# RTI Press

# **Research Report**

ISSN 2378-7902

July 2020



Tracking the Quality of Addiction Treatment Over Time and Across States: Using the Federal Government's "Signs" of Higher Quality

Tami L. Mark, William N. Dowd, and Carol L. Council



RTI Press publication RR-0040-2007

RTI International is an independent, nonprofit research organization dedicated to improving the human condition. The RTI Press mission is to disseminate information about RTI research, analytic tools, and technical expertise to a national and international audience. RTI Press publications are peer-reviewed by at least two independent substantive experts and one or more Press editors.

#### **Suggested Citation**

Mark, T. L., Dowd, W. N., and Council, C.L. (2020). *Tracking the Quality of Addiction Treatment Over Time and Across States: Using the Federal Government's "Signs" of Higher Quality*. RTI Press Publication No. RR-0040-2007. Research Triangle Park, NC: RTI Press. https://doi.org/10.3768/rtipress.2020.rr.0040.2007

This publication is part of the RTI Press Research Report series..

RTI International 3040 East Cornwallis Road PO Box 12194 Research Triangle Park, NC 27709-2194 USA

Tel: +1.919.541.6000 E-mail: rtipress@rti.org Website: www.rti.org ©2020 RTI International. RTI International is a registered trademark and a trade name of Research Triangle Institute. The RTI logo is a registered trademark of Research Triangle Institute.



This work is distributed under the terms of a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 license (CC BY-NC-ND), a copy of which is available at https://creativecommons.org/licenses/by-nc-nd/4.0/legalcode

https://doi.org/10.3768/rtipress.2020.rr.0040.2007

## Contents

About the Authors	i
Acknowledgments	ii
Abstract	ii
Introduction	1
Methods	1
Data	1
Measures	4
Analysis	4
Results	4
National Averages	4
State Variation	5
Discussion	9
References	10

#### **About the Authors**

Tami L. Mark, PhD, MBA, is an internationally known expert on behavioral health care financing, services, and quality measurement. Her research focuses on improving mental health and substance use disorders services systems. She has authored more than 115 scholarly peer-reviewed journal articles and many government reports. Dr. Mark was a contributing author to the report Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health. She has served on technical expert panels for the National Institute on Drug Abuse (NIDA), National Institute of Mental Health (NIMH), National Institute on Alcohol Abuse and Alcoholism (NIAAA), Substance Abuse and Mental Health Services Administration (SAMHSA), National Quality Forum (NQF), and other organizations.

William N. Dowd, BA, is an economist in RTI's Behavioral Health Financing, Economics, and Evaluation program, focusing on substance abuse and mental health research and evaluation. He evaluates policies relating to alcohol, drugs, and mental health, and he conducts impact and economic analysis using econometric and simulation modeling techniques.

**Carol L. Council**, MSPH, is one of RTI's senior experts on substance abuse and behavioral health research. An epidemiologist, Ms. Council focuses on quality measurement and performance monitoring systems for behavioral health providers. She conducts cross-site evaluations of behavioral health initiatives and serves as a task lead on site visits to behavioral health specialty and military health programs.

**RTI Press Associate Editor** 

Jennifer Griffin

#### Acknowledgments

This work was supported by RTI International. We thank Julie Seibert and Gary Zarkin for their feedback on the research.

#### Abstract

The objective of this study was to track trends in the signs of higher-quality addiction treatment as defined by the National Institute on Drug Abuse, the National Institute on Alcohol Abuse and Addiction, and the Substance Abuse and Mental Health Services Administration. We analyzed the National Survey of Substance Abuse Treatment Services from 2007 through 2017 to determine the percent of facilities having the characteristics of higher quality. We analyzed the percent by state and over time. We found improvements between 2007 and 2017 on most measures, but performance on several measures remained low. Most programs reported providing evidence-based behavioral therapies. Half or fewer facilities offered medications for opioid use disorder; mental health assessments; testing for hepatitis C, HIV, and sexually transmitted diseases; self-help groups; employment assistance; and transportation assistance. There was significant state-level variation across the measures.

## Introduction

Individuals with substance use disorders and their families report challenges finding high-quality addiction treatment, as noted in recent Congressional hearings and by the media.<sup>1,2</sup> According to the Substance Abuse and Mental Health Services Administration (SAMHSA) National Survey on Drug Use and Health, one in five adults who felt a need for addiction treatment but did not receive treatment said the reason was because they did not know where to get it.<sup>3</sup> For most health care provider types-hospitals, nursing homes, psychiatric hospitals, rehabilitation facilities, home health care, and hospice-the federal government sponsors online provider treatment locators that display quality measures for providers. For example, the Centers for Medicare and Medicaid Services (CMS)'s Nursing Home Compare website allows the public to search for nursing homes and then compare them on structural quality measures like staff hours per resident and process and outcome measures drawn from inspection reports and clinical assessment data. Public-facing quality measures can drive quality improvements. CMS determined that performance improved on 60 percent of its 226 quality measures over 3 years.<sup>4</sup>

SAMHSA hosts the Behavioral Health Treatment Locator to help consumers find behavioral health treatment.<sup>5</sup> The National Institute on Alcohol Abuse and Alcoholism (NIAAA) hosts the NIAAA Alcohol Treatment Navigator to help consumers find treatment for alcohol use disorders.<sup>6</sup> Both websites use the SAMHSA Inventory of Behavioral Health Services (I-BHS) and direct input from states and providers to identity providers.<sup>7</sup> SAMHSA and NIAAA use information from the SAMHSA National Survey of Substance Abuse Treatment Services (N-SSATS) to describe the services offered by each provider.

Drawing from decades of research, the National Institute on Drug Abuse (NIDA), NIAAA, and SAMHSA have identified principles or "signs" of higher-quality addiction treatment programs. NIDA describes "13 principles of effective treatment," and NIAAA and SAMHSA advise consumers to look for "five signs of higher-quality treatment."<sup>8–10</sup>

The goal of this study was to determine what percentage of specialty addiction treatment facilities have the attributes or signs that indicate higher quality as identified by NIDA, NIAAA, and SAMHSA, to investigate whether the percentage of facilities offering higher quality has increased over time, and to reveal how the proportions vary by state. This information will help to focus efforts to improve addiction treatment quality.

#### Methods

Table 1 describes the characteristics put forth by NIDA, NIAAA, and SAMHSA. These agencies identify the following as signs of higher-quality programs:

- 1. Program uses evidenced-based behavioral health therapies,
- 2. Program offers medications for addiction,
- 3. Program is accredited,
- 4. Program attends to mental health and physical health needs,
- 5. Program offers recovery support services,
- 6. Treatment is readily available when needed,
- 7. Program personalizes the treatment plan for each patient, and
- 8. Patients stay in treatment long enough and receive continuous monitoring with adjustments to the treatment plan as needed.

#### Data

Data were from the N-SSATS for 2007–2017.<sup>11</sup> SAMHSA conducts the N-SSATS, an annual survey of all addiction facilities in the United States. The survey collects information on facility characteristics, service modalities, specific services provided, and types and counts of clients served. SAMHSA collects the N-SSATS from all facilities in I-BHS, a census of all addiction treatment facilities in the United States that captures public and private facilities and residential, outpatient, opioid treatment programs, and detoxification programs. Response rates over

Signs/attributes of higher quality	NIDA. Principles of Effective Treatment	NIAAA. How to Spot Quality Treatment	SAMHSA. Finding Quality Treatment for Substance Use Disorders
Evidence-based behavioral therapies	<b>Behavioral therapies</b> , including individual, family, or group counseling, are the most commonly used forms of drug use treatment.	Science-based therapies. Evidence-based options include both behavioral treatments and medications. Types of evidence- based behavioral treatment include the following: cognitive behavioral therapy, motivational enhancement therapy, contingency management approaches, behavioral couples and family counseling, brief interventions, 12-step facilitation therapy, and mindfulness-based relapse prevention.	<b>Evidence-Based Practices</b> . Does the program offer treatments that have been proven effective in treating substance use disorders, including medication management therapies like motivational therapy, cognitive behavioral therapy, drug and alcohol counseling, education about the risks of drug and alcohol use, and peer support?
Medications to treat addictions	<b>Medications</b> are an important element of treatment for many patients, especially when combined with counseling and other behavioral therapies.	Science-based therapies. Evidence-based options include both behavioral treatments and medications. Steer clear of any program, physician, or therapist who rejects medications out of hand ("We don't believe in drugs" or "We only offer drug-free treatment").	<b>Medication</b> . Does the program offer US Food and Drug Administration–approved medication for recovery from alcohol and opioid use disorders?
Accreditation		<b>Credentials: What are the</b> <b>provider's qualifications?</b> For specialty alcohol treatment programs, look for (1) a current license and accreditation by an independent review board, (2) counseling staff with current licenses and certification in addiction treatment, (3) at least one medical doctor on staff (hospital/rehab programs) or available to consult as needed (outpatient programs).	Accreditation. Has the program been licensed or certified by the state? Is the program currently in good standing in the state? Are the staff qualified? Good quality programs will have a good inspection record, and program staff should have received training in treatment of substance use and mental disorders and be licensed or registered in the state. Does the program conduct satisfaction surveys? Can they show you how people using their services have rated them?
Assesses for/ treats mental and physical health	Effective treatment attends to multiple needs of the individual, not just their drug use. To be effective, treatment must address the individual's drug use and any associated medical, psychological, social, vocational, and legal problems. It is also important that treatment be appropriate to the individual's age, gender, ethnicity, and culture. Treatment programs should test patients for the presence of HIV/ AIDS, hepatitis B and C, tuberculosis, and other infectious diseases and provide targeted risk-reduction counseling, linking patients to treatment if necessary. Many drug-addicted individuals also have other mental disorders. Because drug use and addiction often co-occur with other mental illnesses, patients presenting with one condition should be assessed for others. And when these problems co-occur, treatment should address both, including the use of	<b>Comprehensive assessment.</b> Early in the treatment process, the health professional should assess the person's alcohol use and other medical and behavioral issues. Steer clear of a provider who only asks about a person's alcohol and drug use.	

#### Table 1. Signs of higher-quality addiction treatment, as identified by NIDA, NIAAA, and SAMHSA

Signs/attributes of higher quality	NIDA. Principles of Effective Treatment	NIAAA. How to Spot Quality Treatment	SAMHSA. Finding Quality Treatment for Substance Use Disorders
Provides recovery Supports	An individual's treatment and services plan must be assessed continually and modified as necessary to ensure that it meets changing patient needs. A patient may require varying combinations of services and treatment components during the course of treatment and recovery. In addition to counseling or psychotherapy, a patient may require medication, medical services, family therapy, parenting instruction, vocational rehabilitation, or social and legal services. For many patients, a continuing care approach provides the best results, with the treatment intensity varying according to a person's changing needs.	<b>Continuing recovery support.</b> A good treatment provider will work with each patient to develop a long-term strategy for ongoing recovery support after the initial treatment plan ends.	<b>Supports.</b> Quality programs provide treatment for the long term, which may include ongoing counseling or recovery coaching and support and helps in meeting other basic needs like sober housing, employment supports, and continued family involvement.
Rapid access to treatment	<b>Treatment needs to be readily available.</b> Because individuals who are addicted to drugs may be uncertain about entering treatment, taking advantage of available services the moment people are ready for treatment is critical. Potential patients can be lost if treatment is not immediately available or readily accessible.		
Personalized treatment plan	No single treatment is appropriate for everyone. Matching treatment settings, interventions, and services to an individual's particular problems and needs is critical to their ultimate success in returning to productive functioning in the family, workplace, and society.	Personalized treatment plan. Based on the results of a comprehensive assessment, the therapist or doctor should work with the person entering treatment to develop a customized treatment plan. The person should have a role in developing a treatment plan that might extend beyond their drinking or substance use. Treatment plans should be customized to the specific needs of each person and should change in response to their progress.	
Treatment for a long enough period of time, with continuous monitoring	Remaining in treatment for an adequate period of time is critical. Research indicates that most addicted individuals need at least 3 months in treatment to significantly reduce or stop their drug use and that the best outcomes occur with longer durations of treatment. Medically assisted detoxification is only the first stage of addiction treatment and by itself does little to change long-term drug use. Patients should be encouraged to continue drug treatment following detoxification. Drug use during treatment must be monitored continuously because lapses during treatment do occur.		

#### Table 1. Signs of higher-quality addiction treatment, as identified by NIDA, NIAAA, and SAMHSA (continued)

Sources: National Institute on Drug Abuse (NIDA)<sup>12</sup>; National Institute on Alcohol Abuse and Alcoholism (NIAAA)<sup>13</sup>; Substance Abuse and Mental Health Services Administration (SAMHSA).<sup>10</sup>

the study period ranged from 89 to 95 percent of facilities. In 2017, 13,585 of 15,226 addiction facilities in the United States responded to the survey. As of 2014, SAMHSA administered an abbreviated version of the N-SSATS in even-numbered years; thus, data for the current study come from odd-numbered years.

#### **Measures**

N-SSATS data captured five of the eight characteristics of higher-quality treatment described by NIDA, NIAAA, and SAMHSA. The provision of evidence-based behavioral therapies is captured in the N-SSATS questions that ask whether the facility uses the following evidence-based behavioral approaches with their patients "sometimes," "often," or "always": cognitive behavioral therapy (CBT), motivational interviewing (MI), 12-step facilitation, and contingency management. We interpret the facility as offering these approaches if they responded "sometimes" because the use of these services would not be appropriate for every patient (i.e., "always"). N-SSATS captures whether the facility offers addiction medications by asking whether the facility can provide methadone, buprenorphine, or naltrexone to treat opioid use disorders. We aggregate these separate questions to create a measure of whether the facility can provide at least one of these opioid use disorder medications.

Facility accreditation is captured by N-SSATS questions about whether the facility was accredited by one of the following national accrediting organizations: The Joint Commission, Commission on Accreditation of Rehabilitation Facilities, National Committee for Quality Assurance, or Council on Accreditation. Routine assessment for mental health and physical conditions and ability to treat mental health conditions is measured using N-SSATS questions on whether the facility conducts mental health assessments, offers mental health services, and tests patients for hepatitis C, HIV, and sexually transmitted diseases (STDs). We aggregated these separate questions to create a measure of whether the facility tests for all of these conditions. Whether the facility offers recovery supports and which type of supports it offers is captured by N-SSATS questions

that ask whether the facility offers peer support/ mentoring, self-help groups, housing assistance, employment assistance, and transportation assistance.

#### Analysis

We calculated national averages for each measure and percent change over 2007, 2011, and 2017. We chose 2011 because it is close to the midpoint of the study period. We could not use the exact midpoint (2012) because data on some quality signals (e.g., evidence-based behavioral therapies) were not available in that year. We characterize variation across states in 2017 using the median and range of the metrics. We also created maps to portray variation among the states in 2017.

## Results

#### **National Averages**

As shown in Table 2, a greater percentage of addiction treatment facilities had attributes indicating higher quality in 2017 than in 2007. Most of the improvement occurred in the 2011–2017 period. Nonetheless, in 2017 fewer than 50 percent of facilities offered medications for opioid use disorder; testing for hepatitis C, HIV, and STDs; self-help groups; employment assistance; and transportation assistance.

In 2017, over 90 percent of facilities reporting using CBT and MI, whereas 56 percent used contingency management. Approximately 40 percent of facilities provided medications used to treat opioid dependence (an increase from 26 percent of facilities in 2007). Roughly 51 percent of facilities were accredited in 2017. Only 18 percent of facilities screened or tested for hepatitis C, HIV, and STDs. Approximately 52 percent reported that they assess their patients for mental health comorbidities, and 68 percent reported providing mental health services. The most commonly offered recovery support service was family counseling (83 percent of facilities), followed by peer support (57 percent), housing assistance (54 percent), self-help groups (46 percent), transportation assistance (44 percent), and employment assistance (39 percent).

Attributes of treatment quality	National averages (standard deviation)		Percent change			
	2007	2011	2017	2007–2017	2007–2011	2011-2017
Provides evidence-based behavioral t	herapies					
Uses cognitive behavioral therapy	90% (30%)	91% (29%)	94% (24%)	4%	1%	3%
Uses motivational interviewing	84% (37%)	87% (34%)	93% (26%)	10%	3%	7%
Uses 12-step facilitation	87% (33%)	77% (42%)	73% (44%)	-16%	-13%	-4%
Use contingency management	50% (50%)	58%(49%)	56%(50%)	12%	16%	-3%
Provides medication to treat addiction						
Offers any medications for OUD	26% (44%)	31% (46%)	40% (49%)	52%	19%	27%
Credentialing/accreditation						
Accredited by JC, CARF, NCQA, or COA	43% (49%)	43% (50%)	51% (50%)	19%	1%	18%
Assesses/treats mental and physical health						
Performs comprehensive mental health assessment	42% (49%)	44% (50%)	52% (50%)	24%	7%	16%
Provides mental health services	54% (50%)	60% (49%)	68% (47%)	26%	11%	13%
Tests for hepatitis C, HIV, and STDs	16% (37%)	16% (37%)	18% (39%)	11%	-3%	15%
Supportive recovery environment						
Offers peer support/mentoring	45% (50%)	50% (50%)	57% (50%)	26%	12%	12%
Offers self-help groups	47% (50%)	47% (50%)	46% (50%)	-1%	0%	-1%
Offers employment assistance	34% (47%)	37% (48%)	39% (49%)	15%	9%	5%
Offers housing assistance	43% (50%)	48% (50%)	54% (50%)	25%	10%	14%
Offers transportation assistance	36% (48%)	39% (49%)	44% (50%)	20%	9%	11%
Offers family counseling	72% (45%)	81% (39%)	83% (37%)	15%	12%	2%

#### Table 2. National averages of signs of higher-quality addiction facilities (2007, 2011, 2017)

Note: Standard deviation in parentheses; CARF = Commission on Accreditation of Rehabilitation Facilities; COA = Council on Accreditation; JC = Joint Commission; NCQA = National Committee for Quality Assurance; OUD = opioid use disorder; STD = sexually transmitted disease.

Source: Mark et al. analysis of N-SSATS 2007–2017.

#### **State Variation**

The percentage of facilities having the attributes indicating higher quality varied significantly among the states in 2017 (Table 3). CBT and MI use was high in all states, ranging from 80 to 99 percent of facilities. In contrast, the percentage of facilities within a state using 12-step facilitation ranged from 43 to 89 percent, and the percentage using contingency management ranged from 37 to 72 percent. The provision of medications for opioid use disorder ranged from 10 percent of facilities (in Hawaii) to 81 percent (in Rhode Island). The percentage of accredited facilities ranged from 15 percent (Colorado, North Dakota) to 89 percent (Alaska, Wyoming). The rate of facilities that screened for hepatitis C, HIV, and STDs ranged from 5 percent (Hawaii) to 38 percent (Nevada). The percentage range for comprehensive mental health assessments was 20 percent (Hawaii) to 74 percent (Alaska), and the percentage range for delivery of mental health services was 27 percent (Hawaii) to 96 percent (Wyoming). The proportion of facilities that offered family counseling ranged from 67 percent (Washington, DC) to 98 percent (Mississippi, Wyoming).

#### Table 3. State variation in signs of higher-quality addiction facilities

Attributes of treatment quality	State median	State range
Provides evidence-based behavioral therapies		
Uses cognitive behavioral therapy	94%	80%–99%
Uses motivational interviewing	93%	80%–99%
Uses 12-step facilitation	74%	43%-89%
Use contingency management	55%	37%-72%
Provides medication to treat addiction		
Offers any MAT for OUD	36%	10%–81%
Credentialing/accreditation		
Accredited by JC, CARF, NCQA, or COA	52%	15%–89%
Assesses/treats mental and physical health		
Performs comprehensive mental health assessment	53%	20%-74%
Provides mental health services	70%	27%-96%
Tests for hepatitis C, HIV, and STDs	17%	5%-38%
Supportive recovery environment		
Offers peer support/mentoring	56%	34%-78%
Offers self-help groups	45%	23%-68%
Offers employment assistance	37%	21%-60%
Offers housing assistance	56%	24%-81%
Offers transportation assistance	42%	22%-70%
Offers family counseling	85%	67%–98%

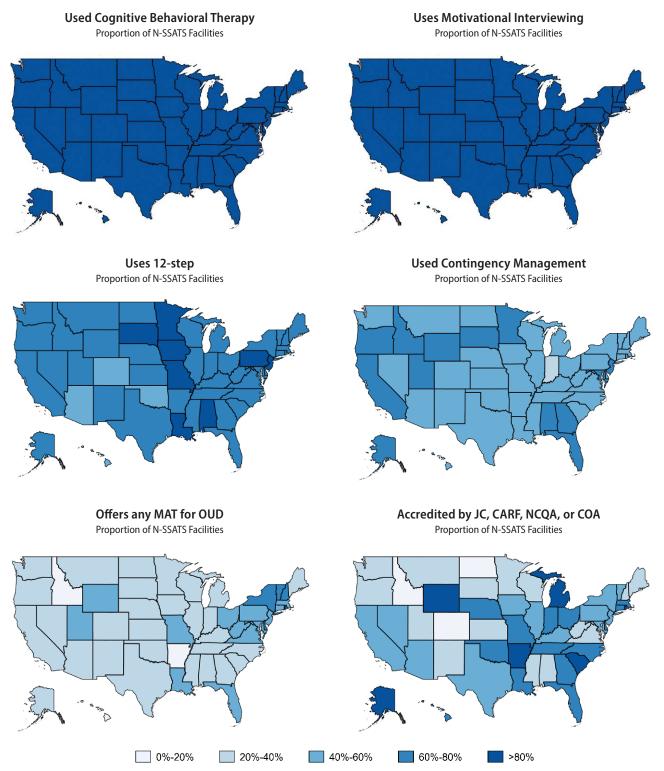
Note: CARF = Commission on Accreditation of Rehabilitation Facilities; COA = Council on Accreditation; JC = Joint Commission; MAT = medication-assisted treatment; NCQA = National Committee for Quality Assurance; OUD = opioid use disorder; STD = sexually transmitted disease.

Source: Mark et al. analysis of National Survey of Substance Abuse Treatment Services (N-SSATS) 2017.

Figures 1 and 2 display maps of the percentage of facilities in each state having each quality characteristic in 2017. Figure 1 presents the evidencebased practices, medication, and accreditation characteristics. As noted, CBT and MI were used frequently in all states; 12-step facilitation and contingency management were more commonly used in certain regions (e.g., contingency management was used more commonly in the Southeast). Northeast states led the nation in the provision of medications to treat opioid use disorders, with over 60 percent of facilities providing medications in New Hampshire, New York, Vermont, and Rhode Island. Facilities were more likely to be accredited in the Eastern and Southcentral United States and less likely to be accredited in the upper Midwest.

Figure 2 shows the mental and physical health and recovery supports characteristics. Comprehensive mental health assessments were most common in the Southeast (i.e., Mississippi, Tennessee), Midwest (i.e., Indiana, Ohio, Wisconsin), and Mountain West (i.e., Arizona, Idaho, New Mexico, Utah, Wyoming). The provision of mental health services was highest in the Mountain West (i.e., Idaho, Utah, Wyoming) and parts of the Southeast (i.e., Mississippi, Tennessee, Virginia, West Virginia) and was lowest in some Midwestern states (i.e., Illinois, Iowa, Minnesota) and some parts of the Southeast (i.e., Alabama, South

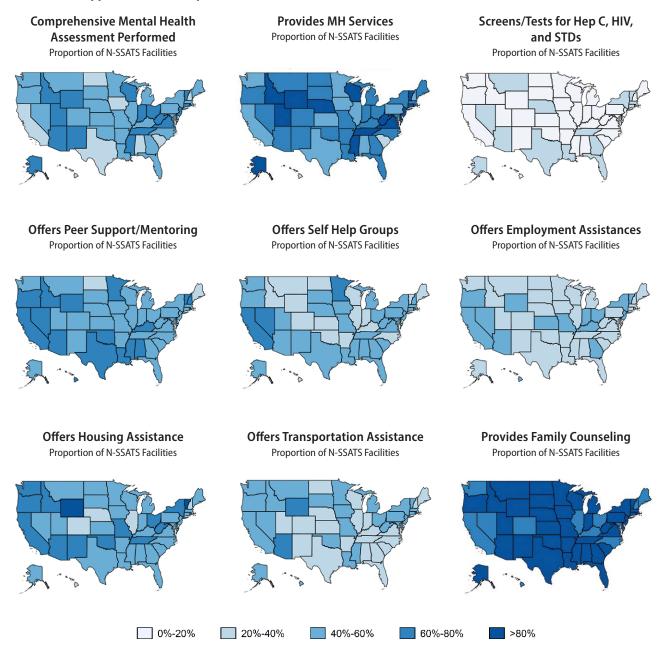
# Figure 1. State variation in signs of higher-quality addiction treatment: Evidence-based behavioral therapies, medication provision, and credentialing/accreditation, 2017



Notes: CARF = Commission on Accreditation of Rehabilitation Facilities; COA = Council on Accreditation; JC = Joint Commission; MAT = medication-assisted treatment; MH = mental health; NCQA = National Committee for Quality Assurance; N-SSATS = National Survey of Substance Abuse Treatment Services; OUD = opioid use disorder; STD = sexually transmitted disease.

Source: Mark et al. analysis of N-SSATS 2017.

# Figure 2. State variation in signs of higher-quality addiction treatment: Provision of mental and physical health care and services supportive of recovery, 2017



Notes: CARF = Commission on Accreditation of Rehabilitation Facilities; COA = Council on Accreditation; JC = Joint Commission; MAT = medication-assisted treatment; MH = mental health; NCQA = National Committee for Quality Assurance; N-SSATS = National Survey of Substance Abuse Treatment Services; OUD = opioid use disorder; STD = sexually transmitted disease.

Source: Mark et al. analysis of N-SSATS 2017.

Carolina). Rates of screening for infectious diseases were low in all states.

The percentage of facilities offering recovery supports differed among the states. Southern states (i.e., Alabama, Louisiana, Mississippi, Texas) commonly offered peer support services and self-help group facilitation. Western states and diverse states like New York, Ohio, Vermont, and Wyoming frequently offered employment, housing, and transportation support. Most states offered family counseling. Data on these measures for all states for 2007, 2011, and 2017 are in an online appendix.

## Discussion

NIDA, NIAAA, and SAMHSA have compiled signs (i.e., attributes or principles) associated with higherquality addiction treatment. SAMHSA and NIAAA have encouraged consumers to use these to help them select among treatment providers. SAMHSA and NIAAA also offer online directories consumers can use to search for addiction treatment specialty programs. However, in 2017, approximately half or fewer of the facilities that populate these online directories offered the following services that NIDA, NIAAA, and SAMHSA consider indicative of higherquality addiction treatment: medications for opioid use disorder; mental health assessments; testing for hepatitis C, HIV, and STDs; self-help groups; employment assistance, and transportation assistance. Moreover, consumers' ability to find facilities that offer these services vary greatly depending on where they live.

Although the N-SSATS data have been collected by SAMHSA for many years and published in numerous peer-reviewed journal articles that describe addiction treatment programs, the data have limitations. First, N-SSATS relies on facilities to self-report information but does not verify it with secondary data sources like chart reviews. Second, the N-SSATS only captures information from specialty addiction facilities, but many individuals seek treatment outside of these specialty addiction treatment settings. The N-SSATS data exclude addiction treatment provided by independently practicing physicians, treatment in jails or prisons, and integrated care settings like primary care clinics. Third, the N-SSATS data do not capture several of the dimensions highlighted by the federal government as good practices, like rapid access to treatment, personalized treatment planning, and treatment for a sufficient time. Future efforts to capture these data elements could help improve consumers' ability to find higher-quality treatment.

Although the signs of higher quality endorsed by NIAAA, NIAAA, and SAMHSA are grounded in research, the quantity and quality of the evidence base differ among the signs. For example, there is strong evidence from numerous randomized clinical trials that medications to treat opioid use disorders are effective in improving patient outcomes. In contrast, evidence on the association between accreditation and effectiveness is more limited. Studies find that accredited specialty addiction treatment facilities are more likely to offer medications to treat opioid and alcohol use disorders but that accredited facilities are no more likely to offer CBT.<sup>14–17</sup> We know of no research that demonstrates patients treated in accredited addiction treatment facilities have better outcomes on average. In general, more research is needed to build the evidence base to support and refine NIH's and SAMHSA's principles and signs of higher-quality addiction treatment.

The characteristics of higher-quality addiction treatment programs described by the federal agencies and used in this paper are structure and process measures. Ideally, higher-quality addiction programs would be identified as providers whose patients have the best outcomes (after risk adjusting, such as for patient severity of illness at intake). The goal of addiction treatment is to reduce the symptoms of addiction like impaired functioning in social relationships and employment, excessive and dangerous substance use, and cravings. Using outcomes as a quality measure for addiction programs is particularly important because subtle (or "nonspecific") factors that are difficult to capture in structure and process measures may be critical for the effectiveness of treatment, like an empathetic clinician-patient relationship.18,19

The limitations of the data and the measures should not overshadow the main finding of this analysisthat many facilities do not appear to offer higherquality addiction treatment. In general, governments have leveraged both market-based and regulatory approaches to improve the quality of health care. For example, a regulatory approach would be for states to align their licensing criteria with the criteria for higher quality established by NIH and SAMHSA. The federal government has encouraged improvements in substance use disorder treatment through its Medicaid demonstration authorities, which employ both incentives and regulatory levers. The CMS Medicaid 1115 substance use disorder demonstration allows states that want to participate to receive federal matching payments for residential addiction

treatment, which has historically been excluded from Medicaid if those states meet "industry standards" for higher-quality addiction treatment.<sup>20</sup>

Governments could also pursue market-oriented approaches like disseminating information on which facilities have higher-quality treatment and allowing market forces to react to that information. To date, the SAMHSA and NIAAA treatment locators do not include quality metrics that empower consumers to readily identify higher-quality programs. In contrast, CMS provider locators for nursing homes, hospitals, rehabilitation facilities, psychiatric hospitals, home health programs, and hospice programs all have public-facing locators linked to quality metrics. Public-facing quality measures can drive quality improvements by giving information that allows consumers to shop based on quality and by encouraging providers to compete for patients by improving their quality. Some states, like Connecticut, have mental health and addiction facility quality dashboards that display a facility's outcomes relative

to those of its peers and to benchmarks; however, these are not meant to be public-facing tools.<sup>21</sup> The nonprofit organization Shatterproof is piloting a public-facing addiction treatment quality system. Research is needed to understand which of these approaches are most effective in promoting the quality of addiction treatment.

Substance use disorders are a leading cause of death in the United States. Treatment can reduce death rates and restore an individual's ability to function in major life domains. However, as with other areas of health care, there are gaps between what we know works and what treatment is delivered in practice. Although NIH and SAMHSA have tried to give consumers tools to find higher-quality providers, a large portion of providers do not offer the services described as indicative of higher-quality. Multipronged federal, state, and private initiatives are needed to close these quality gaps.

#### References

- 1. Grassley at hearing on one-year anniversary of landmark anti-opioid legislation: prepared opening statement by U.S. Senator Chuck Grassley of Iowa Chairman, Senate Finance Comm. hearing on treating substance misuse in America. 2019 Oct 24. Available from: https://www.finance.senate.gov/chairmans-news/ grassley-at-hearing-on-one-year-anniversary-oflandmark-anti-opioid-legislation
- 2. Armstrong D, Allen E. Desperate for addiction treatment, patients are pawns in lucrative insurance fraud scheme. Boston Globe. 2017 Jul 7.
- Park-Lee E, Lipari RN, Hedden SL, Kroutil LA, Porter JD. Receipt of services for substance use and mental health issues among adults: results from the 2016 National Survey on Drug Use and Health. NSDUH Data Review. Bethesda (MD): Substance Abuse and Mental Health Services Administration; 2017 Sep [cited 2020 May 1]. Available from: https:// www.samhsa.gov/data/report/receipt-servicessubstance-use-and-mental-health-issues-amongadults-results-2016-national
- 4. Centers for Medicare & Medicaid Services (CMS). 2018 national impact assessment of the Centers for Medicare & Medicaid Services (CMS) quality measures report. Baltimore (MD): CMS; 2018 Feb 28. Available from: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures/ Downloads/2018-Impact-Assessment-Report.pdf
- Substance Abuse and Mental Health Services Administration. Behavioral health treatment locator. c2020 [cited 2020 May 1] Available from: https:// findtreatment.samhsa.gov/
- National Institute on Alcohol Abuse and Alcoholism. NIAAA alcohol treatment navigator; c2020 [cited 2020 May 1]. Available from: https://alcoholtreatment.niaaa. nih.gov/
- Substance Abuse and Mental Health Services Administration. Inventory of Behavioral Health Services (I-BHS); c2020 [cited 2020 May 1]. Available from: https://wwwdasis.samhsa.gov/dasis2/isatsonline. htm

- National Institute on Alcohol Abuse and Alcoholism. How to spot quality treatment. 2018. c2020 [cited 2020 May 1] Available from: https://alcoholtreatment.niaaa. nih.gov/how-to-find-alcohol-treatment/how-to-spotquality-treatment
- National Institute on Drug Abuse (NIDA). Principles of drug addiction treatment: A research-based guide. 3rd ed. Bethesda (MD): NIDA; 2018. https://www. drugabuse.gov/publications/principles-drug-addictiontreatment-research-based-guide-third-edition/preface. [cited 2019 Feb 4]
- Substance Abuse and Mental Health Services Administration. Finding quality treatment for substance use disorders. 2018. Available from: https:// store.samhsa.gov/product/Finding-Quality-Treatmentfor-Substance-Use-Disorders/PEP18-TREATMENT-LOC
- 11. Center for Behavioral Health Statistics and Quality. National Survey of Substance Abuse Treatment Services (N-SSATS): 2017 data on substance abuse treatment facilities; 2018. [cited 2020 May 1] Available from: https://wwwdasis.samhsa.gov/dasis2/ nssats/2017\_nssats\_rpt.pdf
- 12. National Institute on Drug Abuse. Principles of effective treatment. In: Principles of drug addiction treatment: A research-based guide. 3rd ed. Bethesda (MD): NIDA; 2018. https://www.drugabuse.gov/ publications/principles-drug-addiction-treatmentresearch-based-guide-third-edition/principleseffective-treatment [cited 2020 Apr 30]
- Center for Behavioral Health Statistics and Quality. National Survey of Substance Abuse Treatment Services (N-SSATS): 2017 data on substance abuse treatment facilities; 2018. [cited 2020 May 1] Available from: https://wwwdasis.samhsa.gov/dasis2/ nssats/2017\_nssats\_rpt.pdf
- Alinsky RH, Hadland SE, Matson PA, Cerda M, Saloner B. Adolescent-serving addiction treatment facilities in the United States and the availability of medications for opioid use disorder. J Adolesc Health 2020 Apr;S1054-139X(20)30106-3.

- Knudsen HK, Roman PM. Dissemination, adoption, and implementation of acamprosate for treating alcohol use disorders. J Stud Alcohol Drugs 2014;75(3):467–75. https://doi.org/10.15288/ jsad.2014.75.467
- 16. Knudsen HK, Ducharme LJ, Roman PM. Early adoption of buprenorphine in substance abuse treatment centers: data from the private and public sectors. J Subst Abuse Treat 2006;30(4):363–73. https:// doi.org/10.1016/j.jsat.2006.03.013
- Bride BE, Abraham AJ, Roman PM. Organizational factors associated with the use of contingency management in publicly funded substance abuse treatment centers. J Subst Abuse Treat 2011;40(1):87– 94. https://doi.org/10.1016/j.jsat.2010.08.001
- Wampold BE, Imel ZE. The great psychotherapy debate: The evidence for what makes psychotherapy work. New York: Routledge; 2015. https://doi. org/10.4324/9780203582015
- Wild TC, Wolfe J. The clinical course of addiction treatment: the role of nonspecific therapeutic factors. In: Evidence-based addiction treatment. Burlington (MA): Elsevier, Inc; 2009. pp. 21–45. https://doi. org/10.1016/B978-0-12-374348-0.00002-1
- 20. Centers for Medicare and Medicaid Services. 1115 substance use disorder demonstrations. c2020 [cited 2020 May 1] Available from: https://www. medicaid.gov/resources-for-states/innovationaccelerator-program/program-areas/substanceuse-disorders/1115-substance-use-disorderdemonstrations/index.html
- 21. Connecticut Department of Mental Health and Addiction Services. DMHAS EQMI provider dashboard quality reports forums. 2013. Available from: https://www.ct.gov/dmhas/lib/dmhas/eqmi/ DashboardForums.pdf

RTI International is an independent, nonprofit research institute dedicated to improving the human condition. We combine scientific rigor and technical expertise in social and laboratory sciences, engineering, and international development to deliver solutions to the critical needs of clients worldwide.

www.rti.org/rtipress