian (1980), only after the relationship between aspects of the process of care and desirable outcomes has been validated, do the specific process measures indicate quality. In those cases, “once it has been established that certain procedures used in specified situations are clearly associated with good results, the mere presence or absence of these procedures in these situations can be accepted as evidence of good or bad quality.” (However, the relationship between program performance and client outcomes is not always easy or even possible to determine. See the subsequent section on “Relationship of Process [Program Performance], Client Outcome, and Structural Measures in Assessing Quality of Care”.)

Meanwhile, various federal-level frameworks and approaches are continually being updated and revised to incorporate the current state-of-the-art knowledge and conceptualizations of quality of care (see Table 1 below). The Institute of Medicine has identified six aims of high quality health care (2001, pp. 5-6). The Agency for Healthcare Research and Quality (AHRQ), under the U.S. Department of Health & Human Services (DHHS) developed the Conceptual Framework for Healthcare Quality and continues to update it. This framework is intended to serve as a performance measurement classification matrix that can accommodate a wide spectrum of measures and corresponds to the aims of quality health care as presented in the IOM “Crossing the Quality Chasm: A new health system for the 21th Century” report (AHRQ Web site: http://www.ahrq.gov/research/iomqrdrreport/futureqrdr3.htm).

As the ACA has established a “health home” option under Medicaid, in another recent report, “Behavioral Health Homes for People with Mental Health & Substance Use Conditions: the Core Clinical Features,” the Substance Abuse and Mental Health Services Administration, Health Resources and Service Administration (SAMHSA-HRSA) Center for Integrated Health Solutions (2012) proposes five clinical features of a behavioral health home. SAMHSA has also drafted a National Framework for Quality Improvement in Behavioral Health Care (the National Behavioral Health Quality Framework), aimed at establishing priorities, goals, and objectives for improving the delivery of behavioral health services, achieving better behavioral health outcomes, and improving the behavioral health of the U.S. population, especially those with mental illnesses and substance abuse (SAMHSA, 2011b). The six priorities for behavioral health are analogous to those of the National Quality Strategy for health care.
Table 1. U.S. Federal Agency Quality of Care Frameworks.

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<td><strong>Safe</strong>—avoiding injuries to clients from the care that is intended to help them</td>
<td><strong>Safety</strong>—avoiding injuries to patients from the care that is intended to help them</td>
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<td><strong>Make behavioral health care safer</strong> by reducing harm caused in the delivery of care</td>
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<td><strong>Effective</strong>—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)</td>
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<td><strong>Promote the most effective prevention, treatment and recovery practices</strong> for behavioral health disorders</td>
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<td><strong>Timely</strong>—reducing waits and sometimes harmful delays for both those who receive and those who give care</td>
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<td><strong>Efficient</strong>—avoiding waste, including waste of equipment, supplies, ideas, and energy</td>
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<td><strong>Equitable</strong>—providing care that does not vary in quality because of personal characteristics (e.g., gender, ethnicity, geographic location)</td>
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<td>Community linkages: augments the services offered by linking consumers to community resources (e.g., peer support organizations, self-help groups)</td>
<td><strong>Assist communities to utilize best practices</strong> to enable healthy living</td>
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<td>Foster affordable high quality behavioral health care for individuals, families, employers, and governments by developing and advancing new delivery models</td>
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<td>Assure behavioral health care is person- and family-centered</td>
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<td>Self-management support: helps activate consumers by assessing their activation level and addressing deficits through self-management support strategies, including both education and coaching components</td>
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<td>Delivery system design: redesigns the care system in key ways, including forming multidisciplinary practice teams and providing care management</td>
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<td>Clinical information systems: organizes population-level data to maximize the outcomes for a defined group of consumers and consumer-level data to optimize individual outcomes</td>
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Quality of Treatment for Substance Use Disorder Conditions

Similar to within the physical health and mental health fields, the definition of what constitutes quality care for SUD conditions has changed over time and continues to evolve. Measures of quality may be developed using scientific evidence or expert consensus (Mangione-Smith & McGlynn, 1998). While McLellan, Chalk, and Bartlett (2007) operationalize “quality care” as “evidence-based treatments that are provided by licensed or credentialed practitioners who have demonstrated core competence in their practice areas and whose activities are monitored regularly by program- and system-level measurement of quality indicators,” there are a variety of conceptual frameworks and measures for assessing and improving the quality of care, specifically for SUD treatments at the individual, program, and system levels. For example, the National Quality Forum (NQF) has developed consensus standards for quality treatment within alcohol and other drug systems, which have been used as the basis for effective program-performance measurement models promoting quality improvement (see www.qualityforum.org). The NQF standards correspond directly to the Washington Circle performance measures and SAMHSA’s National Registry on Evidence-Based Practices (NREP; http://www.nrepp.samhsa.gov/); thus they provide a useful framework for performance measurement in relation to national values. The domains (and performance measures) are:

- identification of substance use conditions (screening or case finding, assessment, and diagnoses)
- initiation and engagement in treatment (access, initiation/engagement, withdrawal management, retention, client perceptions of care)
- therapeutic interventions for substance use illness (use of evidence-based practices for pharmacotherapy/medications, psychosocial interventions, case management), and
- continuing care management of substance use illness (continuing care management, recovery support).

However, a unified approach, set of standard core measures, and common language for the SUD field does not currently exist. Multiple and diverse calls to improve treatment accountability and outcomes, combined with insufficient leadership in guiding a united effort, have resulted in a myriad of conceptual and methodological approaches. Thus, overall, the

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1 Performance measures (e.g., access, initiation, engagement, retention, continuing care, use of evidence-based practices, and client perceptions of care) refer to how well a treatment program is performing, whereas outcomes refer to how well the patient did while in treatment (e.g., substance use, employment, arrest).
SUD field has lagged in terms of assessing the quality of care compared to the medical field (Garnick et al., 2002; Kilbourne et al., 2010; McLellan et al., 2007; Pincus et al., 2007).

Current initiatives assessing the quality of care for mental health and/or SUDs in the United States by federal and state agencies, health plans, and non-governmental and professional organizations lack coordination, have concentrated on limited clinical areas, and have not been used to improve quality of care, according to Herbstman and Pincus (2009). The National Center on Addiction and Substance Abuse at Columbia University (CASA, 2012) recently reported that established standards of practice or service requirements across facilities and programs that provide addiction treatment are lacking, and federal regulatory oversight of addiction treatment facilities and programs is insufficient to ensure quality addiction treatment. Further, licensing requirements vary by state and type of program. Some addiction treatment facilities and programs are accredited by national accreditation organizations (e.g., Commission on Accreditation of Rehabilitation Facilities, Joint Commission on Accreditation of Healthcare Organizations, Council on Accreditation, National Committee for Quality Assurance, and the National Commission on Correctional Health Care) in addition to, or in place of, licensing. Further, standards vary by accreditation body. Thus, state quality assurance requirements for addiction treatment facilities and programs are diverse and generally focus on process rather than outcomes, which are more challenging to collect and analyze.

Goals of Treatment

Addiction as a Chronic Condition

While consensus is lacking within the SUD field on the specific goals of treatment (CASA, 2012), the field’s focus has been shifting from an acute, episodic system paradigm toward a model that approaches addiction in a way that is similar to approaches to other chronic conditions (e.g., diabetes; McLellan, Lewis, O’Brien, & Kleber, 2000; McLellan, McKay, Forman, Cacciola, & Kemp, 2005). The IOM report, “Improving the Quality of Health Care for Mental and Substance Use Conditions” (IOM, 2006) recommends that the illness model used for chronic medical conditions (i.e., diabetes, hypertension, asthma) be applied to mental and substance use disorders. This paradigm presumes that recovery from SUDs is a long-term process, with remissions in illness but also periodic exacerbations of illness that may require continuous service system exposure over the lifetime for most individuals (Dennis & Scott, 2007; Dennis, Scott & Funk, 2003; Hser, Anglin, Grella, Longshore, & Prendergast, 1997; Hser, Longshore, & Anglin, 2007; McLellan, 2002; McLellan & Weisner, 1996). Under a chronic care model, individuals with substance use problems may be required to make self-management lifestyle
changes, take medications, keep regular follow-up appointments and/or undergo continuing care, and take steps to minimize risks from co-morbid complications. The chronic-illness approach or chronic-care model for SUDs shifts the emphasis away from acute symptom stabilization (episodic treatment) toward a continuum-of-services system of care that includes prevention, intervention, treatment, and long-term recovery support (Flaherty, 2006; Kipnis & Killar, n.d.).

With treatment, many chronic problems (e.g., diabetes) can at best be maintained at some level of severity, and treatment of most chronic conditions is either intended to maintain that same level of functioning of the individual or slow the rate of his or her deterioration. The prospect of permanent remission, though, is seldom considered as part of the goal of treatment. However, what may distinguish SUDs from other chronic illnesses is the possibility of improvements in outcomes. Many individuals who meet the criteria for SUDs at some point in their lives, do achieve sustained recovery (Cunningham, 1999). In other words, after repeated treatments, many individuals, although not “cured,” can remain drug free for the remainder of their lives. Each care episode (treatment with or without continued care or recovery support) represents a step toward subsequent improvement or permanent remission, although the number of care episodes necessary to achieve remission may vary. If the notion of care as a cumulative process is accepted, lack of success after one care episode is not interpreted as failure. Rather, it is viewed as an indication that the course of care is incomplete. In addition, instead of simply accepting the idea of never-ending and expensive services, as in the traditional chronic care model, cumulative services are expected to lead to continually more positive outcomes, with increasing benefits to society in terms of criminal justice, welfare, and health care costs (Dennis & Kaminer, 2006). Therefore, while SUDs may share many of the same characteristics of other chronic conditions, it is important to recognize that they also have unique aspects (Laudet, 2008).

**Harm Reduction**

Harm reduction refers to both a philosophical approach and particular types of programs or interventions (e.g., needle exchange, outreach to provide education and information to reduce risks of illicit drug use or brief interventions; Ritter & Cameron, 2006). There are many definitions of the term, “harm reduction”; therefore, a unified definition of the term does not currently exist. For example, a public health perspective on care for SUDs focuses on harm reduction as a pragmatic approach, whereby the goal is to reduce the harmful consequences of drug use and related high-risk activities rather than abstinence only, particularly for individuals
who are unwilling or unable to completely abstain from drug use (Marlatt & Witkiewitz, 2010). However, while the harm-reduction approach remains controversial in the United States, with advocates on both sides of the issue, from a global policy perspective, it has been supported by the World Health Organization and several United Nations and international programs, especially given the spread of HIV among and by injection drug users (Wodak, 2009).

**Recovery**

While the goal of treatment includes recovery from SUDs, the definition of “recovery” is largely in flux and multiple perspectives and definitions exist within the SUD field and recovery community. The following are some of the various definitions of “recovery”:

- A process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential (SAMHSA, 2011c);
- A voluntarily self-maintained lifestyle characterized by sobriety, personal health or well-being, and citizenship (The Betty Ford Institute Consensus Panel, 2007);
- A process of overcoming both physical and psychological dependence to a psychoactive substance while making a commitment to sobriety (American Society of Addiction Medicine [ASAM], 2001); and
- A process of restoring or developing a positive and meaningful sense of identity apart from one’s condition and then rebuilding one’s life despite, or within the limitations imposed by that condition (White, 2008).

Critical to these definitions is the perspective that recovery is a process rather than an end. As with other chronic illnesses, the absence of illness in an active recovery phase does not mean it will never return or that the individual can discontinue self-care. Another key element of the recovery process is that it varies from person to person (Laudet & White, 2008). Further, although it is widely accepted that abstinence or significant decreases in substance use is necessary for maintaining gains in other outcome domains (e.g., health, employment), it is not sufficient for recovery (McLellan et al., 2007).

A recovery paradigm also prompts the movement away from a narrow focus on the deficits that accompany substance use disorders to the strengths that can be used to facilitate recovery. Less focus is placed on pathology, and more on wellness and quality of life. White (2008) defines “recovery management” as a “philosophical framework for organizing addiction treatment services to provide pre-recovery identification, recovery initiation and stabilization, long-term recovery maintenance, and quality-of-life enhancement for individuals and families.
affected by severe substance use disorders.” Emphasis is placed on patients’ recovery from SUDs and its negative effects as well as on their regaining a meaningful life within families and communities. However, after conducting an environmental scan of measures of recovery, SAMHSA (2009) found that “The addiction field currently lacks a dedicated measure of recovery though all stakeholder groups recognize the urgent need for such a tool.” Efforts have been initiated to ascertain and develop such measures of recovery and recovery support services, as discussed in the following sections.

**Treatment Outcomes**

While there are many definitions of “recovery” from SUDs, McLellan et al. (2007) suggest that “when patients have achieved substantial reduction in their use of drugs, alcohol, or both, as well as improvement in several other important functional domains, this is termed recovery.” What constitutes “substantial reduction” varies with the individual. Treatment and recovery outcome measures also vary considerably. In the SUD field, the evaluation of treatment success has traditionally emphasized treatment outcomes. McLellan et al. (2007) describe outcomes as an individual’s functional status within a domain, or an area of life function or status that is expected to be positively influenced by treatment. While multiple outcome domains have been identified (e.g., physical health, mental health, family or social relations), health outcomes that are indicative of recovery from SUDs typically include decreased substance use, improvements in personal health, increased levels of functioning (e.g., employment, support), and reduced criminal justice involvement (McLellan et al., 2005).

Although abstinence from substance use is considered to be a prominent factor in determining recovery outcomes, as discussed above, some suggest that recovery should be considered as something broader than abstinence, and that improved health and quality of life should be the primary criteria of recovery (Center for Substance Abuse Treatment [CSAT], 2007; Laudet, 2007; The Betty Ford Institute Consensus Panel, 2007; White, 2007). There is still a need to identify and develop recovery outcome measures that particularly show whether individuals are attaining and sustaining recovery. To date, research efforts to identify factors linked with successful recovery have been restricted to client-level factors, including drug choice and addiction severity, motivation and readiness, living situation, employment, and medical and psychiatric illness (Hiller, Knight, & Simpson, 1999; Joe, Simpson & Broome, 1998; Lang & Belenko, 2000; Maglione, Chao, & Anglin, 2000; Veach, Remley, Kippers, & Sorg, 2000) as well as treatment program factors, including treatment approach and assessment (De Leon, Hawke, Jainchill, & Melnick, 2000; Moos, Moos & Andrassy, 1999; Simpson, et al., 1997a; Simpson, Joe
& Rowan-Szal, 1997d; Simpson, Joe, Rowan-Szal, & Greener, 1997e), and provision of ancillary services, such as job training, medical and psychiatric care, housing assistance, and transportation (Friedmann, D'Aunno, Jin, & Alexander, 2000; Friedmann, Lemon, Stein, Etheridge, & D'Aunno, 2001; Marsh, D'Aunno, & Smith, 2000; McLellan, Arndt, Metzger, Woody, & O'Brian, 1993). In addition, some people maintain that individuals who intend to make changes be considered “in recovery,” whereas most others assert that a certain period of time (e.g., one to two years) of abstinence and/or improvement in other life domains (Maddux & Desmond, 1986) is required to be considered in recovery. Some studies have suggested that five years of abstinence may be critical in indicating the likelihood of a sustained recovery (Dennis, Foss, & Scott, 2007; Hser, Longshore & Anglin, 2007; Sobell, Ellingstad, & Sobell, 2000).

It is notable that traditionally, client outcomes have been collected at a single point in time, but some researchers have suggested that having multiple follow-up time points would aid in providing a more accurate evaluation of the course of addiction and recovery (McLellan, et al., 2005). Further, while posttreatment client outcomes may provide evidence for the effectiveness of treatment, there are substantial associated methodological and operational issues involved in collecting outcome information, including expense, time, and the difficulty of collecting, analyzing, and interpreting these data (Harris, Kivlahan, Bowe, Finney, & Humphreys, 2009c).

**Structural Measures**

Common structural or organizational measures used in the SUD field include licensure, type of training at the individual professional level, government certification, private accreditation, and physical attributes at the facility level. Structural measures have tended to be used by regulatory, accreditation, and licensing bodies such as The Joint Commission (formerly the Joint Commission on Accreditation of Healthcare Organizations; JCAHO; http://www.jointcommission.org/), Commission on Accreditation of Rehabilitation Facilities (CARF), and state agencies (e.g., California Department of Alcohol and Drug Programs). These independent nonprofit organizations or government agencies set standards with which treatment facilities and programs must comply. For example, The Joint Commission accreditation requirements include areas such as business practices, environment of care, safety, human resources, emergency management, and performance improvement. There are additional requirements specifically for medication-assisted opioid treatment programs.
Organizational performance, which comprises the operations, procedures, and conditions of the treatment process (Joe, Simpson, & Sells, 1994), focuses on aspects of the organization that are relatively stable, including size, location, physical plant, philosophy and goals, operational structure, staff, client composition, and use of evidence-based practices and standards. While measures at the organizational level are relatively easy to establish based on reports, they only indicate whether the program is capable of providing quality care rather than whether such care is actually provided (Kilbourne et al., 2010). McLellan, Carise, and Kleber (2003) have called attention to the weakening of the treatment infrastructure (e.g., inadequate and unstable organizational and administrative infrastructures, unstable workforce at all levels, daunting data collection requirements from government agencies and managed care organizations), which may have implications for the quality of care provided.

**Process Measures**

More recently, treatment process measures have been emphasized as tools to evaluate quality of care and improve it (McCarty, 2007). There are a number of terms that are in use, sometimes interchangeably, when referring to process measures, including “performance measures,” “quality measures,” “performance indicators,” and “quality indicators.” Process measures are used to develop performance (or quality) measures, which are employed to evaluate the extent to which health care clinicians’ actions adhere to practice guidelines, medical review criteria, or standards of quality (Garnick et al., 2006). An “indicator” is a “measurable practice or behavior that is related to – but not identical with – the clinical practice of interest” (McLellan et al., 2007). Indicators are useful in monitoring and informing policies and practices for the organization. Performance (quality) indicators are “measures to estimate and monitor the extent to which the actions of a health care plan, program, or provider conform to best practices (evidence-based practices) or other standards of quality” (Academy for Health Services Research and Health Policy, 2004).

A growing body of research indicates that poor long-term client outcomes (e.g., relapse, treatment re-entry) reflect a host of factors related to the “treatment process” (Simpson, 2004), including client motivation and engagement in treatment, retention in treatment or the therapeutic process across multiple episodes of care, satisfaction with the treatment process, engagement in continuing care, and participation in sustained social support activities (Bartlett, Chalk, Manderschied, & Wattenberg, 2006; De Leon et al., 2000; Hiller et al., 1999; Joe et al., 1998; Lang & Belenko, 2000; Stahler, Cohen & Shipley, 1993). Studies have demonstrated that
these treatment process factors are related to client attrition or early treatment drop out (Anglin & Hser, 1990; Simpson, 1997; Stahler et al., 1993).

**Categories of Measures to Assess Quality of Treatment for SUDs**

The following sections describe and present relevant research findings for categories of measures that are in widespread use in the SUD field.

**Access to Treatment**

One of the factors impeding treatment entry is waiting time, the period when individuals seeking treatment are delayed in receiving services or denied referral for a service of interest (Appel, Ellison, Jansky, & Oldak, 2004; Farabee, Prendergast, & Anglin, 1998; Rotstein & Alter, 2006). Waiting time has been described as “a function both of whether prospective clients can get into the queue and how quickly they get off the queue and into treatment” (Friedmann, Lemon, Stein, & D’Aunno, 2003). It also has been characterized as the period between clinic intake assessment and actual program admission (Best et al., 2002; Schottenfeld, O’Malley, Abdul-Salaam, & O’Connor, 1993). More recent conceptualizations of waiting time have included the time individuals with SUDs must wait to initially present for treatment services once they or others recognize a problem, which includes phone screenings and intake assessments (Chawdhary et al., 2007; Rotstein & Alter, 2006).

Generally, the longer the delay in entering treatment for SUDs, the higher the drop-out rate (Donovan, Rosengren, Downey, Cox, & Sloan, 2001). The likelihood that individuals seeking treatment for SUDs will actually enter treatment after assessment is often less than 50% (Stark, Campbell, & Brinkderhoff, 1990). Research studies have found that the average wait times to treatment entry vary widely, from 7 days to more than 30 days (Claus & Kindleberger, 2002; Downey, Rosengren, & Donovan, 2003; Maddux, Desmond, & Esquivel, 1995). Empirical evidence suggests a positive relationship between wait time and pretreatment dropout (Claus & Kindleberger, 2002; Jackson, Booth, McGuire, & Salmon, 2006; Maddux et al., 1995). This is related, in part, to this population’s limited tolerance for having to wait to enter treatment (Hser, Anglin, & Fletcher, 1998; Kaplan & Johri, 2000).

Access is a priority performance measure, given that substance users who wait for treatment services are less likely to enter treatment and often continue to use drugs, placing them and the public at increased risk for major health problems (Chawdhary et al., 2007; Donovan et al., 2001; Hser et al., 1998; Pollini, McCall, Mehta, Vlahov, & Strathdee, 2006). It is an especially salient issue for special populations, including injection drug users, pregnant
women, and the homeless. One study found that among injection drug users who attempted to enter treatment, the majority (67%) did not present for their first visit due to being placed on a waiting list (Pollini et al., 2006).

Waiting time has also been shown to negatively affect treatment engagement and retention (Claus & Kindleberger, 2002; Simpson, Joe, & Brown, 1997b), although other studies have not supported this relationship (Addenbrooke & Rathod, 1990; Deck, McFarland, Titus, Laws, & Gabriel, 2000). Some studies indicate that waiting lists undermine the opportunity to reach individuals with SUDs during a potential “teachable moment” (Carlson, 2006). Furthermore, in addition to service availability, there are other barriers to treatment access, including program proximity; availability of transportation, day care, and gender or culturally responsive services; and a client’s fluctuating motivation, all of which need to be considered when using this measure in assessing performance.

Treatment Engagement

Treatment initiation and engagement are important performance measures as they have been shown to be related to early treatment drop-out, which negatively impacts treatment effectiveness (Anglin & Hser, 1990; Simpson, Joe, Rowan-Szal, 2007; Stahler et al., 1993). High rates of early treatment drop-out are indicative of a program’s inability to “engage” a client; however, how to best measure engagement is an area of debate. Different measures of engagement have been used in the SUD field over the past three decades, and have mainly focused on client drop-out during the initial month after treatment entry, with some targeting the first two weeks of the first month. For example, one recent study examining the association between treatment service encounters during the first 30 days of treatment (as an indicator of treatment engagement) and client outcomes found that in outpatient counseling programs, more group sessions predicted abstinence or greater reductions in primary drug use, and in narcotic treatment programs, more methadone doses received were related to longer treatment retention (Crevecoeur-MacPhail et al., 2010).

The research group at Texas Christian University (TCU) has defined “engagement” in terms of client motivation, readiness, and participation in treatment during the first month post admission. The researchers developed an engagement performance measure to focus on key client attributes, including cognitions or thoughts related to treatment motivation and readiness, and the programmatic issues related to high rates of client drop out (Simpson, Joe, Dansereau, & Chatham, 1997c; Simpson et al., 1997e). Studies conducted by the TCU group have shown that these elements are important determinants of engagement in SUD treatment, which in turn,
is related to program completion and other core treatment outcomes such as reduced drug use, involvement in social support, and reduced criminal activity (Joe et al., 1998; Prochaska, DiClemente, & Norcross, 1992; Simpson, 2004; Simpson, Joe, Dansereau, & Flynn, 2011; Simpson, Joe, & Rowan-Szal, 1997d; Stahler et al., 1993). (See http://www.ibr.tcu.edu/pubs/datacoll/datacoll.html for TCU measures.)

**Treatment Retention**

Retention, in terms of the amount of time (days or weeks) or number of sessions individuals spend in treatment from first session/day to last session/day, has been a widely accepted indicator of the quality of care for people with SUDs. Similar to engagement, examinations of the treatment process have shown that longer stays in treatment (retention) is among the few consistent predictors of better posttreatment outcomes (Anglin & Hser 1990; Hubbard, Craddock, Flynn, Anderson & Ethridge, 1997), including decreased drug use, increased level of functioning, greater chance for employment, and decreased criminal involvement (Acevedo et al., 2012; Conners, Grant, Crone, & Whiteside-Mansell, 2006; Garner et al., 2009; Gossop, Marsden, Stewart, & Kidd, 2003; Hubbard, Craddock, & Anderson, 2003; Koenig et al., 2005; Luchansky, Brown, Longhi, Stark, & Krupski, 2000; Luchansky et al., 2006; Simpson, 1979, 1981; Simpson et al., 1997b). Thresholds for the length of stay needed to receive therapeutic benefits from treatment (improved outcomes) may differ for each treatment type/modality. The standard minimum length of stay varies between program types/modalities. Studies have identified minimum thresholds of approximately 90 days for outpatient and residential drug-free treatment (Simpson, 1979, 1981; Simpson, Joe, Broome, Hiller, Knight, & Rowan-Szal, 1997a). The effective dose for methadone maintenance is at least one year (Simpson & Joe, 2004).

**National Outcome Measures (NOMs)**

In an effort to move the SUD field toward outcomes-based measurement, SAMHSA, in collaboration with the states for its block grant programs, developed the National Outcome Measures (NOMs) for mental health and substance abuse treatment and prevention (See Table 2 below). The performance-based, outcomes-driven measurement system collects outcome data in 10 domains.
### Table 2. National Outcome Measures (NOMs)

<table>
<thead>
<tr>
<th>NOMs Domains</th>
<th>Substance Abuse Treatment Outcomes</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced morbidity</td>
<td>Abstinence from drug/alcohol use</td>
<td>Reduction in/no change in frequency of use at date of last service compared to date of first service</td>
</tr>
<tr>
<td>Employment/education</td>
<td>Increased/retained employment or return to/stay in school</td>
<td>Increase in/no change in number of employed or in school at date of last service compared to first service</td>
</tr>
<tr>
<td>Crime and criminal justice</td>
<td>Decreased criminal justice involvement</td>
<td>Reduction in/no change in number of arrests in past 30 days from date of first service to date of least service</td>
</tr>
<tr>
<td>Stability in housing</td>
<td>Increased stability in housing</td>
<td>Increase in/no change in number of clients in stable housing situation from date of first service to date of last service</td>
</tr>
<tr>
<td>Social connectedness</td>
<td>Increased social supports/social connectedness</td>
<td>Under development</td>
</tr>
<tr>
<td>Access/capacity</td>
<td>Increased access to services</td>
<td>Unduplicated count of persons served; penetration rate – numbers served compared to those in need</td>
</tr>
<tr>
<td>Retention</td>
<td>Increased retention in treatment for substance abuse</td>
<td>Length of stay from date of first service to date of last service; unduplicated count of persons serviced</td>
</tr>
<tr>
<td>Perception of care</td>
<td>Client perception of care</td>
<td>Under development</td>
</tr>
<tr>
<td>Cost effectiveness</td>
<td>Cost effectiveness (average cost)</td>
<td>Number of states providing substance abuse treatment services within approved cost per person bands by the type of</td>
</tr>
<tr>
<td>Use of evidence-based practices</td>
<td>Use of evidence-based practices</td>
<td>Under development</td>
</tr>
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</tbody>
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**Washington Circle Performance Measures**

The most widely adopted set of performance measures for SUD services was developed by the Washington Circle Group, which comprises researchers, providers, and policy makers within the addiction treatment field. Three performance measures using administrative data have been specified and tested:

- Identification (percentage of enrollees in a health plan diagnosed with a substance use disorder);
- Initiation (percentage of adults with an index diagnosis of AOD abuse or dependence who receive any additional AOD services within 14 days following identification); and
- Engagement (percentage of adults diagnosed with AOD disorders who receive three plan-provided AOD services within 30 days of the initiation of care (or two additional substance abuse services within 30 days of the initiation of care (Garnick, Lee, Horgan, & Acevedo, 2009).

The Washington Circle measures have been adopted by a number of national, state, and local entities. For example, in 2004, the National Committee for Quality Assurance (NCQA), a private not-for-profit organization founded in 1990 to improve health care quality, adapted the Washington Circle identification, initiation, and engagement measures for inclusion in its Health Plan Employer Data and Information Set (HEDIS®, Garnick et al., 2006; NCQA, 2007, 2009), which is the most widely used set of quality measures in the nation’s managed health care sector (Harris, Bowe, Finney, & Humphreys, 2009a). The initiation, engagement and continuity of care measures have been adapted for use in the public sector by the Department of Veterans Affairs’ Program Evaluation and Resource Center (PERC; Harris, Humphreys, & Finney, 2007) and several states (Connecticut, Massachusetts, New York, North Carolina, and Oklahoma) (Garnick et al., 2009, 2011).

Other performance measures being developed, specified, and tested by the Washington Circle Group include continuity of care, screening and brief intervention for unhealthy alcohol
and drug use, and medication-assisted treatment (http://www.washingtoncircle.org/).

“Continuity of care” refers to the percent of individuals who receive AOD services within 14 days following discharge from a detox, residential, or inpatient stay, or after an assessment for each type of service or level of care separately (http://www.washingtoncircle.org/pdfs/9a1.pdf). The continuity-of-care measures, along with the initiation and engagement measures, have been adapted for public substance abuse treatment systems using existing state and local administrative data. However, Garnick and colleagues (2009) report that although state agencies were able to calculate the Washington Circle performance measures using routinely collected administrative data, wide variation in the indicators was observed across states (e.g., outpatient initiation rates ranged from 42% to 73%). One study testing the validity of the continuity-of-care measure among adolescents following residential treatment (using a dichotomous measure indicating whether or not another service was received within 14 days after discharge) found an association with recovery status at follow-up (Garner, Godley, Funk, Lee, & Garnick, 2010).

The Washington Circle screening and brief intervention measures under development focus on screening in general health care settings, and are specified for different target health risks (unhealthy alcohol use, drug use, unhealthy drug and alcohol use), target age groups (adult, adolescent), and activity (screening, brief intervention for people identified to be at risk). The specific performance measure being developed by the Washington Circle Group for medication-assisted treatment includes:

- initiation and duration;
- adherence to treatment;
- measure of process of care (such as client perceptions of care);
- use of therapeutic, evidence-based counseling; and
- prescribing practices.

To date, research studies examining the relationship between Washington Circle performance measures and substance abuse treatment outcomes are limited but growing. Findings concerning the association between the Washington Circle initiation and engagement measures and outcomes have been inconsistent. For example, Garnick and colleagues have conducted studies demonstrating the efficacy of performance measures in predicting client outcomes and found that increased initiation and engagement leads to decreased criminal involvement and substance use (Garnick et al., 2007, 2009). In a more recent study among
adolescents who received outpatient treatment for SUDs, those who engaged in treatment were less likely to report substance use, heavy alcohol use, and marijuana use (Garnick et al., 2012).

There also have been numerous studies conducted by the Veterans Administration (VA) examining the Washington Circle performance measures of initiation and engagement at the facility level in relationship to client outcomes and various settings that deliver care to veterans. One of the studies examined the degree to which these performance measures were associated with facility-level client improvement on clinical outcomes seven months posttreatment utilizing case-mix adjustment (Harris et al., 2007). That study found that higher initiation rates were not associated with facility-level improvement in Addiction Severity Index (ASI) alcohol composite scores but were modestly related to increased improvement in ASI drug composite scores. The study also found that identification and engagement rates were unrelated to average improvement in clinical outcomes. The researchers suggested that the Washington Circle indicators that target performance or processes early in treatment may not be sufficient to impact posttreatment outcomes, and that other process supplemental measures should be considered when examining treatment effectiveness. A second VA study found that clients in the outpatient sample who met the engagement indicator improved significantly more in the alcohol and legal domains of the ASI than clients who did not engage, but that result was not found in the residential sample (Harris, Humphreys, Bowe & Finney, 2008a). A third study by Harris, Humphreys, Bowe, Tiet, and Finney (2010) of a VA sample found that clients who engaged in treatment improved significantly more in all the ASI domains than did those who did not engage, and the relationship was stronger for alcohol and legal outcomes for clients in outpatient treatment. McCarty (2007) proposes that the somewhat mixed findings from some of the studies examining the association of Washington Circle performance measures with improvements in outcomes (e.g., Garnick et al., 2007; Harris, Griffin, McCaffrey, & Morral, 2008b) may be due to differences in methodology (the testing of different aspects of performance measurement systems) rather than the measures themselves, implying that caution should be exercised in their interpretation.

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2 A composite score indicates the severity in a particular domain/scale (e.g., alcohol use). Scores range from 0 to 1, with higher scores indicating greater severity (McLellan, Luborsky, Woody, & O’Brien, 1980; McLellan et al., 1992)
Use of Evidence-based Practices

While the use of evidence-based practices (EBPs) is considered to be essential in providing high quality SUD treatment that contributes to favorable client outcomes, there is a lack of consensus on procedures or criteria for determining what constitutes EBPs or which agency or organization is responsible for making these determinations (Glasner-Edwards & Rawson, 2010; Miller, Duncan, Sorrell, & Brown, 2005). Multiple agencies, groups, and organizations have been creating repositories of treatments and practices that meet their requirements for being “evidence-based.” According to McLellan and colleagues (2007), interventions and practices that have been shown to be efficacious through controlled research trials are considered “evidence-based treatments or practices,” whereas “practice guidelines” are typically developed by experts within a profession based on experience, knowledge of the field, and pragmatic matters. The Addiction Technology Transfer Center refers to EBPs as “interventions that show consistent scientific evidence of being related to preferred client outcomes.” Further, factors determining whether specific pharmacological and behavioral approaches and interventions are effective in treating substance use disorders (Glasner-Edwards & Rawson, 2010; McGovern & Carroll, 2003; Miller & Wilbourne, 2002) tend to include: high quality evaluation design and methodology; replicated by other researchers; manual available; validated by some form of documented scientific evidence; integration of best practice evidence with clinical expertise and client values (e.g., preferences, culture); and consistent scientific evidence showing improved client outcomes.

The SAMHSA National Registry of Effective Programs and Practices (NREPP; http://www.nrepp.samhsa.gov) provides a set of guidelines for determining the strength of evidence for practices and interventions. The American Psychiatric Association (http://www.psych.org/) provides recommendations to guide the selection of appropriate modalities, levels of care (e.g., detoxification, inpatient treatment, intensive outpatient treatment, aftercare/continuing care services), and practices for each of the major substances of abuse, whereas the National Institute on Drug Abuse’s (NIDA) “Blue Book” describes a set of 13 overarching “principles” that characterize the most effective drug abuse treatments (NIDA, 1999). These “principles” include broad concepts such as “effective treatment attends to multiple needs of the individual, not just his/her drug use,” and are intended to help clinicians make empirically informed decisions about treatment.

As a caveat, although there are a wide array of interventions and programs for substance use disorders that have been supported empirically, as listed by SAMHSA’s NREPP
critics argue that what constitutes “evidence-based” can vary and can constrain practitioner and client choice (Chambless & Ollendick, 2001). Furthermore, while the treatments that are considered to be effective are established through empirical research, the absence of efficacy or effectiveness studies regarding an intervention does not necessarily mean its approach is ineffective (Miller et al., 2005).

In addition, the National Quality Forum (NQF, 2007) published the “National Voluntary Consensus Standards for the Treatment of Substance Use Conditions: Evidence-based treatment Practices: A Consensus Report” in response to the need for performance measures for the treatment of substance use conditions. According to that report, research over the past three decades has established components of care that are essentially “evidence based practices,” including pharmacotherapy/medications. The consensus standards include that a program should have the capability to provide (either on site or through consultation with a medical clinic) buprenorphine and naltrexone for opiate addiction, naltrexone for alcohol addiction [e.g., Revia, Trexan, Vivitrol], topiramate [Topimax] for cocaine treatment, and some type of anti-smoking medication [Chantrix, nicotine patch]). In terms of psychosocial interventions, the NQF standards are that a program should have trained staff to provide at least one of the following individual therapies—Motivational Enhancement Therapy (MET), Cognitive Behavioral Therapy (CBT), Twelve-Step Facilitation Therapy (TSF), and Community Reinforcement and Family Training—as well as case management (a program should have the ability to provide clients with a case manager who can connect them with health and social services that support their employment, education and training, and continuing care services).

As efforts are underway to specify performance measures for SUD pharmacotherapy, Thomas et al. (2011) points out that the measurement approach may need to be determined by the availability of the data collection and monitoring system at the setting. For example, the authors report that The Washington Circle group developed and is testing a process-of-care measure for SUD pharmacotherapy for adults. The measure uses claims data for its prescribing rate measure, i.e., the number of individuals with at least one prescription for appropriate SUD medication within a specified time, divided by the number of individuals with an appropriate substance abuse/dependence diagnosis, visit, or service. However, the American Medical Association Physician Consortium for Process Improvement’s process measure assesses whether clients identified with SUD are counseled about psychosocial and pharmacological treatment options using specific codes recorded in client medical records. While organizational factors (e.g., data system, personnel) may need to be considered when measuring performance
for pharmacotherapies, it is much more difficult to measure non-pharmacological interventions and practices. As noted by the NQF, medications are relatively easy to define and measure (i.e., either a program uses methadone, buprenorphine, or naltrexone, or not). A recent investigation of substance abuse state agencies across the country found that the dissemination of EBPs and model program information to substance abuse treatment agencies is largely insufficient and that the implementation of science and organizational principles is not adequately incorporated into treatment settings (Rieckmann, Kovas, Fussell, & Stettler, 2009).

**Continuing Care**

It is widely recognized that treatment of SUDs is often complex, requiring multiple and various services as part of the recovery process, such as detoxification, residential, intensive outpatient, regular outpatient, and medication-assisted treatment (McLellan et al., 2003). As noted above, SUDs are characterized by repeated cycles of remission and resumption of use. Because the risk of relapse may continue until exposure to multiple levels of care (Anglin, Hser, & Grella., 1997; Hser et al., 1998), most of the research conducted with substance dependent populations suggests that substance use disorders be managed like other chronic health problems that require continuous and coordinated care (McKay, 2005). Continuing care (once also referred to as “aftercare”) is considered essential in maintaining the benefits of treatment participation and avoiding relapse (Donovan, 1998). As a performance measure of quality, continuity of care focuses on the extent to which clients receive appropriate levels of care across the treatment continuum (prevention [education], intervention [identification], treatment [initiation and engagement], and recovery [maintenance]).

Continuing care is the stage of treatment that follows an initial episode of more intensive care, usually inpatient/residential or intensive outpatient, and includes recovery support services to maintain and support long-term recovery. Due to the chronic and relapsing nature of SUDs, clients are frequently transferred between levels of care following an initial phase of treatment. For example, clients may be transferred from an intensive or high level of care (i.e., detoxification or residential treatment) to a less intensive or lower level of care (i.e., outpatient treatment), services can be extended, and/or care can be less frequent. Continuing care can be considered as professionally- guided recovery support (White & Kurtz, 2006). Services are provided in a variety of formats and modalities, including group counseling, individual therapy, telephone counseling, brief face-to-face checkups, self-help meetings, recovery management, continuing care interventions, assertive aftercare, assertive continuing care, and recurrent
recovery monitoring (Godley, Godley, Dennis, Funk, & Passetti, 2002; McKay, 2009; McLellan et al., 2005).

A growing body of empirical evidence has begun to highlight promising continuing-care interventions and approaches that may contribute to improved treatment outcomes (Dennis et al., 2003; Godley et al., 2002; Lash et al., 2007; McKay, 2001, 2009). Recent studies have focused on more proactive approaches to improve participation in continuing care, such as telephone-based checkups (McKay et al., 2004; McKay, Lynch, Shepard, & Pettinati, 2005), assertive continuing care (Godley et al., 2002, 2007; Godley, Godley, Dennis, Funk, & Passetti, 2007) recovery management checkups (Dennis & Scott, 2012; Dennis et al., 2003; Scott, Dennis, & Foss, 2005; Scott & Dennis, 2012), and involving families of individuals with SUDs in the recovery process (Gruber & Fleetwood, 2004; Gruber, Fleetwood, & Herring, 2001). However, a study by Godley, Coleman-Cowger, Titus, Funk, and Orndorf (2010) did not find assertive continuing care (an approach that combines Adolescent Community Reinforcement Approach with case management services) to be as incrementally effective following outpatient treatment for adolescents as it was following residential treatment (Godley et al., 2002, 2007).

The recovery management check-up model (RMC, Scott et al., 2005) involves long-term monitoring through regular check-ups to help clients recognize and deal with re-emerging substance use issues sooner. It involves regular monitoring of participants (e.g., quarterly), brief counseling, and linking participants with treatment, if needed, over an extended period of time (Scott & Dennis, 2012). RCM has been reported to be effective in randomized clinical trials (Scott & Dennis, 2009). In a recent trial among women offenders, Scott and Dennis (2012) found that during the 90 days following release from jail, the women assigned to RMC (compared to the control group) were significantly more likely to return to treatment sooner. In addition, several clinical trials of recovery management checkups show promising results in retaining and facilitating reentry into community-based treatment (Dennis et al., 2003; Dennis & Scott, 2012; Scott et al., 2005) and report more days of abstinence and fewer past-month symptoms of abuse/dependence (Scott & Dennis, 2009).

Some continuing care approaches are telephone-based. Several studies suggest that telephone-based continuing care intervention is feasible to implement (Cacciola et al., 2008) and can be effective in supporting recovery (Godley et al., 2010; McKay et al., 2004, 2005; Stanford, Banerjee, & Garner, 2010), but the results are not currently definitive. For example, in a randomized controlled trial, McKellar et al. (2012) found significant benefits to clients receiving telephone case monitoring services (compared to in-person continuing care) at 3 months, but
not at the 12-month follow-up. In another study, the improved alcohol outcomes found during 18 months of telephone continuing care to treat alcohol dependence did not persist after the intervention at 24 months (McKay et al., 2011). In subgroup analyses, the study showed significant effects were found during the 18 months of the intervention for women, individuals with social networks that supported drinking, and those with prior alcohol treatments. In addition, a recent study conducted among clients approaching completion in outpatient stimulant abuse treatment who were randomized to one of four telephone support protocols (unstructured/non-directive, unstructured/directive, structured/non-directive, structured/directive) or a standard referral to aftercare without telephone counseling (control) found modest support for the telephone-based continuing care counseling approaches at the 3-month follow-up (Farabee et al., 2012).

Along with telephone-based approaches to continuing care, new computerized and Internet-based technologies are being developed and tested to support recovery. For example, the U.S. Veterans Health Administration is designing an Internet-based system called “My Recovery Plan” that will allow veterans who have recently completed addiction treatment access to information relevant to their recovery, including their symptoms, progress toward achieving their recovery goals, and interactive educational material (Cucciare, Weingardt, & Humphreys, 2009). Analysis of administrative data from a separate Web-based program, My Ongoing Recovery Experience (MORE), developed by Hazeldon treatment center, showed that delivering continuing care and recovery support (e.g., assessments, clinical content, resources, activities, contact with a recovery coach) may be beneficial to clients who recently completed residential treatment for alcohol/drug dependence (Klein, Slaymaker, Dugosh, & McKay, 2012).

A review of controlled studies of continuing care suggests that interventions with longer planned lengths of stay may have an increased likelihood of producing favorable outcomes, if clients are able to remain engaged (McKay, 2009). However, the author cautioned that randomized studies comparing shorter and longer versions of the same intervention are needed. Client engagement and retention in continuing care programs can be challenging over time (Cacciola et al., 2008; Klein et al., 2012; Lash et al., 2007). Some promising interventions to retain clients in continuing care include contracting, prompting, and social reinforcement (Lash, Burden, Monteleone, & Lehman, 2004; Lash et al., 2007), and contingency management (Godley, Godley, Wright, Funk, & Petry, 2008). One study found that VA clients in substance use disorder treatment programs were more likely to be abstinent and engaged in continuing care longer when they received continuing-care appointments before discharge, developed
discharge plans that included attending continuing care at least once a week, and made arrangements with staff for drug-free/sober living housing (Schaeffer, Harris, Cronkite, & Turrubiartes, 2008). Another study among VA clients in SUD treatment found that clients who received more continuing-care services (e.g., discharge planning with a counselor, sober living arrangements) also engaged in continuing care longer, although the association was weaker for the high psychiatric-severity subgroup compared to the moderate-to-low psychiatric-severity subgroup (Schaefer, Cronkite, & Hu, 2011). However, studies of continuity-of-care practices to facilitate client engagement and retention are limited (McKay, 2005).

While the body of research on continuing care approaches is growing, the research findings are currently not definitive. In addition, more research is needed to understand for which client population subgroups (e.g., psychiatric severity, alcohol abuse only, poly-substance use) and under what conditions continuing care (e.g., content, frequency of calls, method of intervention) is most effective (Godley et al., 2010).

**Client Perceptions of Care**

Client-centered care is one of the key elements of providing quality health care, and assessing clients’ perceptions of their care is essential to that endeavor. The importance of the client/consumer perspective in evaluating the quality of services and care has been commonly acknowledged (Cleary & McNeil, 1988; Doucette, 2008; Kenagy, Berwick, & Shore, 1999; McCorry 2007). Client perceptions of their experience and/or satisfaction with care, which has been considered as either a process or outcome measure (Carlson & Gabriel, 2001; Hermann et al., 2000), is frequently used to evaluate whether the respondents’ expectations of the care received were met and to facilitate organizational improvement (Kolodziej et al., 2011). However, research has found that satisfaction is not closely associated with measuring client perceptions of care in terms of the quality of the services they received (Bartlett et al., 2006), and the linkage between structure and process of care with satisfaction is not always apparent.

Many satisfaction surveys measure overall or global satisfaction (e.g., likelihood of returning for care), whereas others collect ratings of satisfaction with particular aspects of the delivery of care (e.g., access to services, waiting time) or client experiences with care received (e.g., whether clients helped to develop their own treatment plans). Results of studies investigating the association between client/consumer satisfaction and SUD treatment outcomes are limited and their results have been mixed. For example, studies have found a positive relationship between satisfaction close to time of discharge from drug abuse treatment and favorable drug use outcomes (Zhang, Gerstein, & Friedmann, 2008) and significant
relationships between service use, satisfaction with access, satisfaction with service effectiveness, and abstinence one year after treatment entry (Carlson & Gabriel, 2001). In addition, increased service intensity and satisfaction have been positively associated with either treatment completion or longer treatment retention, which in turn was related to positive treatment outcomes (Hser, Evans, Huang & Anglin, 2004). A relationship between client satisfaction with methadone treatment and retention at 12 months, reductions in substance use, and reduced illegal activity have also been observed (Kelly, O’Grady, Brown, Mitchell, & Schwartz, 2010). However, while client satisfaction is important in measuring whether clients liked what they received or received what they expected, other studies have reported that such satisfaction may not be related to other measures of favorable treatment outcomes (McLellan & Hunkeler, 1998; Tetzlaff et al., 2005). That is, satisfaction may not be synonymous with excellent outcomes.

There are also limitations in interpreting satisfaction survey findings, as the responses are subjective and difficult to understand because the influence of clients’ expectations is complex and may vary widely with comparable care. Levels of client satisfaction with substance use treatment found in the literature are typically high. In addition, samples may be biased as clients who dropped out of treatment and were not surveyed may have been less satisfied than those for whom data were collected (Carlson & Gabriel, 2001; Cleary & McNeil, 1988). Further, satisfaction surveys often do not produce data that can be used to guide program changes or improvement, and validated measures of satisfaction are relatively few.

While some surveys assess clients’ perspectives in terms of their satisfaction with care, others solicit clients’ experience in specific areas. The Consumer Assessment of Healthcare Providers and Systems (CAHPS) program is an initiative of the Agency for Healthcare Quality and Research (AHRQ) to support and promote the assessment of client experience (rather than “satisfaction”) with care, which can be compared across providers and over time (Dyer, Sorra, Smith, Cleary, & Hays, 2012; https://cahps.ahrq.gov/about.htm). Evidence for the reliability and validity of the measures has been reported. The CAHPS consists of a set of standardized survey instruments to collect information from clients about their care in areas such as access to care, provider communication, and helpfulness of staff. The data collected are used to educate and inform health agencies and the public, and to focus and facilitate quality improvement efforts.

Within the SUD and mental health treatment systems, the Modular Survey (Bartlett et al., 2006) is a 21-item survey (4-point Likert scale, ranging from disagree to strongly agree).
designed to assess client perceptions of care in four domains: quality of care, perceived outcomes as a result of treatment, social connectedness, and commitment to change. Treatment providers can act upon these areas to improve the quality of care. A recent pilot test of the Modular Survey among clients in 17 agencies representing 25 sites in Los Angeles County showed that, overall, clients who were abstinent at the time of discharge were engaged in treatment (i.e., > 30 days in treatment), had positive compliance (completed treatment or left treatment prior to completion with satisfactory progress), and had significantly higher scores on the Modular survey, which suggests that clients who fared better in these areas of treatment also had better perceptions of care (Crevecoeur-MacPhail et al., 2011). The report’s authors suggest that the findings support the use of the Modular Survey as a measure of client perception of, and reported satisfaction with, care, and that if results from individual items from the scales are examined, they can provide a focus for improvement in the delivery of care.

The importance of the client’s point of view in program development and improvement is further evidenced by the establishment of the Network for the Improvement of Addiction Treatment (NIATx) model (Reynard & Fitzgerald, 2007). In this model, client involvement is one of the five key principles that guides the selection of program problems to be addressed and the implementation of changes (McCarty et al., 2007). Studies have demonstrated that successful implementation of the NIATx model can improve client access and engagement as well as retention in substance abuse treatment (Capoccia et al., 2007; McCarty et al., 2007; Rutkowski et al., 2010).

**Relationship of Process (Program Performance), Client Outcome, and Structural Measures in Assessing Quality of Care**

Overall, performance measures are more direct measures of program quality than client outcome measures, as they are collected frequently, they allow for immediate program changes and improvement, and they are controllable at the program level. While the relationship between particular program process (performance) measures and client outcomes may seem more straightforward, the linkage is not necessarily clear. When selecting measures to assess the quality of care, it is important to consider the population, setting, level of analysis (e.g., client, facility), and other aspects relevant to how such measures will be used.

According to Harris et al. (2009b), process quality measures should predict facility-level performance, predict client-level outcomes, and specify care that is evidence-based and acceptable to clients and clinical staff. It is sometimes taken for granted that provision of “quality care” by clinicians, treatment programs, and health care systems will result in favorable
outcomes (McLellan et al., 2007). However, almost all client outcomes are highly probabilistic. While posttreatment client outcomes may provide evidence for the effectiveness of treatment, substantial associated methodological and operational issues exist, including expense, time, and difficulty in collecting, analyzing, and interpreting these data (Harris et al., 2009c).

Outcomes are often difficult to measure and can be influenced by multiple and cumulative factors that may be attributed to the client (e.g., co-occurring mental health or medical conditions) or that are outside the realm of treatment or the care delivery system (e.g., living situation). Specifically, although individual outcomes can be observed, causal conclusions cannot be drawn. Individual client outcomes can occur despite or as a result of the care received. Outcomes, particularly for individuals with SUD, are associated with complex interactions with factors other than the treatment process (e.g., genetic, mental health, environmental, socioeconomic, behavioral, social; Harris et al., 2009b; Moos & Moos, 2007), and there is a delay in realizing the treatment effect or successful outcomes. Measures must either be selected that assess processes or outcomes under the control of providers, or adjustments should be made for significant confounding factors so that variation attributable to the delivery of services can be taken into account (Mangione-Smith & McGlynn, 1998). Studies or evaluations that compare treatment effectiveness across treatment programs must apply case-mix adjustment tools to outcome measures for drug-use severity and other client-level characteristics, and to organizational and county level factors that vary across programs, in order to make equitable comparisons (Koenig, Fields, Dall, Ameen, & Harwood, 2000; Phibbs, Swindle, & Recine, 1997).

Client case-mix comprises socio-demographic and clinical characteristics that are considered to influence treatment effectiveness, independent of clinical interventions and organizational factors (Rawson, Urada, Antonini, et al., 2011). When comparing treatment effectiveness across diverse treatment programs, the analysis must adjust for client level characteristics (e.g., drug-use severity) that may vary between programs (e.g., specialized services, unique client populations; Koenig et al., 2000; Phibbs et al., 1997). While support for the usefulness of case-mix adjustment to examine performance of treatment programs has been reported (Phibbs et al., 1997), in a UCLA evaluation using case-mix adjustment for monitoring county-wide performance on treatment engagement after detox, Rawson et al. (2011) found weak case-mix effects. The researchers proposed that it may not be possible to substantially adjust county-level performance measures using variables from the California
Outcomes Measurement Data System (CalOMS), and suggest that use of organizational- and county-level predictors may be more effective forms of case-mix adjustment.

Studies also have pointed out the importance of conceptually and statistically distinguishing between client-level and facility/program-level effects when evaluating the association of process indicators of quality and outcomes (Finney, Humphreys, Kivlahan, & Harris, 2011; Harris et al., 2010). They caution that although client-level correlations are often used in defining and operationalizing quality indicators, these indicators should be validated prior to being used to measure facility/program-level performance. The term used to refer to the “problem with inferring individual-level relationships from aggregated data” is “ecological fallacy,” a factor that highlights the need for multilevel or mixed-effects methods to examine process-outcome relationships across and within facilities (Finney et al., 2011). For example, one study showed a significant association between the engagement indicator and outcomes on the ASI alcohol and legal domains at the client level, but not at the facility level (Harris et al., 2010). Another study found no associations between the continuity-of-care performance measure and improvements in ASI alcohol or drug domains, days of alcohol use, or days of substance-related problems at the client level in analyses adjusting for baseline characteristics (Harris et al., 2009b). Facility-level rates of continuity of care were negatively associated with improvements in ASI alcohol and drug domains. Ideally, analyses at both the client and facility levels will support the linkage between process performance measures and outcomes. Harris, Kivlahan, Bowe, Finney, and Humphreys (2009c) have proposed minimal criteria to consider in developing process quality measures, including the ability to predict facility-level outcomes (e.g., facilities rated higher on the measures show better outcomes), predict client-level outcomes (e.g., clients who received the care measured have better outcomes), and identify care that is supported by evidence and is satisfactory to clients and staff.

In terms of structural measures or standards, although they may provide baseline data on capacity, compliance does not assure the provision of quality care (Donaldson, 1999). Further, use of structural measures does not mean that high quality care cannot be provided unless the standards are met. However, standards (e.g., governance, workforce) can be combined with measures of performance and outcomes to assess the quality of care.
Recovery Support Services

As mentioned earlier in this report, although the concept of recovery is not new, it has received heightened attention over the last decade due to the shift from an acute, episodic care model of SUD treatment toward a recovery management model similar to the approach for managing other chronic conditions (Dennis & Scott, 2007; McLellan et al., 2000) that requires a range of services and continuing care (also see previous section on Continuing Care; Dennis & Scott, 2007; Laudet, Stanick, & Sands, 2009; McKay, 2009). The recovery movement underway in the SUD field in the United States has been focused on expanding recovery support services as part of recovery-oriented systems of care (The Betty Ford Institute Consensus Panel, 2007; White, 2007) to improve the quality of care, and is expected to gain in importance as the ACA is implemented (Buck, 2011).

As reported in Kaplan (2008), recovery support services are “services provided to people and families during the initiation, ongoing, and post-acute stages of their recovery.” Services are offered by substance use treatment programs, recovery community organizations, and faith-based organizations, and may be provided in combination with treatment, as well as separate from treatment, to individuals and families (Kaplan, 2008). Such services are provided by a range of personnel, including peers, staff trained specifically to provide recovery support services, faith leaders, and credentialed professionals, and have been shown to be effective or beneficial in helping many people sustain recovery from drugs and alcohol (Kaplan, 2008). Recovery support services refer to non-clinical services and supports that can be utilized prior to, during, and after treatment, or in lieu of treatment, to assist individuals and families in or seeking recovery from addiction to alcohol and other drugs. The services include assistance with housing, case management services, social skills development, assistance with obtaining social services, self-help groups, mentoring/peer support, transportation assistance to treatment, employment counseling or training for clients, and child care.

New addiction recovery support institutions include recovery community organizations (RCOs) that are organized by and for people in recovery and involve a broad range of recovery advocacy and peer recovery support activities, some of which have created local recovery community centers (RCCs), recovery homes (e.g., Oxford House), recovery schools (settings that provide recovery support within academic environments), recovery industries (e.g., employment clearinghouses established by RCOs, recovery-friendly employers), and recovery ministries (e.g., recovery-friendly churches, recovery-focused worship services; Hill, McDaid, & Taylor, 2012; White, Kelly, & Roth, 2012). With the recent increase in the number of RCOs,
Faces & Voices of Recovery (http://facesandvoicesofrecovery.org), a non-profit organization, has prepared a concept paper to establish an accreditation system for organizations and programs providing peer recovery support services (Burden, Hill, & Zastowny, 2012).

**Initiatives at the National Level Focused on Recovery Support Services**

There are numerous efforts underway at the national level that focus on recovery and recovery support services. The Access to Recovery (ATR) program is a presidential initiative that began in 2004 to provide federal funds to increase access to addiction treatment and non-clinical recovery support services. Effective January 1, 2006, The Joint Commission approved new behavioral health care standards and elements that include services that support a recovery-oriented philosophy and approach to care (www.jointcommission.org). The standards of performance involve care coordination, employment services, peer support, family support, and community integration, and apply only when and to the extent the service(s) is offered. While the Commission has set the standards, it has not required adoption of a recovery model, in recognition that the definitions and principles of recovery are still evolving within the field.

According to the Office of National Drug Control Policy (http://www.whitehouse.gov/ondcp/recovery-systems-and-services), “recovery support services are non-clinical services that help people achieve, enrich, and maintain recovery.” Services include, but are not limited to, transportation assistance, childcare, mentoring, recovery coaching, traditional Native American healing practices, housing and employment assistance, self-help and support groups, parent education and child development, peer-to-peer services, family and marriage education, spiritual and faith-based support, and social support. In 2010, the White House identified recovery services as a priority of the Office of National Drug Control Policy (ONDCP) and appointed a Recovery Branch Chief to ensure that recovery support services are taken into consideration across branches of government. Moreover, a continuum of support services that span healthcare, employment, housing, and education sectors, along with effective treatment, are part of a “modern addictions and mental health services system” (SAMHSA, 2011a). Additionally, passage of the ACA of 2010 emphasizes a person-centered focus to health care, and includes a number of provisions aimed at improving coverage for and access to SUD prevention, treatment, and recovery services.

In addition, SAMHSA’s 2011–2014 Strategic Initiative #4: Recovery Support promotes individual, program, and system-level approaches that encourage health and self-reliance, permanent housing, employment, education, and other support services that reduce barriers to recovery.
Research on Recovery Support Services

As already mentioned, recovery is currently an evolving concept in the SUD field. Individuals entering treatment often have complex needs due to co-occurring issues, including depression and other mental health disorders; violence; unemployment; financial, family, and legal stresses; and lack of vocational skills, housing, education, and social support (McLellan, Hagan, Meyers, Randall, & Durell, 1997; McLellan et al., 1993). Despite the historical and recent increased interest in recovery among many stakeholders in the substance abuse field, empirical research on recovery program performance and client outcome domains remains limited. To date, research has shown that a variety of factors can influence the recovery process, including substance use severity, environmental obstacles (e.g., use in the home, victimization, homelessness), self-efficacy to resist drug use, motivation for sustained help for substance use problems (i.e., continuing care), self-help group participation, and individual choice and commitment (Laudet, 2008). Studies have also found that access to and receipt of comprehensive services (e.g., medical, psychological, social services) improves engagement, retention, and treatment outcomes (Berkman & Wechsberg, 2007; McLellan et al., 1998; Pringle et al., 2002). However, while most studies have shown that providing support services during treatment (e.g., educational training, family counseling, child care, employment assistance, housing assistance) improves treatment outcomes, some studies have not (McLellan et al., 1998; Pringle et al., 2002).

Research has shown that particular components of recovery support services can be effective, including living environments supportive of recovery (Jason, Davis, & Ferrari, 2007a; Jason & Ferrari, 2010; Jason, Olson, Ferrari, & Lo Sass, 2006; Polcin & Hendersen, 2008; Polcin, Korcha, Bond, & Galloway, 2010a; Polcin, Korcha, Bond, Galloway, & Lapp, 2010b), involving families in the recovery process (Gruber & Fleetwood, 2004; Higgins, Budney, Bickel, & Badger, 1994; McCrady et al., 1986; Noel, McCrady, Stout, & Fisher-Nelson, 1987; O’Farrell, Choquette, Cutter, Brown, & McCourt, 1993), and recovery coaches, mutual-help groups, and social and community support (Beattie & Longabaugh, 1999; Humphreys, Manowski, Moos, & Finney, 1999; Humphreys, Moos, & Finney, 1995; Laudet, Savage, & Mahmood, 2002; Pringle et al., 2002; Scott, et al., 2005; Stout, Kelly, & Magill, 2012). As reported by Kaplan (2008), studies show that for clients with low recovery capital and high problem severity, social support

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3 According to Cloud and Granfield (2008), recovery capital comprises the quantity and quality of internal and external resources (e.g., skills, health, education, social network, income) an individual brings to the initiation and maintenance of recovery.
provided by a sober living community is important to long-term recovery (Jason, Davis & Ferrari, 2007a; Jason, Davis, Ferrari, & Bishop, 2001).

While recovery measures exist at the individual-client and program/system levels, they are in various stages of development and testing. For example, the Evaluation Center at the Human Services Research Center has prepared a compendium of recovery measures (Campbell-Orde, Chamberlin, Carpenter, & Leff, 2005). One of the measures included is the Recovery Self-Assessment (RSA), a 36-item measure developed by Yale University to gauge the extent to which programs implement recovery-oriented practices (Davidson et al., 2007). It is a self-reflective tool designed to identify strengths and specific areas for improvement as agencies and systems move toward providing recovery-oriented care. (See http://www.yale.edu/prch/tools/rec_selfassessment.html for the instrument). The RSA contains concrete, operational items to help staff and persons in recovery and their significant others to identify practices in behavioral health care settings that facilitate or impede recovery.

In an environmental scan of California counties’ recovery supports and services, Cousins, Antonini, and Rawson (2012) found that over half of the county administrators surveyed indicated that measurement and documentation of recovery support services (e.g., Internet-based recovery, recovery check-ups/monitoring, telephone support housing assistance, relapse prevention, transportation) was a high to very high priority. Data collected by the counties included recovery support and services utilization, satisfaction, outcomes, employment, housing, legal status, social support, and demographics. Notably, the most commonly reported barrier to measuring recovery supports and services was the lack of measurement tools or a data collection information technology system. Further, as mentioned earlier in this paper, a well-established recovery measure does not currently exist in the addiction field.

Findings contained in the Betty Ford Institute Consensus Statement on recovery support services concluded that although there is strong theoretical support for such services, rigorous studies are limited (White et al., 2012). Among the expert panel’s recommendations is a call for studies evaluating the effects of recovery support components on short- and long-term recovery outcomes for individuals and families to aid in the development of practice guidelines and standards, the development of valid and reliable measure of recovery, and the identification of key quality indicators of recovery support services.
Peer-based Recovery Support Services

According to White (2009), peer-based recovery support can be defined as “the process of giving and receiving non-professional, non-clinical assistance to achieve long-term recovery from severe alcohol and/or other drug-related problems. This support is provided by people who are experientially credentialed to assist others in initiating recovery, maintaining recovery, and enhancing the quality of personal and family life in long-term recovery.” Peer-based recovery support services, which are designed to help people become and remain engaged in the recovery process and decrease the likelihood of relapse, may be delivered within treatment programs or other local community or grassroots groups or organizations (White 2004) across the continuum of care. They are distinct from professional SUD treatment and mutual aid support groups. However, professional treatment and support services provided by professionals and others in the community, and peer-recovery support services can and do complement each other. The approach taken by peer-recovery services can be that of problem-solving or it can be strengths-based.

Peer-based community support is important in initiating and sustaining recovery from substance use dependence over time (White, 2009). Peer recovery support services aim to encourage and assist entry into recovery, prevent relapse, and promote sustained recovery. As peer-to-peer recovery support services is an emerging area, a SAMHSA report prepared by Health Systems Research, Inc. (2006) summarized the current knowledge on peer recovery support services at the time of the 2005 Recovery Community Services Programs (RCSPs) Conference. The report covered such support services in the following domains: emotional support (e.g., peer mentoring, peer coaching, peer-led support groups), informational support (e.g., peer-led life skills training, job skills training, sharing of health and wellness information), instrumental support (e.g., providing child care or clothes, transportation), and affiliation support (e.g., peer-led recovery community centers). The Center for Substance Abuse Treatment (CSAT), in conjunction with its RCSP grantees, has developed 12 common indicators of quality peer recovery support services (which are authentically peer-based4 in design and operation, as distinguished from professional treatment services and from mutual aid groups; Kaplan, Nugent, Baker, Clark, & Veysey, 2010).

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4 Authentic peer support is characterized by mutual exchange between equals through shared power, authority, challenge, intention, experiences, goals, beliefs, values, and desires. (Health Systems Research, Inc., 2006).
In addition, SAMHSA, in consultation with Faces & Voices of Recovery, has developed service definitions for the following peer recovery support services (Source: http://facesandvoicesofrecovery.org/publications/other.php#support_services):

- **Behavioral health peer navigator**: This service is a set of non-clinical activities that engage, educate, and offer support to individuals, their family members, and caregivers in order to successfully connect them to culturally relevant health services (e.g., prevention, diagnosis, timely treatment, recovery management, follow-up).

- **Peer recovery support coaching**: This is a set of non-clinical, peer-based activities (education and coaching) that engage, educate, and support an individual successfully to make life changes necessary to recover from disabling mental illness and/or substance use disorder conditions. A key element is that coaches appropriately highlight their personal lived experience with recovery.

While a body of research exists on the effectiveness of peer support for several chronic health conditions (e.g., diabetes, cancer), such evidence for SUDs is currently limited, but growing (Hill, McDaid, & Taylor, 2012). For example, one study found that among drug court participants who received Access to Recovery services, recovery support services that were directly linked to the recovery process (e.g., individual recovery coaching, recovery support groups) were most strongly related with successful outcomes (Mangrum, Spence, & Lopez, 2006). Studies have shown that social support, particularly when a client has a recovery-oriented network, predicts successful recovery (Humphreys et al., 1999; Weisner, Delucchi, Matzger & Schmidt, 2003). In addition, a randomized clinical trial conducted among individuals diagnosed with co-occurring substance use and mental health problems found that adding a peer-based component to treatment was effective in decreasing substance use (Rowe et al., 2007).

**Living Environments Supportive of Recovery**

Research also suggests that safe living environments supportive of recovery during and following substance abuse treatment reduces the risk of relapse (Didenko & Pankratz, 2007; Jason & Ferrari, 2010; Lewis, Haller, Branch, & Ingersoll, 1996) and favorably impacts outcomes (Hitchcock, Stainback, & Roque, 1995; Milby, Schumacher, Wallace, Freedman, & Vuchinich, 2005; Milby et al., 2004; Orwin, Garrison-Mogren, Jacobs, & Sonnefeld, 1999; Polcin, 2009). Residents who stayed in an Oxford House (a recovery home) for at least six months following residential substance abuse treatment had better outcomes compared to those placed in traditional aftercare, and had higher rates of employment, higher incomes, and
lower rates of arrest at two-year follow-up (Jason, Olson, Ferrari, Majer, Alvarez, & Stout, 2007b; Jason, Olson, Farrari, & Sasso, 2006). Residents in a sober housing program linked to outpatient substance abuse treatment showed a decrease in the number of months that they used substances, the maximum number of days that they used substances per month, arrests, and unemployment; 76% of residents in the study remained in the house at least 5 months, and 39% reported being employed at some point during the past 30 days (Polcin, 2009). Worcel, Burrus, and Finigan (2009) reported that among a group of 301 substance-abusing offenders, longer lengths of stay in transitional housing (Oxford house and other types of substance-free transitional housing), over and above the other services participants received (e.g., mental health, employment, substance abuse), resulted in less substance use and lower stress one year later. However, there is insufficient evidence to suggest which services are most effective for which types of clients (Pringle et al., 2002). Regarding quality indicators, The National Association of Recovery Residences (NARR; www.narronline.com) has developed standards to promote high quality housing.

**Self-Help or Mutual-Help Groups**

While the majority of research on substance use self-help groups focuses on Alcoholics Anonymous (AA), with Narcotics Anonymous (NA) as the second type of such groups most examined, only scant outcomes research has been conducted on non 12-step based self-help groups (Humphreys et al., 2004). Studies have supported the beneficial effects of alcohol and drug self-help groups, including reduction in substance use, lower health care costs, and other associated positive effects, including increased self-efficacy, improved social support, decreased depression and anxiety, and increased ability to cope with stress (Humphreys et al., 2004; Kelly & White, 2012). One study found that drug-dependent clients randomly assigned to an aftercare program that included a self-help group and network of supportive former clients were about 40% less likely to relapse over a six-month period compared with those receiving the usual aftercare services (McAuliffe, 1990). Studies have also reported that outpatient programs that hold 12-step meetings on-site are significantly more effective at encouraging 12-step participation during treatment and that client participation is maintained posttreatment, significantly increasing the odds of sustained abstinence from drugs during the year following treatment (Laudet et al., 2007); clients have better outcomes when participating in self-help groups focused on particular issues (e.g., dual diagnosis; Laudet, Magura, Vogel, & Knight, 2000); and participation in recovery support groups prior to linkage to treatment may be
beneficial for those who may be able to resolve their AOD problems without formal treatment while improving outcomes for those who require treatment (Moos & Moos, 2004, 2006).

Evidence shows that there may be additive effects of professional treatment and support groups as well as dose effects. Completion of substance abuse treatment and participation in recovery support groups is more predictive of long-term recovery than either one alone (Fiorentine & Hillhouse, 2000; Kisson, McLeod & McKay, 2003), and people who attend self-help groups do better following treatment than those who do not attend, regardless of the type of treatment received (Tonigan, Connors, & Miller, 2003).

Other studies have found a dose effect (early recovery stability related to more meeting attendance; Chappel, 1993; Humphreys, Moos, & Cohen, 1997), and recovery stability with more intense participation (e.g., reading recovery literature, service work; White, 2009). Attending meetings less than an average of once per week, especially early in recovery, is tantamount to not attending meetings (Fiorentine, 1999). Moos and Moos (2005) found that those who continue attending meetings after the first year have better long-term recovery rates than those who do not participate or those who decrease or stop participating after one year. However, research also has documented AA members’ decreased or discontinuation of participation in meetings but continued sobriety and other recovery-related activities (White, 2009).

Given the findings on the wide reach and effectiveness of AA, “twelve step facilitation “ (TSF) interventions, developed to engage clients with the support groups during and after treatment, have been found to improve client outcomes in randomized controlled trials, and are an empirically supported treatment according to the American Psychological Association and U.S. federal agencies (Kelly & White, 2012). However, empirical evidence for the direct association between 12-step attendance and abstinence is unclear, partially due to the difficulty in conducting randomized clinical trials of AA/NA participation (Witbrodt et al., 2012). In addition, more research is needed to understand, for instance, how particular types of mutual aid groups work, how effective these groups are, and for whom, and how much and how long a client should participate in these groups to help maintain long-term recovery.

**Culturally/Linguistically Appropriate Services**

Racial and ethnic disparities persist in health care, including treatment for SUD conditions (IOM, 2001, 2002). Studies examining the experiences of racial and ethnic minority
groups in SUD treatment have highlighted some areas for concern (Campbell & Alexander, 2002; Fosados, Evans, & Hser, 2007). For example, ethnic/racial minorities may be less likely to initiate treatment (Acevedo et al., 2012), have shorter stays in treatment (Agosti, Nunes, & Ocepeck-Welikson, 1996; Bluthenthal, Jacobson, & Robinson, 2007; Evans, Spear, Huang & Hser, 2006; Hser, Joshi, Maglione, Chou, & Anglin, 2001), are more likely to terminate treatment early (Jacobson, Robinson, & Bluthenthal, 2007; Mertens & Weisner, 2006), receive fewer services (Jerrell & Wilson, 1997; Wells, Klap, Koike, & Sherbourne, 2001), are less likely to achieve recovery (Rebach, 1992), have less access to drug treatment (Daley, 2005; Wu, El-Bassel, Gilbert, Piff, & Sanders, 2004; Lundgren, Amodeo, Gerguson, & Davis, 2001), and report lower satisfaction with treatment (Wells, Klap, Koike, & Sherbourne, 2001). Delivery of culturally and linguistically appropriate services should contribute to increasing the quality of care for racial and ethnic minority groups.

**Defining and Operationalizing Cultural Competence**

Cultural competence is considered an important component in addressing the ethnic/racial disparities in service utilization and treatment outcomes (Finn, 1996; Simpson, 1997), and is receiving increased attention with the recent passage of the Patient Protection and Affordable Care Act, which includes provisions focusing on workforce diversity and cultural competence (Andrulis et al., 2010). However, the literature on culturally competent treatment for substance abuse is limited. In addition, there is lack of agreement on the definition of “cultural competency” and how it should be operationalized and measured (Betancourt, Green, Carrillo, & Ananeh-Firempong, 2003; Howard, 2003), although descriptions generally include “having knowledge of and respect for different cultural perspectives, as well as being able to use skills effectively in cross-cultural situations” (Campbell & Alexander, 2002). Cultural competence also has been described as a “set of congruent behaviors, attitudes, and policies that come together in a system, agency or amongst professionals and enables that system, agency or those professionals to work effectively in cross-cultural situations” (Cross, Bazron, Dennis, & Issacs, 1989). The domains where implementation of cultural competence practices could be beneficial include organizational governance, program evaluation, communication, human resources, and facilitation of services to clients (Guerrero & Andrews, 2011).

Cultural competence has been operationalized in terms of various organizational practices, attitudes, and services that can be modified to increase the cross-cultural sensitivity and responsiveness of health care delivery settings (Brach & Fraser, 2000; Fisher, Burnet, Huang, Chin, & Cagney, 2007; Guerrero & Andrews, 2011; The Lewin Group, 2001). Drawing
on the literature on cultural competency and health care disparities, Brach and Fraser (2000) identified nine major categories of cultural competency practices to evaluate treatment organizations along a continuum:

(1) interpreter services,
(2) recruitment and retention of staff from minority groups,
(3) cultural competency training,
(4) coordinating with traditional healers,
(5) use of community health workers,
(6) culturally competent health promotion (e.g., incorporations of culture-specific values into message and materials),
(7) including family and/or community members,
(8) immersion into another culture, and
(9) administrative and organizational accommodations (e.g., clinic locations, hours of operation, physical environments).

The most common organizational culturally competent practices include: race-ethnic matching (treatment by staff of the same racial or ethnic minority group as the client), language congruence (treatment by staff who speak the primary language of the client), cross-cultural training (providing staff with knowledge and skills relevant to the needs, preferences, and beliefs among specific racial and cultural minority groups), inclusion of family in the treatment process, and collaboration with faith-based organizations during and following treatment (Guerrero & Andrews, 2011).

**Cultural Competency Frameworks, Standards, and Measures**

In a review of the literature on cultural competence in health care delivery settings, Campbell and Alexander (2002) found multiple examples of standards and guidelines, but measures that had been tested and validated were limited. Further, there is insufficient empirical evidence suggesting which cultural competency practices are effective. While studies conducted in medical settings have found associations between staff cultural competence and improved communication, more accurate diagnosis, favorable therapeutic alliance, and increased client satisfaction, much less is known in substance use disorder treatment settings (Guerrero & Andrews, 2011).
Culturally and Linguistically Appropriate Services (CLAS)

In an effort to guide the cultural competency efforts for the nation, the U.S. Department of Health and Human Services’ (DHHS) Office of Minority Health (OMH) (IQ Solutions, Inc., 2001) has developed national standards for culturally and linguistically appropriate services (CLAS) in health care to inform, guide, and facilitate required and recommended practices. The report defines cultural and linguistic competence as “a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations,” and culturally and linguistically appropriate services as “health care services that are respectful of and responsive to cultural and linguistic needs.” The 14 standards are grouped by themes: Culturally competent care (Standards 1-3), language access services (Standards 4-7), organizational supports for cultural competence (Standards 8-14); address interventions that have the most direct impact on clinical care (Standards 1-7) and organizational structures, policies and processes (Standards 8-14) that support the implementation of the first seven standards. In addition, some of the standards are mandated by the federal government for all recipients of federal funds (4-7), others are guidelines recommended by OMH for adoption as mandates for federal, state and national accrediting agencies (1-3, 8-13), while Standard 14 is suggested by OMH for voluntary adoption by health care organizations. (See Appendix B.)

The Agency for Healthcare Research and Quality’s report (Fortier & Bishop, 2004) “Setting the Agenda for Research on Cultural Competence in Health Care,” examined the relationship of cultural competence interventions and the delivery of health care and health outcomes subsequent to the development of the CLAS standards. The results of the literature review suggest that some culturally sensitive interventions (e.g., cultural competence training, and racial and ethnic concordance) have shown improvements in subjective, self-assessed measures of provider knowledge and client satisfaction. In addition, health promotion and education programs that make use of interpreters, community health workers, translated materials, and other culturally sensitive methods reported increased intake, program completion, and knowledge acquisition. The effectiveness of linguistic and communication interventions on client satisfaction and health services use was equivocal, however, and studies investigating the effect of community health workers and traditional healers was scant. Furthermore, literature that examined both the processes and outcomes of organizational accommodations for cultural and linguistic competence was nonexistent. The report also lays out a research agenda in the following areas: culturally sensitive interventions (cultural
competence education and training, racial, ethnic, and linguistic concordance, community health workers and culturally competent health promotion), language assistance (language barriers, bilingual services, oral interpretation, translated written materials), and organizational supports for cultural competence (e.g., management activities to improve health care delivery). The report also noted that there is a lack of standardized definitions of the interventions, standardized evaluative measures, culturally competent instruments, and secondary data sources with uniform racial, ethnic, and language data. Another area that needs to be addressed is adaptation of evidence-based practices for racial and ethnic groups while ensuring fidelity.

**National Quality Forum Endorsed Quality Measures**

Further, the National Quality Forum, a voluntary consensus standards-setting organization, recently endorsed 12 quality measures focused on healthcare disparities and culturally competent care for racial and ethnic minority populations ([http://www.qualityforum.org/News And Resources/Press_Releases/2012/NQF_Endorses_Healthcare_Disparities_and_Cultural_Competency_Measures.aspx](http://www.qualityforum.org/News And Resources/Press_Releases/2012/NQF_Endorses_Healthcare_Disparities_and_Cultural_Competency_Measures.aspx)), including:

- 1888: Workforce development measure derived from the workforce development domain of the Communication Climate Assessment Toolkit (CCAT) (American Medical Association)
- 1901: Performance evaluation measure derived from the performance evaluation domain of the Communication Climate Assessment Toolkit (CCAT) (American Medical Association)
- 1905 Leadership commitment measure derived from the leadership commitment domain of the Communication Climate Assessment Toolkit (CCAT) (American Medical Association)
- 1892: Individual engagement measure derived from the individual engagement domain of CCAT (American Medical Association)
- 1894: Cross-cultural communication measure derived from the cross-cultural communication domain of the CCAT (American Medical Association)
- 1896: Language services measure derived from the language services domain of CCAT (American Medical Association)
Health literacy is emerging as an area that is being recognized as a key element in the delivery of culturally and linguistically appropriate services. The term has been defined as the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions (Ratzan & Parker, 2000). Health literacy is influenced by individual and health care organizational/system factors. In a recent report, Brach et al. (2012) propose 10 attributes that are embodied by health-literate health care organizations; the attributes were drawn from a synthesis of scientific knowledge and practices and the authors offered implementation strategies for their adoption:

1. Health literacy is integral to the organization’s mission, structure, and operations.
2. Health literacy is integrated into the organization’s planning, evaluation measures, patient safety, and quality improvement efforts.
3. The workforce is prepared to be health literate and its progress is monitored.
4. Populations served are included in the design, implementation, and evaluation of health information and services.
5. The organization meets the needs of populations with a range of health literacy skills while avoiding stigmatization.
6. The organization uses health literacy strategies in interpersonal communications and confirms understanding at all points of contact.

7. The organization provides easy access to health information and services and navigation assistance.

8. The organization designs and distributes print, audiovisual, and social media content that is easy to understand and act on.

9. The organization addresses health literacy in high-risk situations (e.g., care transitions, communication about medications).

10. The organization communicates clearly what health plans cover and what individuals will have to pay for services.

**CAHPS Cultural Competence (CC) and Health Literacy Practices Item Sets**

While there are a number of cultural competence instruments and measures, there are few empirically validated measures, and data on the impact of these measures on treatment outcomes is scant. The AHRQ recently developed the CAHPS Cultural Competence (CC) Item set, which measures from the client perspective how culturally competent an organization is, and the CAHPS Item Set for Addressing Health Literacy, which measures the extent to which health care professionals are addressing health literacy requirements from the client perspective (Clancy, Brach, & Abram, 2012). The CAHPS CC item set covers client perceptions of language access, trust, complementary and alternative medicine, client-provider communication, and discrimination, whereas the CAHPS health literacy practices item set includes questions about interpersonal communication between providers and clients, important prevention and treatment topics (e.g., medicine instructions), and aspects within the health literacy environment outside the clinical visit (e.g., client forms). Study findings support the reliability and validity for the scales of both item sets (Weech-Maldonado et al., 2012; Weidmer, Brach, & Hays, 2012).

**Cultural Competency in the Delivery of SUD Treatment**

While there are a number of cultural competency frameworks proposed, empirical evidence of the effectiveness of cultural competency measures is currently insufficient (Brach & Fraser, 2000; Campbell & Alexander, 2002; Castro, & Garfinkle, 2003; The Lewin Group, 2001). For example, although some studies have focused on treatment program staffing, client population demographics, or racial/ethnic matching of therapist and client as proxy measures of cultural competency, results of empirical studies are ambiguous (Howard, 2003). Studies have found that certain culturally competent treatment practices may influence the use of specific
ancillary services (medical and psychosocial), but may not be consistently effective in encouraging the use of all services (Campbell & Alexander, 2002).

With respect to substance abuse treatment specifically, racial/ethnic matching between staff and clients (e.g., same-race therapist), language concordance (e.g., bilingual personnel), and cultural competency training are broad categories of cultural competency strategies identified in the literature that may facilitate increased communication, trust, and understanding regarding the client’s background, and may, in turn, positively impact the assessment of client needs and client engagement and retention in treatment. Studies have found that gender and culture-based approaches are beneficial to racial and ethnic minority groups in treatment for SUDs (Acevedo et al., 2012; Campbell & Alexander, 2002; Longshore, Grills, & Annon, 1999; Uziel-Miller, Lyons, Kissiel, & Love, 1998).

There is a need, however, to develop a core set of standard measures for cultural competency specific to SUD treatment settings and to investigate their relationship with the service utilization patterns and outcomes of specific minority groups, while being cognizant of the significant heterogeneity that exists within minority groups. There are few studies addressing how to measure elements of cultural competency and their relationship to outcomes. One study examined two measures of organizational cultural competence—organizational practices and manager’s culturally sensitive beliefs—among managers in a nationally representative sample of outpatient substance abuse treatment programs and their association with client wait time and retention (Guerrero & Andrews, 2011). In terms of organizational practices, the study found that managers typically reported matching providers and clients based on language/dialect, offering cross-cultural training and encouraging linkages with community and faith-based organizations associated with racial and ethnic minority groups. The most culturally sensitive belief among managers was support for language/dialect matching for racial and ethnic minority clients. While organizational practices were not found to be associated with client wait time or retention, manager’s culturally sensitive beliefs were negatively related with average wait time (p < 0.05), and positively related with average retention (p < 0.01). In other words, more cultural sensitive beliefs is related to less wait time and longer retention. However, the researchers could not explain the reasons for this relationship and suggested that further research is needed.
Policy Recommendations for the State of California

While assessing and improving the quality of care for substance use disorder conditions is high on the list of priorities at the federal, state, and local levels, it is an area that is still evolving. Thus, state agencies must keep apprised of new conceptualizations of quality care for substance use disorders and recovery, research findings, and best practices even as they are pressed to identify and implement their own measures of quality. The following are recommendations for the state, given the current dynamic and changing environment of health care reform and the need to demonstrate the effectiveness and improvement in publicly funded care provided to people with SUD conditions:

- *Provide leadership at the state level in assessing and improving the quality of care for SUD conditions.* This includes providing guidance and resources for developing an infrastructure for performance measurement and management that is sustainable and accommodates the data needs for quality improvement efforts. Institute incentives for performance.

- *Select a framework, set of measures and indicators, and data based on the needs, goals, and settings of the agency or system that will effectively and efficiently provide the amount and detail of information to assess and improve the quality of care* (Garnick et al., 2006; McLellan et al., 2007). The measures chosen should be in alignment with the agency's vision and mission. No single measure or indicator by itself is sufficient evidence for quality, as each has benefits and limitations. Measures must be meaningful and feasible to collect.

- *Select measures at different levels (e.g., client, organization, system), and for diverse stakeholders (e.g., payers, providers, policy makers), specifying the purpose of the measures (e.g., to guide individual client care, assess quality of treatment programs).* Select measures that have been validated for particular settings and populations as appropriate to meet the needs of the state and other stakeholders. Examine data on measures by subgroups (e.g., age, gender, type of substance used) to help inform quality improvement efforts targeted to specific populations with SUD conditions (Garnick et al., 2006). Use case-mix adjustment tools when appropriate. Avoid the assumption that client-level outcomes and program-level performance will be identical.
• *Periodically and routinely revisit measures in use.* Re-evaluate and modify measures and indicators as new evidence emerges, needs and goals of the system change, and conceptualizations of addiction and recovery evolve. Consider how new data sources, advances in information technology (e.g., electronic health records, Internet- and computer-based; Garnick et al., 2011), and integration efforts (e.g., SUD services, mental health, and primary care) may affect assessment and quality of care, given the changes prompted by the Affordable Care Act.

• *Consider providing timely and detailed data to providers so that they can track their own performance and improvement efforts* (Garnick et al., 2006). CADP has been working with the CADPAAC Treatment Data/Outcomes Committee, UCLA ISAP, and other stakeholders to develop and implement some initial program-performance and client-outcome indicator reports and dashboard templates (Antonini, Urada, Crevecoeur-MacPhail, & Rawson, 2011). This work to develop and implement some initial program-performance and client-outcome indicator reports and dashboard templates should continue and progress to automation of such information sharing with counties and providers, within given resource constraints.

• *Consider providing public access to reports on performance and client outcomes at different levels (e.g., system, county, program), which is consistent with the client-centered care approach to providing quality health care* (Berwick, Nolan, & Wittington, 2008; IOM, 2001). The “dashboards” developed through the Evaluation Services to Enhance the Data Management System in California (EnCAL) project might serve as initial reporting templates (Rawson et al., 2011, 2012).
References


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Appendix A

National Quality Measures Clearinghouse (NQMC) Substance-Related Measures

(Source: http://www.qualitymeasures.ahrq.gov; as of 10/09/2012)

1. **Engagement of alcohol and other drug (AOD) treatment**: percentage of members who initiated treatment and who had two or more additional services with a diagnosis of AOD within 30 days of the initiation visit. NQMC:007136

2. **Initiation of alcohol and other drug (AOD) treatment**: percentage of members who initiate treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter, or partial hospitalization within 14 days of the diagnosis. NQMC:007135

3. **Homeless**: percent of eligible homeless Veterans with an intake interview who receive timely MH or SUD specialty services. NQMC:006047

4. **Homeless**: percent of homeless Veterans entering a homeless program who receive timely MH or SUD specialty services. NQMC:006048

5. **Homeless**: percent of Veterans discharged from one of three types of homeless residential programs who receive timely MH or SUD specialty follow-up. NQMC:006050

6. **Mental health**: percent of patients beginning a new episode of treatment for substance use disorder (SUD) who maintain continuous treatment involvement for at least 90 days after qualifying date. NQMC:006056

7. **Identification of alcohol and other drug services**: summary of the number and percentage of members with an alcohol and other drug (AOD) claim who received the following chemical dependency services during the measurement year: any service, inpatient, intensive outpatient or partial hospitalization, and outpatient or emergency department (ED). NQMC:006259

8. **Substance use disorders**: percentage of patients aged 18 years and older with a diagnosis of current substance abuse or dependence who were screened for depression within the 12 month reporting period. NQMC:004006

9. **Bipolar disorder**: the percentage of patients with bipolar disorder who receive an initial assessment that considers alcohol and chemical substance use. NQMC:003493

10. **Depression**: the percentage of patients diagnosed with unipolar depression who receive an initial assessment that considers alcohol and chemical substance use. NQMC:003494
11. **Assessment of smoking, substance abuse, safety, and firearms risks in the family by a child’s doctor(s) or other health care provider(s):** proportion of children whose parents were assessed for one or more risk factors. NQMC:002968

12. **Assessment of smoking, substance abuse, safety, and firearms risks in the family:** average percentage of recommended topics assessed. NQMC:002969

13. **Mental health/substance abuse:** mean of patients’ change scores on the “Depression/Functioning” subscale of the BASIS-24® survey. NQMC:002657

14. **Mental health/substance abuse:** mean of patients’ change scores on the “Emotional Lability” subscale of the BASIS-24® survey. NQMC:002661

15. **Mental health/substance abuse:** mean of patient’s change scores on the “Interpersonal Relationships” subscale of the BASIS-24® survey. NQMC:002658

16. **Mental health/substance abuse:** mean of patients’ change scores on the “Psychosis” subscale of the BASIS-24® survey. NQMC:002659

17. **Mental health/substance abuse:** mean of patients’ change scores on the “Self-harm” subscale of the BASIS-24® survey. NQMC:002662

18. **Mental health/substance abuse:** mean of patients’ change scores on the “Substance Abuse” subscale of the BASIS-24® survey. NQMC:002660

19. **Mental health/substance abuse:** mean of patients’ overall change scores on the BASIS-24® survey. NQMC:002656

20. **Behavioral health care patients’ experiences:** percentage of adult patients who rated how much improvement they perceived in themselves. NQMC:000843

21. **Behavioral health care patients’ experiences:** percentage of adult patients who reported how much of a problem they had getting treatment and information from their health plan or managed behavior health organization. NQMC:000842

22. **Behavioral health care patients’ experiences:** percentage of adult patients who reported how much they were helped by the counseling or treatment they received. NQMC:000855

23. **Behavioral health care patients’ experiences:** percentage of adult patients who reported how often their clinicians communicated well. NQMC:000841

24. **Behavioral health care patients’ experiences:** percentage of adult patients who reported how often they get treatment quickly. NQMC:000840

25. **Behavioral health care patients’ experiences:** percentage of adult patients who reported how often they were seen within 15 minutes of their appointment. NQMC:000847
26. **Behavioral health care patients' experiences**: percentage of adult patients who reported whether anyone shared information regarding their counseling or treatment that should have been kept private. NQMC:000853

27. **Behavioral health care patients' experiences**: percentage of adult patients who reported whether someone talked to them about including family or friends in their counseling or treatment. NQMC:000849

28. **Behavioral health care patients' experiences**: percentage of adult patients who reported whether the care they received was responsive to their cultural needs. NQMC:000854

29. **Behavioral health care patients' experiences**: percentage of adult patients who reported whether they felt they could refuse a specific type of medicine or treatment. NQMC:000852

30. **Behavioral health care patients' experiences**: percentage of adult patients who reported whether they were given enough information to manage their condition. NQMC:000850

31. **Behavioral health care patients' experiences**: percentage of adult patients who reported whether they were given information about patient rights. NQMC:000851

32. **Behavioral health care patients' experiences**: percentage of adult patients who reported whether they were provided information about treatment options. NQMC:000844

33. **Behavioral health care patients' experiences**: percentage of adult patients who reported whether they were told about medication side effects. NQMC:000848

34. **Behavioral health care patients' experiences**: percentage of adult patients who reported whether they were told about other ways to receive treatment after their benefits were used up. NQMC:000856

35. **Behavioral health care patients' satisfaction**: adult patients' overall rating of the counseling or treatment they received. NQMC:000845

36. **Behavioral health care patients' satisfaction**: adult patients' overall rating of their health plan for counseling or treatment. NQMC:000846

37. **HIV ambulatory care satisfaction**: percentage of HIV positive adult patients in a methadone maintenance program who reported how often the dispensing line was too slow. NQMC:002083

38. **HIV ambulatory care satisfaction**: percentage of HIV positive adult patients who reported how often the program rules were enforced fairly by the staff. NQMC:002066
39. **HIV ambulatory care satisfaction**: percentage of HIV positive adult patients who reported how often their substance use counselors knew about both substance use and HIV. NQMC:002064

40. **HIV ambulatory care satisfaction**: percentage of HIV positive adult patients who reported how often their substance use counselors were responsible and professional. NQMC:002063

41. **HIV ambulatory care satisfaction**: percentage of HIV positive adult patients who reported how often their substance use counselors, case manager, and HIV medical providers worked together to help them. NQMC:002070

42. **HIV ambulatory care satisfaction**: percentage of HIV positive adult patients who reported how often they could see their substance use counselors soon enough for their needs when they needed an appointment. NQMC:002062

43. **HIV ambulatory care satisfaction**: percentage of HIV positive adult patients who reported how often they felt they would get in trouble if they disagreed with or complained about their substance use counselors. NQMC:002067

44. **HIV ambulatory care satisfaction**: percentage of HIV positive adult patients who reported how often they found it hard to relate to their substance use counselors. NQMC:002065

45. **HIV ambulatory care satisfaction**: percentage of HIV positive adult patients who reported their whether they were satisfied overall with the substance use services they received over the past 12 months. NQMC:002082

46. **HIV ambulatory care satisfaction**: percentage of HIV positive adult patients who reported whether clients should have more help in transitioning out of the program. NQMC:002078

47. **HIV ambulatory care satisfaction**: percentage of HIV positive adult patients who reported whether if they knew someone who was HIV-positive and had a substance use problem, they would refer her or him to this program for help. NQMC:002081

48. **HIV ambulatory care satisfaction**: percentage of HIV positive adult patients who reported whether if they knew someone who was HIV-positive and had a substance use problem, they would refer her or him to this program for help. NQMC:002081

49. **HIV ambulatory care satisfaction**: percentage of HIV positive adult patients who reported whether the program helped them to reduce their substance use. NQMC:002080
50. **HIV ambulatory care satisfaction**: percentage of HIV positive adult patients who reported whether their substance use counselors explained to them in a way they could understand how their substance use treatment (for example, methadone) and their HIV medications might interact. NQMC:002076

51. **HIV ambulatory care satisfaction**: percentage of HIV positive adult patients who reported whether their substance use counselors helped them get into a residential drug treatment program if needed. NQMC:002074

52. **HIV ambulatory care satisfaction**: percentage of HIV positive adult patients who reported whether their substance use counselors helped them to achieve their substance use treatment plan goals. NQMC:002077

53. **HIV ambulatory care satisfaction**: percentage of HIV positive adult patients who reported whether their substance use counselors understood where they were with their recovery and helped them to reduce or eliminate their drug use. NQMC:002075

54. **HIV ambulatory care satisfaction**: percentage of HIV positive adult patients who reported whether they wanted to have more time in group therapy to meet their needs. NQMC:002071

55. **HIV ambulatory care satisfaction**: percentage of HIV positive adult patients who reported whether they wanted to have more time in individual therapy to meet their needs. NQMC:002072

56. **HIV ambulatory care satisfaction**: percentage of HIV positive adult patients who reported whether, if they relapsed, their substance use counselors explained ways to reduce the harm of drug use. NQMC:002073

57. **Lead screening in children**: percentage of children 2 years of age who had one or more capillary or venous lead blood test for lead poisoning by their second birthday. NQMC:007068

58. **Aminoglycoside monitoring**: percentage of patients with a toxic aminoglycoside concentration whose dosage has been adjusted prior to the next aminoglycoside dose, during the 6 month time period. NQMC:006695

59. **Chronic stable coronary artery disease**: percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period who were screened for tobacco use AND who received tobacco cessation counseling intervention if identified as a tobacco user. NQMC:007239

60. **Behavioral health**: percent of eligible patients screened annually for alcohol misuse with AUDIT-C. NQMC:006014
61. **Behavioral health**: percent of patients screened for alcohol misuse with AUDIT-C who meet or exceed a threshold score of 5 who have timely brief alcohol counseling. NQMC:006015

62. **Smoking**: percent of eligible spinal cord injury and disorders (SCI&D) patients using tobacco who have been offered a referral to a tobacco cessation specialty program within the past year. NQMC:006043

63. **Smoking**: percent of eligible spinal cord injury and disorders (SCI&D) patients using tobacco who have been offered medications to assist with cessation within the past year. NQMC:006044

64. **Smoking**: percent of eligible spinal cord injury and disorders (SCI&D) patients using tobacco who have been provided with brief counseling for tobacco cessation within the past year. NQMC:006042

65. **Tobacco cessation**: percent of patients using tobacco who have been offered a referral to smoking cessation specialty program to assist with cessation within the past year. NQMC:006034

66. **Tobacco cessation**: percent of patients using tobacco who have been offered medication to assist with cessation within the past year. NQMC:006033

67. **Tobacco cessation**: percent of patients using tobacco who have been provided with brief counseling within the past year. NQMC:006035

68. **Smoking and tobacco use cessation**: percentage of members 18 years and older who were current smokers or tobacco users and who discussed or were provided cessation methods or strategies during the measurement year. NQMC:006280

69. **Smoking and tobacco use cessation**: percentage of members 18 years of age and older who were current smokers or tobacco users and who discussed or were recommended cessation medications during the measurement year. NQMC:006279

70. **Smoking and tobacco use cessation**: percentage of members 18 years of age and older who were current smokers or tobacco users who received advice to quit during the measurement year. NQMC:006278

71. **Asthma**: the percentage of patients with asthma between the ages of 14 and 19 in whom there is a record of smoking status in the previous 15 months. NQMC:005104

72. **Preventive care and screening**: percentage of patients 18 years and older who were screened for tobacco use at least once during the two-year measurement period AND who received cessation counseling intervention if identified as a tobacco user. NQMC:004462
73. **Preventive care and screening**: percentage of patients aged 18 years and older who were screened for unhealthy alcohol use at least once during the two-year measurement period using a systematic screening method AND who received brief counseling if identified as an unhealthy alcohol user. NQMC:004458

74. **Preventive care and screening**: percentage of patients aged 18 years and older who were screened for unhealthy alcohol use at least once during the two-year measurement period using a systematic screening method. NQMC:004463

75. **Substance use disorders**: percentage of patients aged 18 years and older with a diagnosis of current alcohol dependence who were counseled regarding psychosocial AND pharmacologic treatment options for alcohol dependence within the 12 month reporting period. NQMC:004007

76. **Substance use disorders**: percentage of patients aged 18 years and older with a diagnosis of current opioid addiction who were counseled regarding psychosocial AND pharmacologic treatment options for opioid addiction within the 12 month reporting period. NQMC:004208

77. **Cardiac rehabilitation**: percentage of patients in the healthcare system's cardiac rehabilitation program(s) who meet the specified performance measure criteria for tobacco use. NQMC:003776

78. **Anticipatory guidance and parental education (AGPE) about injury prevention from doctor(s) or other health provider(s)**: proportion of children whose parents had their informational needs met. NQMC:002964

79. **Diabetes mellitus**: percent of patients who are current smokers (documented in the last 12 months). NQMC:001601

80. **Preventive care and screening**: percentage of patients who were queried about tobacco use one or more times during the two-year measurement period. NQMC:001953

81. **HIV**: percentage of adult and adolescent patients with whom tobacco use was discussed during the past year. NQMC:001764

82. **Preventive screening and counseling on risky behaviors**: average proportion saying "yes" to ten items about whether provider(s) discussed/screened on smoking, alcohol use, helmet use, drunk driving, chewing tobacco, street drugs, steroid pills, sexual/physical abuse, violence, guns. NQMC:000224
Appendix B

National Standards on Culturally and Linguistically Appropriate Services (CLAS)

The CLAS standards are primarily directed at health care organizations; however, individual providers are also encouraged to use the standards to make their practices more culturally and linguistically accessible. The principles and activities of culturally and linguistically appropriate services should be integrated throughout an organization and undertaken in partnership with the communities being served.

The 14 standards are organized by themes: Culturally Competent Care (Standards 1-3), Language Access Services (Standards 4-7), and Organizational Supports for Cultural Competence (Standards 8-14). Within this framework, there are three types of standards of varying stringency: mandates, guidelines, and recommendations as follows:

CLAS mandates are current Federal requirements for all recipients of Federal funds (Standards 4, 5, 6, and 7).

CLAS guidelines are activities recommended by OMH for adoption as mandates by Federal, State, and national accrediting agencies (Standards 1, 2, 3, 8, 9, 10, 11, 12, and 13).

CLAS recommendations are suggested by OMH for voluntary adoption by health care organizations (Standard 14).

**Standard 1**
Health care organizations should ensure that patients/consumers receive from all staff member’s effective, understandable, and respectful care that is provided in a manner compatible with their cultural health beliefs and practices and preferred language.

**Standard 2**
Health care organizations should implement strategies to recruit, retain, and promote at all levels of the organization a diverse staff and leadership that are representative of the demographic characteristics of the service area.
Standard 3
Health care organizations should ensure that staff at all levels and across all disciplines receive ongoing education and training in culturally and linguistically appropriate service delivery.

Standard 4
Health care organizations must offer and provide language assistance services, including bilingual staff and interpreter services, at no cost to each patient/consumer with limited English proficiency at all points of contact, in a timely manner during all hours of operation.

Standard 5
Health care organizations must provide to patients/consumers in their preferred language both verbal offers and written notices informing them of their right to receive language assistance services.

Standard 6
Health care organizations must assure the competence of language assistance provided to limited English proficient patients/consumers by interpreters and bilingual staff. Family and friends should not be used to provide interpretation services (except on request by the patient/consumer).

Standard 7
Health care organizations must make available easily understood patient-related materials and post signage in the languages of the commonly encountered groups and/or groups represented in the service area.

Standard 8
Health care organizations should develop, implement, and promote a written strategic plan that outlines clear goals, policies, operational plans, and management accountability/oversight mechanisms to provide culturally and linguistically appropriate services.

Standard 9
Health care organizations should conduct initial and ongoing organizational self-assessments of CLAS-related activities and are encouraged to integrate cultural and linguistic competence-related measures into their internal audits, performance improvement programs, patient satisfaction assessments, and outcomes-based evaluations.
**Standard 10**
Health care organizations should ensure that data on the individual patient’s/consumer’s race, ethnicity, and spoken and written language are collected in health records, integrated into the organization’s management information systems, and periodically updated.

**Standard 11**
Health care organizations should maintain a current demographic, cultural, and epidemiological profile of the community as well as a needs assessment to accurately plan for and implement services that respond to the cultural and linguistic characteristics of the service area.

**Standard 12**
Health care organizations should develop participatory, collaborative partnerships with communities and utilize a variety of formal and informal mechanisms to facilitate community and patient/consumer involvement in designing and implementing CLAS-related activities.

**Standard 13**
Health care organizations should ensure that conflict and grievance resolution processes are culturally and linguistically sensitive and capable of identifying, preventing, and resolving cross-cultural conflicts or complaints by patients/consumers.

**Standard 14**
Health care organizations are encouraged to regularly make available to the public information about their progress and successful innovations in implementing the CLAS standards and to provide public notice in their communities about the availability of this information.