



**U.S. Department of Health and Human Services
Assistant Secretary for Planning and Evaluation
Office of Disability, Aging and Long-Term Care Policy**

EXAMINING SUBSTANCE USE DISORDER TREATMENT DEMAND AND PROVIDER CAPACITY IN A CHANGING HEALTH CARE SYSTEM:

FINAL REPORT

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Office of the Assistant Secretary for Planning and Evaluation

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This report was prepared under contract #HHSP23320100019WI between HHS's ASPE/DALTCP and Mathematica Policy Research. For additional information about this subject, you can visit the DALTCP home page at <https://aspe.hhs.gov/office-disability-aging-and-long-term-care-policy-daltcp> or contact the ASPE Project Officer, Judith Dey, at HHS/ASPE/DALTCP, Room 424E, H.H. Humphrey Building, 200 Independence Avenue, S.W., Washington, D.C. 20201. Her e-mail address is: Judith.Dey@hhs.gov.

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Final Report**

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The opinions and views expressed in this report are those of the authors. They do not necessarily reflect the views of the Department of Health and Human Services, the contractor or any other funding organization.

TABLE OF CONTENTS

ACRONYMS	vi
EXECUTIVE SUMMARY	vii
I. INTRODUCTION	1
A. Purpose of Report	1
B. Report Methods	2
II. DEMAND FOR SUBSTANCE USE DISORDER TREATMENT	5
A. How Many People are Receiving SUD Treatment Services and What Services are They Receiving?	5
B. How Does Service Receipt Vary Geographically, by Level of Urbanicity and by Facility Operation?	10
C. What is the Relationship between the Prevalence of SUDs and Demand for Care? How Does the Relationship Vary Geographically?	12
D. What Evidence Exists about How Increases in Medicaid Enrollment Have Impacted Demand?	15
III. SUPPLY OF SUBSTANCE USE DISORDER TREATMENT	20
A. What are the Professions and SUD Treatment Credentials of the Current Workforce?	20
B. What is the Current Capacity of Service Providers to Supply SUD Treatment Services? How Does Provider Capacity Differ Across Geographic Areas? What Disparities in Care Access are Evident? How Does Provider Capacity Differ in Relation to Various Services, such as Inpatient, Residential, Intensive Outpatient, Outpatient, and Pharmacotherapy?	24
C. What is the Current Capacity of SUD Treatment Organizations to Participate in Efforts to Integrate SUD Treatment within the Broader Health Care System? To What Degree are SUD Treatment Providers Used to Billing Medicaid?	30
D. How Have Wages for SUD Treatment Staff Changed Over the Last Decade?	31
IV. DISCUSSION	34
REFERENCES	36
APPENDICES	
APPENDIX A. Data Sources	A-1
APPENDIX B. Detailed Tables	A-5

LIST OF FIGURES AND TABLES

FIGURE ES.1.	Number of Individuals Who Received Any Treatment or Specialty Treatment, NSDUH 2004-2014	viii
FIGURE ES.2.	Hours of Care per 100 Outpatient Clients per Week, by Facility Characteristics, N-SSATS 2016	x
FIGURE ES.3.	Staff Hours of Care per 100 Outpatient Clients per Week, by Whether Facility Provided Pharmacotherapy, N-SSATS 2016	xi
FIGURE II.1.	Number of Individuals Who Received Any Treatment or Specialty Treatment, NSDUH 2004-2014	5
FIGURE II.2.	Number of Clients by Urbanicity, N-SSATS 2013 and 2015	11
FIGURE II.3.	Number of Individuals Age 12 and Older with Abuse of or Dependence on Alcohol or Illicit Drugs in the Past Year, NSDUH 2002-2014.....	13
FIGURE II.4.	Percentage of Individuals Age 12-64 with Abuse or Dependence Who Received Specialty SUD Treatment, 2013-2014.....	14
FIGURE II.5.	Number of Individuals Who Received Specialty SUD Treatment or Felt They Needed but Did Not Receive Treatment, NSDUH, 2004-2014.....	15
FIGURE II.6.	Estimated Rate of Treatment Receipt among Medicaid Expansion Population Ages 12-64 with an SUD, 2014	18
FIGURE III.1.	Distribution of Paid FTEs by Staff Type, 2016	21
FIGURE III.2.	Distribution of FTE Medical Staff, by Training.....	22
FIGURE III.3.	Distribution of FTE Counseling Staff, by Education Level.....	22
FIGURE III.4.	Percentage of Specialty SUD Treatment Staff Certified in Addiction Treatment, by Type of Staff	23
FIGURE III.5.	Staff Hours per 100 Outpatient Clients per Week, by Facility Services Offered, 2016	25
FIGURE III.6.	Staff Hours per 100 Outpatient Clients per Week, by Urbanicity, Operation, and Size, 2016.....	26

FIGURE III.7.	Percentage of Facilities Offering Any Pharmacotherapies, 2013 and 2016.....	27
FIGURE III.8.	Percentage of Facilities Offering Opioid-Related Pharmacotherapies, 2013 and 2016	28
FIGURE III.9.	Percentage of Facilities Offering Opioid-Related and Any Pharmacotherapies, 2016	28
FIGURE III.10.	Trends in Wage Gaps for SUD Treatment Staff, BLS OES 2006-2016.....	32
FIGURE III.11.	Gap Between Mean Hourly Wage for All Occupations and Occupations with SUD Treatment Staff, BLS OES 2006-2016	33
<hr/>		
TABLE ES.1.	Number of Clients by Setting of Care, N-SSATS 2013 and 2015	ix
TABLE II.1.	Number of Individuals Who Received Any Treatment or Specialty Treatment, NSDUH 2015-2016	6
TABLE II.2.	Number of Individuals Receiving Any Specialty SUD Treatment by the Settings in Which They Received Care, NSDUH 2012-2014	6
TABLE II.3.	Number of Individuals Receiving Any Specialty SUD Treatment by the Settings in Which They Received Care, NSDUH 2015-2016	7
TABLE II.4.	Services Provided by Setting of Care, N-SSATS 2013 and 2015	8
TABLE II.5.	Distribution of Discharges by Length of Stay, TEDS 2012 and 2014.....	9
TABLE II.6.	Number and Percentage of Specialty SUD Treatment Admissions by Primary Substance, TEDS 2004 and 2014	10
TABLE II.7.	Percentage of Population with an SUD by Type of Substance and Age Group, NSDUH 2002 and 2015	13
TABLE II.8.	Percentage of Individuals Ages 12-64 with SUDs Who Were Enrolled in Medicaid or Uninsured in 2009-2013 versus 2014, by SUD Type	17
TABLE II.9.	Estimated Increase in Medicaid Enrollment Associated with Medicaid Expansion for Individuals Ages 12-64 with an SUD, by SUD Type	17

TABLE II.10.	Percentage of Individuals Ages 12-64 with SUDs Who Were Enrolled in Medicaid Who Used Specialty Treatment in 2009-2013 versus 2014, by SUD Type	19
TABLE II.11.	Number of Individuals Ages 12-64 Not Meeting Criteria for an SUD Who Received Specialty SUD Treatment in 2009-2013 versus 2014, by Medicaid Enrollment.....	19
TABLE III.1.	Staff Hours per 100 Outpatient Clients per Week, by Type of Staff and Availability of Pharmacotherapy, 2016	25
TABLE III.2.	Percentage of Facilities Accepting Indicated Insurance Type.....	31
TABLE B.1.	Distribution of Specialty Treatment Receipt by Geographic Location and Type of Service, 2013 and 2015	A-6
TABLE B.2.	Distribution of Specialty Treatment Receipt by State and Type of Service, 2013 and 2015	A-7
TABLE B.3.a.	Number of Clients Receiving Medications by Geographic Location and Facility Characteristics, 2013 and 2015.....	A-9
TABLE B.3.b.	Proportion of Clients Receiving Medications by Geographic Location, 2013 and 2015.....	A-10
TABLE B.4.a.	Number of Clients Receiving Medications by State, 2013 and 2015.....	A-11
TABLE B.4.b.	Proportion of Clients Receiving Medications by State, 2013 and 2015.....	A-13
TABLE B.5.	Substance Dependence or Abuse for Specific Substances in the Past Year Among Persons Age 12 or Older, 2002-2015	A-15
TABLE B.6.	Proportion of Individuals 12 or Older Reporting Symptoms of SUD but Not Receiving Any Treatment, by State, 2013-2014	A-16
TABLE B.7.	Total Paid Staff Working in Specialty SUD Treatment Facilities in the United States, by Profession, 2016	A-18
TABLE B.8.	Total Unpaid Staff Working in Specialty SUD Treatment Facilities in the United States, by Profession, 2016.....	A-19
TABLE B.9.a.	Number and FTEs for Paid Medical Staff by Profession and State, 2016.....	A-20
TABLE B.9.b.	Percentage of Medical Staff Certified in Addiction Treatment by Profession and State, 2016	A-22

TABLE B.10.a.	Number of FTEs for Paid Counseling and Support Staff by Profession and State, 2016	A-24
TABLE B.10.b.	Percentages of Counseling and Other Support Staff Certified in Addiction Treatment by Profession and State, 2016.....	A-26
TABLE B.11.a.	FTE Medical Staff and Percentage Certified in Addiction Treatment by Profession and Facility Characteristic, 2016	A-28
TABLE B.11.b.	FTE Counseling Staff and Percentage Certified in Addiction Treatment by Profession and Facility Characteristic, 2016	A-29
TABLE B.12.a.	Number of Staff Hours per 100 Outpatient Clients per Week in Specialty SUD Treatment Facilities Providing Only Outpatient Services by Type of Staff and State, 2016 (all facilities)	A-30
TABLE B.12.b.	Number of Staff Hours per 100 Outpatient Clients per Week in Specialty SUD Treatment Facilities Providing Only Outpatient Services by Type of Staff and State, 2016 (pharmacotherapy provided).....	A-32
TABLE B.12.c.	Number of Staff Hours per 100 Outpatient Clients per Week in Specialty SUD Treatment Facilities Providing Only Outpatient Services by Type of Staff and State, 2016 (no pharmacotherapy provided).....	A-34
TABLE B.13.	Number of Staff Hours per 100 Outpatient Clients per Week in Specialty SUD Treatment Facilities Providing Only Outpatient Services, by Type of Services Offered at Facility, 2016.....	A-36
TABLE B.14.	Number of Staff Hours per 100 Outpatient Clients per Week in Specialty SUD Treatment Facilities Providing Only Outpatient Services, by Facility Characteristics, 2016	A-37
TABLE B.15.	Number and Percentage of Facilities Providing Any Pharmacotherapy or Opioid-Related Pharmacotherapy, by Facility Characteristics, 2013 and 2016.....	A-38
TABLE B.16.	Number and Percentage of Facilities Providing Any Pharmacotherapy or Opioid-Related Pharmacotherapy, by State, 2013 and 2016.....	A-39
TABLE B.17.	Number and Percentage Change in Residential and Inpatient-Designated Beds and Utilization Rate by State, 2013 and 2015.....	A-41

ACRONYMS

The following acronyms are mentioned in this report and/or appendices.

ACA	Affordable Care Act
BLS	Bureau of Labor Statistics
CL	Confidence Limit
CMS	HHS Centers for Medicare and Medicaid Services
DSM-IV-TR	Diagnostic and Statistical Manual of Mental Disorders, 4 th Edition, Text Revision
FP	For-Profit
FTE	Full-Time Equivalent
HHS	U.S. Department of Health and Human Services
HIV	Human Immunodeficiency Virus
IAP	Innovation Accelerator Program
IC&RC	International Certification and Reciprocity Consortium
MH	Mental Health
MHPAEA	Mental Health Parity and Addiction Equity Act
N-SSATS	National Survey of Substance Abuse Treatment Services
NA	Not Available
NAADAC	National Association for Alcoholism and Drug Abuse Counselors
NP	Non-Profit
NSDUH	National Survey on Drug Use and Health
OES	Occupation Employment Survey
OTP	Opioid Treatment Program
SAMHSA	HHS Substance Abuse and Mental Health Services Administration
SUD	Substance Use Disorder
TEDS	Treatment Episode Data Set

EXECUTIVE SUMMARY

Despite federal policies enacted within the last decade aimed at promoting insurance coverage for substance use disorders (SUDs), the existing SUD treatment workforce may be insufficient to accommodate the potential increase in demand for care and other factors may be contributing to stagnant treatment utilization rates. To address this concern, in September 2014, the U.S. Department of Health and Human Services (HHS) Office of the Assistant Secretary for Planning and Evaluation contracted with Mathematica Policy Research to conduct this project to assess current demand for SUD treatment and the state of provider capacity in the SUD treatment field. The key study findings on the demand for and supply of SUD treatment are summarized below.

Demand for SUD Treatment

Uninsured rate among individuals with SUD declined following ACA implementation.

The uninsured rate among individuals 12-64 with an SUD declined to 20 percent in 2014 from an average rate of 25 percent between 2009 and 2013. Most of this decline resulted from an increase in the rate of Medicaid enrollment, from 13 percent between 2009 and 2013 to 18 percent in 2014. This change added about 1 million individuals with SUDs to the Medicaid program.

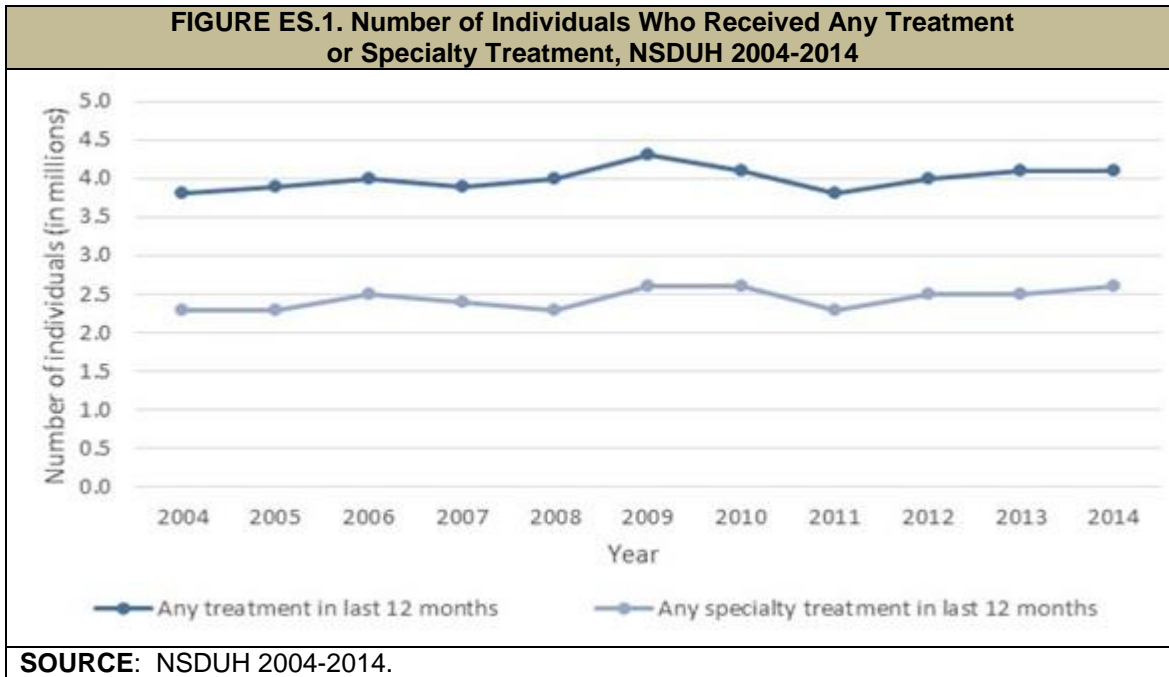
Nevertheless, the rate of SUD treatment receipt did not increase substantially in the initial years following implementation of the ACA.

Despite the increase in insurance coverage among individuals with SUDs, evidence from multiple data sources indicates there has been no or only a small increase in treatment service use since the beginning of 2014.

Overall treatment use has remained constant, according to the National Survey on Drug Use and Health (NSDUH). According to aggregate estimates from the NSDUH, the number of individuals receiving any SUD treatment in the past year remained constant between 2004 and 2014, at about 4 million individuals (Figure ES.1). About 60 percent of these individuals (2.2-2.6 million individuals per year) received treatment in a specialty setting, which the HHS Substance Abuse and Mental Health Services Administration (SAMHSA) defined as any of the following types of facilities: hospitals (inpatient only), drug or alcohol rehabilitation facilities (inpatient or outpatient), or mental health centers.¹ Because of methodological changes in the NSDUH survey

¹ SAMHSA did not count positive responses to NSDUH questions regarding treatment at an emergency room, private doctor's office, self-help group, prison or jail, or hospital as an outpatient as specialty treatment.

implemented in 2015, the survey’s estimate of 3.7 million and 2.3 million individuals receiving any and specialty treatment, respectively, in 2015 are not comparable to estimates from earlier years. According to NSDUH, between 2015 and 2016 there was again no significant change in the number of individuals receiving any and specialty treatment in the past year.



National Survey of Substance Abuse Treatment Services (N-SSATS) counts of clients in treatment indicate a small increase in the number of clients in care. In contrast to the NSDUH, which measures whether a person had any treatment in the past year based on person-level responses, N-SSATS measures counts of clients in care at a point-in-time as reported by specialty SUD treatment facilities.²

N-SSATS client counts indicate a small increase in the number of clients in care between 2013 and 2015 (4.5 percent over two years), or about 56,000 individuals. About 40 percent of the growth was related to increases in inpatient hospital (which had a change of 65.6 percent) and residential care (which had a change of 11.3 percent) (Table ES.1). The increases in hospital use align with sharp increases in opioid overdoses (Rudd et al. 2016) and opioid-related admissions to intensive care units³

² For the NSDUH SAMHSA defines specialty treatment based on the setting of care as described above. The N-SSATS universe is limited to specialty treatment facilities. These facilities have units or programs focused on provision of SUD treatment. Thus, facilities may not be defined as “specialty” in both surveys. For example, a general hospital or mental health center would not be included in the N-SSATS universe unless they have a treatment program or unit designated for SUD treatment. These settings are, however, consider specialty treatment for NSDUH.

³ Stevens et al. (2017) found a 34 percent increase in opioid overdose-related admissions to hospital intensive care units between January 2009 and September 2015 in a study of 162 hospitals in 44 states.

observed in this period. Because NSDUH excludes institutionalized individuals from its sample, N-SSATS is a more accurate source of trends in institutional service use.

The lack of change in the population with service use in the past year based on NSDUH suggests that the increase in point-in-time outpatient clients observed in N-SSATS stems from a longer duration of care. Overall, the estimated increase in SUD treatment use was minimal relative to the increases in insurance coverage and the level of unmet treatment needs.

Type of Care Within Setting	2013	2015	% Change
Total	1,249,629	1,305,647	4.5%
Outpatient	1,127,235	1,161,456	3.0%
Residential (non-hospital)	107,727	119,900	11.3%
Hospital inpatient	14,667	24,291	65.6%

SOURCE: N-SSATS 2013 and 2015.
NOTE: N-SSATS surveys the universe of specialty SUD treatment facilities. In 2013 and 2015, respectively, the survey had a 94% and 92% response rate. Estimates are not adjusted for facility or item non-response. For inpatient and residential services counts indicate the number of clients in treatment on the last working day in March of each survey year. For outpatient services counts indicate the number of clients receiving services during March who are still enrolled in treatment on the last working day in March.

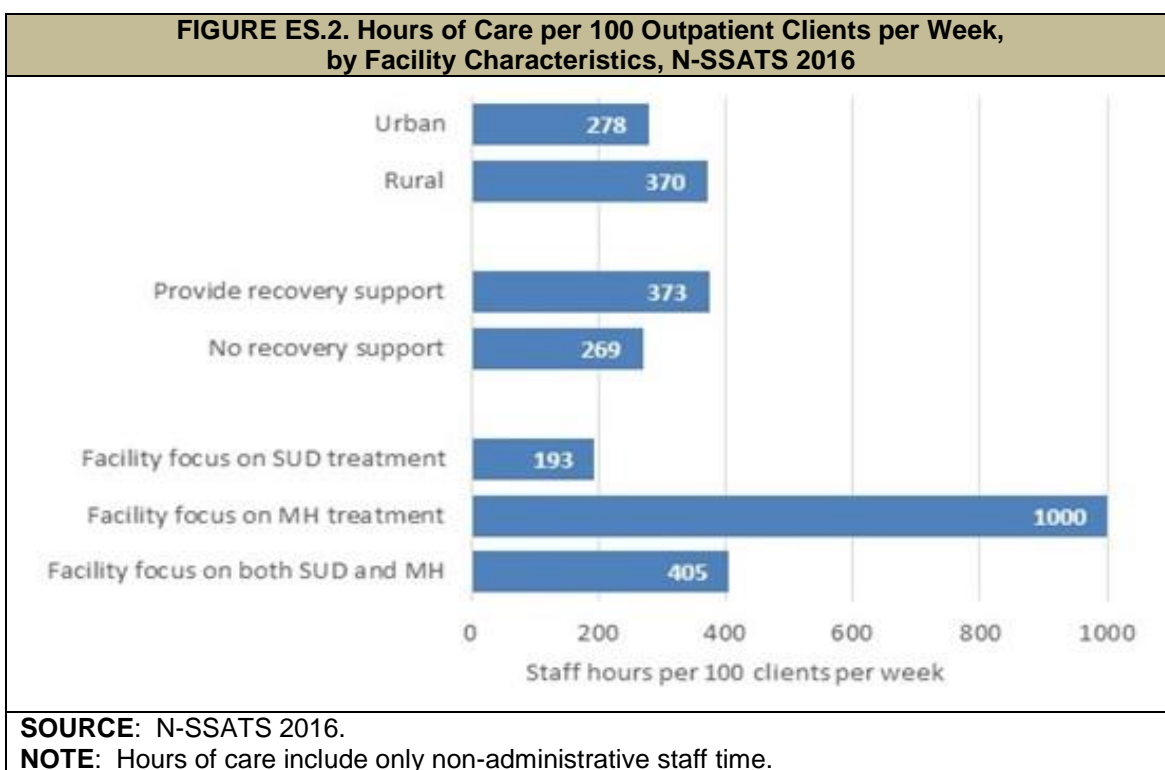
Lack of perceived need for treatment presents challenges in providing treatment services to those with SUDs.

Increasing treatment use for individuals with SUDs has the potential to substantially improve their welfare and that of their families as well as reduce societal and economic losses associated with SUDs, such as criminal justice costs, productivity loss, and mortality and morbidity due to accidents. The increased insurance coverage provided through recent federal policy initiatives resulted in, at most, small increases in treatment use. An important reason insurance coverage did not result in a significant expansion in treatment use is that, according to the 2015 NSDUH (Lipari et al. 2016), 95.4 percent of individuals who met criteria for an SUD but who did not receive specialty treatment (19.3 million people) did not feel they needed treatment. Among the remaining small percentage (4.6 percent, or 880,000 people) who felt they needed treatment but did not get it, 64.4 percent (about 567,000 people) reported making no effort to get treatment. Thus, expanding treatment use will require a multifaceted approach including changing attitudes about alcohol misuse and illicit drug use, increasing public awareness of treatment effectiveness, reducing stigma associated with SUD treatment, addressing financial barriers, and increasing primary care physicians' role in screening, treatment and referral.

Supply of SUD Treatment

The SUD treatment workforce comprises counselors, medical professionals, and support staff.

The 2016 N-SSATS survey found 197,559 full-time equivalent (FTE)⁴ paid staff and 6,726 unpaid staff in specialty SUD treatment facilities in 2016.⁵ About two-fifths of the FTE paid staff were counseling staff (that is, no-degree or degreed counselors); the other three-fifths were about evenly divided between medical staff (that is, physicians, nurses, pharmacists, and mid-level professionals), other support staff (that is, peer support staff, care managers, care navigators, other recovery support staff, other clinical staff and interns, pharmacy assistants, contractors/per diem staff, and intake coordinators), and administrative staff. A substantial majority of counseling staff FTEs (57 percent) had a graduate degree, but most counseling staff members with a graduate education were not certified in addiction treatment (60 percent).



Outpatient treatment intensity varies based on facility characteristics.

On average, non-administrative staff provided 292 hours of care per 100 clients in outpatient treatment per week. The intensity of treatment varied substantially based on facility characteristics and services offered (Figure ES.2). Statutes and regulations for

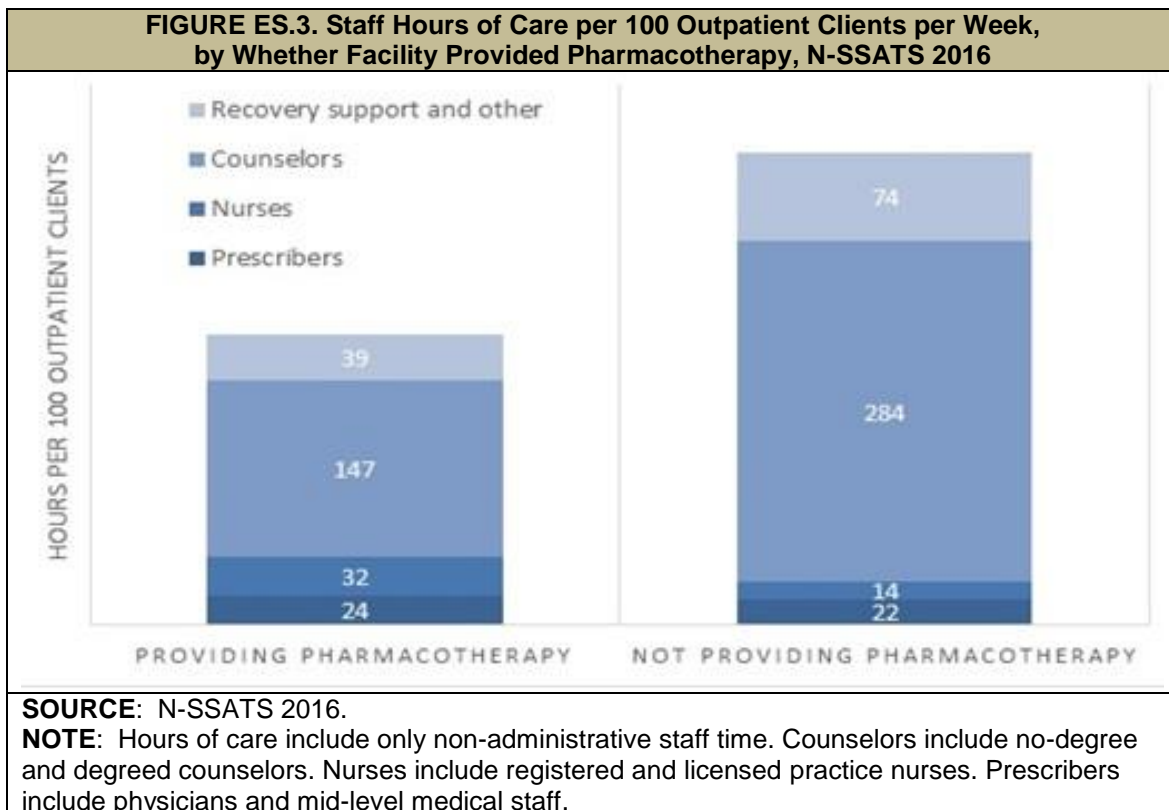
⁴ We define an FTE as 40 working hours per week.

⁵ N-SSATS surveys the universe of specialty SUD treatment facilities. In 2016 the survey had a 91 percent response rate. Estimates are not adjusted for facility or item non-response.

SUD treatment facilities vary by state and commonly allow facilities substantial flexibility in the professional credentials and intensity of services provided by staff (National Association of State Alcohol and Drug Abuse Directors 2013). There is little research on how staffing affects care quality.

The availability of evidence-based pharmacotherapy has increased, but challenges to further expansion remain.

Pharmacotherapy has been demonstrated to be clinically effective and cost effective for alcohol and opioid disorders (Baser et al. 2011; Mann et al. 2015). Although strong evidence suggests that the use of pharmacotherapy in managing SUDs provides substantial cost savings, the approach has not been widely adopted. The proportion of facilities offering pharmacotherapy has expanded in recent years, but still only 43 percent of facilities offered any pharmacotherapies in 2016.



Many of the barriers to expansion of pharmacotherapy are related to the workforce. The number of medical staff qualified to provide pharmacotherapy services and the staff supporting them needs to increase for provision of pharmacotherapy to expand. Training primary care providers to provide pharmacotherapy in primary care or other integrated care settings such as HIV or mental health treatment settings can improve treatment access and abstinence at six months (NIDA 2017; Korthuis et al. 2017). Primary care providers can act independently or work collaboratively with SUD treatment specialist in these models. In addition to increasing the number of qualified

providers, workforce attitudes preferring behavioral therapies may need to change to attain more widespread adoption. Consistent credentialing and licensure requirements across states and insurers for professionals providing pharmacotherapy services are also needed. The HHS Opioid Strategy announced in April 2017 aims to continue the department's efforts to improve access to "treatment, and recovery services, including the full range of medication-assisted treatments" (HHS 2017); also, despite the barriers, the ACA has resulted in expansions in the number of physicians waived to prescribe buprenorphine (Knudsen et al. 2015).

There were substantial differences in staffing patterns for outpatient treatment based on whether facilities offered pharmacotherapy (Figure ES.3). Facilities that did not offer pharmacotherapy provided nearly twice as many counselor and recovery support staff hours and about half as many nursing staff hours per 100 outpatient clients. Facilities provided a similar number of prescriber hours (including physician and mid-level medical staff) regardless of whether they provided pharmacotherapy.

Residential and inpatient hospital capacity for SUD treatment is insufficient in many states.

Despite increases in designated beds for residential and inpatient hospital SUD treatment between 2013 and 2015, utilization rates rose in these care settings. Nationally, the utilization rate for residential beds increased from 97 percent to 106 percent; that for inpatient hospital beds increased from 97 percent to 109 percent.⁶ In 18 states, residential bed utilization rates across all facilities were over 100 percent in 2015; the same number of states had inpatient bed utilization rates of over 100 percent.

Treatment provision at publicly operated facilities declined while care at privately operated facilities increased.

Between 2013 and 2015 clients served in public facilities declined substantially for outpatient care (13.7 percent) and somewhat for residential care (4.3 percent). Meanwhile clients served in private for-profit and private non-profit facilities expanded in these settings. This shift may be related to increased rates of insurance coverage. Inpatient clients increased substantially for facilities of all operation types.

The number of clients served in rural areas declined substantially although the population in rural areas was constant.

The number of clients receiving treatment in rural areas declined substantially (31.8 percent) and increased in urban areas (15.6 percent) between 2013 and 2015, the latest period of data available. Meanwhile, the population living in rural areas was fairly constant in this period while the population living in urban areas increased modestly (U.S. Department of Agriculture 2016). Given the treatment access barriers for

⁶ Utilization rate is calculated by dividing the number of clients in care by the total number of designated beds. The utilization rate will exceed 100 percent when clients are placed in beds not specifically designated for substance use treatment.

individuals living in rural areas that pre-date this period, the substantial declines in treatment use in rural areas warrant further investigation.

Low wages for SUD treatment providers present challenges in expanding the workforce.

Although most SUD counselors and social workers providing SUD treatment hold post-graduate degrees, analyses of data from the Bureau of Labor Statistics show that average hourly wages for SUD treatment professionals are substantially below the average wage across all occupations and the difference between the average wage for all occupations and that for counselors has widened over the last decade, from \$1.56 per hour in 2006 to \$2.63 per hour in 2016. Looking at two health care professions requiring similar or fewer years of education mean hourly wages for SUD counselors were \$5 and \$13 lower, respectively, than those for marriage and family therapists and registered nurses.

Currently, high turnover and difficulty in hiring qualified SUD treatment staff are attributed by facility administrators to low compensation (Hyde 2013; Ryan et al. 2012; Bukach et al. 2017). Efforts to increase the supply of individuals seeking work in the SUD treatment field by increasing training program output without an associated increase in reimbursement for services or increases in funding sources are likely to result in reduced wage levels and lower retention as individuals in the SUD treatment field recognize the potential to increase their earnings by shifting to other professions.

Discussion

Policymakers at all levels of government have targeted increasing SUD treatment to address escalating drug overdose deaths related to the opioid epidemic and improve societal welfare. Meanwhile, rates of SUD treatment use generally have been constant for more than a decade despite the substantial recent increase in insurance coverage for SUD treatment. Individuals with SUD treatment needs overwhelmingly indicate that they do not feel a need for treatment and, even among the small minority who believe that they might benefit from treatment, most make no effort to obtain it. Increasing treatment penetration will require a multifaceted approach to identify and refer individuals in need to treatment, reduce treatment access barriers, and reduce stigma and change attitudes about SUDs and treatment efficacy.

Overall, the role of Medicaid in funding SUD treatment services has expanded since the beginning of 2014. There is concern that low reimbursement rates and restrictive treatment coverage under Medicaid may be a barrier to expanding treatment in some states (Dickson 2015). State Medicaid programs have the potential to play an important role in transforming the SUD treatment system and the HHS Centers for Medicare and Medicaid Services (CMS) is taking an active role encouraging states to make reforms. CMS is conducting an Innovation Accelerator Program (IAP) to support state efforts to improve care quality and continuity, enhance performance monitoring

capacity, identify beneficiaries in need of treatment, develop a continuum of care that addresses the variety treatment needs and the chronic nature of SUDs, and target reimbursement models to incentivize better outcomes (CMS 2017). In addition, CMS has been working with states to improve access to and quality of SUD treatment through Medicaid Section 1115 demonstrations (CMS 2017b).

The impact of a number of recent federal efforts to increase SUD treatment use and the quality of SUD treatment services is not fully captured in the data available for this study. The initiatives include the CMS IAP as well as several SAMHSA grant programs intended to expand access to SUD treatment (McCance-Katz et al. 2017). There are also a number of federally-funded efforts to expand access to SUD screening and treatment in primary care settings and rural areas. Future years of data should be monitored to assess the impact of these initiatives.

I. INTRODUCTION

A. Purpose of Report

Despite federal policies enacted within the last decade aimed at promoting insurance coverage for substance use disorders (SUDs), the existing SUD treatment workforce may be insufficient to accommodate the potential increase in demand for care and other factors may be contributing to stagnant treatment utilization rates. The Affordable Care Act (ACA) specifically required subsidized marketplace insurance plans, individual and small group market plans, and Medicaid expansion programs to cover SUD treatment as an essential health benefit. Two years before passage of the ACA, the 2008 Mental Health Parity and Addiction Equity Act (MHPAEA) began requiring private insurance plans that included behavioral health benefits and were offered through large group insurers to cover those services on a par with medical/surgical care (Humphreys and Frank 2014; Beronio et al. 2014).

Providing insurance coverage for SUD treatment is intended to reduce financial barriers to treatment use and thereby increase the proportion of individuals with SUD treatment needs who seek and receive evidence-based care. However, the existing SUD treatment workforce may be insufficient to accommodate an increase in demand for care and other factors may be limiting treatment utilization. To address this concern, in September 2014, the U.S. Department of Health and Human Services (HHS) Office of the Assistant Secretary for Planning and Evaluation contracted with Mathematica Policy Research to assess: (1) the current demand for SUD treatment; (2) how demand will change as more people obtain insurance coverage for this treatment; (3) the current state of capacity in the SUD treatment field; and (4) the degree to which treatment providers are prepared for integration into the broader health care system.

A previous report from this study (Bouchery et al. 2015) reviewed and analyzed the available literature and data on SUD prevalence, treatment, and workforce capacity, and incorporated information obtained through expert interviews. In the current report, we supplement the findings from the previous report with analyses of newly collected survey data on the size and characteristics of the workforce. We also reassess supply and demand trends described in the previous report, incorporating newly available data for the period following the insurance expansions that began in 2014. The following research questions guided our analyses:

1. *Demand-Related Questions*

- How many people are receiving SUD treatment services, and what services are they receiving?
- How does service receipt vary geographically?

- What is the relationship between prevalence of SUDs and demand for care? How does this relationship vary geographically?
- What evidence exists about how increases in Medicaid enrollment have impacted demand?

2. *Supply-Related Questions*

- What are the professions and SUD treatment credentials of the current workforce?
- What is the current capacity of service providers to supply SUD treatment services? How does provider capacity differ across geographic areas? What disparities in care access are evident (for example, by region or subpopulation)? How does provider capacity differ in relation to various services, such as inpatient, residential, intensive outpatient, outpatient, and pharmacotherapy?
- What is the current capacity of SUD treatment organizations to participate in efforts to integrate SUD treatment within the broader health care system? To what degree are SUD treatment providers used to billing Medicaid?
- How have wages for SUD treatment staff changed over the last decade?

B. Report Methods

We conducted the study in two phases:

- In Phase 1, from October 2014 through December 2015, we: (1) assessed available data sources to answer the research questions and analyzed relevant data from these sources; (2) reviewed and summarized findings from the existing professional literature that addressed the questions; (3) interviewed selected experts; and (4) developed supplemental questions regarding the workforce to be fielded with an existing survey of SUD treatment facilities in 2016.
- In Phase 2, from September 2015 through November 2017: (1) the HHS Substance Abuse and Mental Health Services Administration (SAMHSA) fielded the SUD workforce survey questions we developed, and we analyzed the results; and (2) we updated the analyses we conducted in the first phase to include newly released data so as to identify more recent trends.

Below, we briefly summarize the methods we used in conducting the study.

1. *Review and Analysis of Existing Data Sources*

We reviewed pre-existing sources of data regarding SUD treatment supply and demand, and identified the strengths and limitations of each. Based on this analysis, we determined which data sources were most relevant for describing the current state of and relevant trends in the supply of and demand for SUD treatment services. We obtained these data, analyzed them, and presented the results in our previous report. For the current report, we extended the analyses of selected trends for which more recent data have since become available. Appendix A provides a brief overview of the data sources analyzed in this study.

2. *Literature Review*

Using a defined set of key words, we searched the Cumulative Index to Nursing and Allied Health Literature, PsycINFO, Scopus, and PubMed databases for literature published from 2005 through November 2014 on the following topic areas:

- Current demand for SUD treatment services.
- Trends and policies impacting demand over the next decade.
- Previous efforts to estimate the size and composition of the SUD workforce.
- Recruiting and developing the workforce.

We also used Google to search for important studies in the gray literature. We reviewed the publication information and abstracts retrieved for relevance to our study and strength of the methodology used. We then obtained the studies most likely to provide evidence related to the four topic areas of interest and extracted relevant information from each.

3. *Expert Interviews*

In May and June of 2015, we interviewed three SUD workforce experts. First, we interviewed the executive director of the International Certification and Reciprocity Consortium (IC&RC), which develops standards and examinations that its local boards across the country use for credentialing and licensing. The director responded to our interview questions orally and provided written responses to the questions in our interview guide from local board staff in Louisiana, Minnesota, North Carolina, and Ohio. Next, we interviewed the executive director of the National Association for Alcoholism and Drug Abuse Counselors (NAADAC), an association for professionals in the SUD treatment workforce that also develops examinations for certifications. We conducted the third interview with the senior vice president of public policy and practice improvement for the National Council for Behavioral Health, an association of behavioral health provider organizations.

The interviews with the IC&RC and NAADAC representatives addressed trends in addiction provider certification and training programs; state requirements for licensing and certification; and recent changes in the workforce, including those associated with the ACA and MHPAEA. The interview with the National Council for Behavioral Health representative addressed the following topics:

- Providers' experiences related to implementation of the ACA and MHPAEA.
- How providers have adapted to the availability of expanded Medicaid and private insurance coverage for SUD treatment.
- Barriers providers have identified related to supporting patient treatment through insurance coverage.
- The most pressing concerns for providers related to training programs for SUD treatment professionals, recruitment and hiring of qualified staff, and retention of existing staff.
- Those state-level differences in licensing/credentialing policies or professional certification requirements that have an important impact on the availability of SUD treatment programs or program staffing patterns.

The experts did not have data available to support responses to most questions and thus could provide only anecdotal information. They also were not able to address all topics identified. IC&RC and NAADAC representatives indicated that state board representatives might have information to address particular questions, but this information typically is not passed on to the national organization.

4. *National Survey of Substance Abuse Treatment Services (N-SSATS) 2016 Supplemental Workforce Questions*

Because no data had been collected on the size and composition of the SUD workforce since the late 1990s, we developed supplemental questions about them that were added to the 2016 N-SSATS, which surveys all specialty SUD treatment facilities in the United States and its territories. The supplemental questions asked facilities to identify, by profession, the total number of staff, staff hours worked in a week, and the number of paid and non-paid staff certified in addiction treatment.⁷

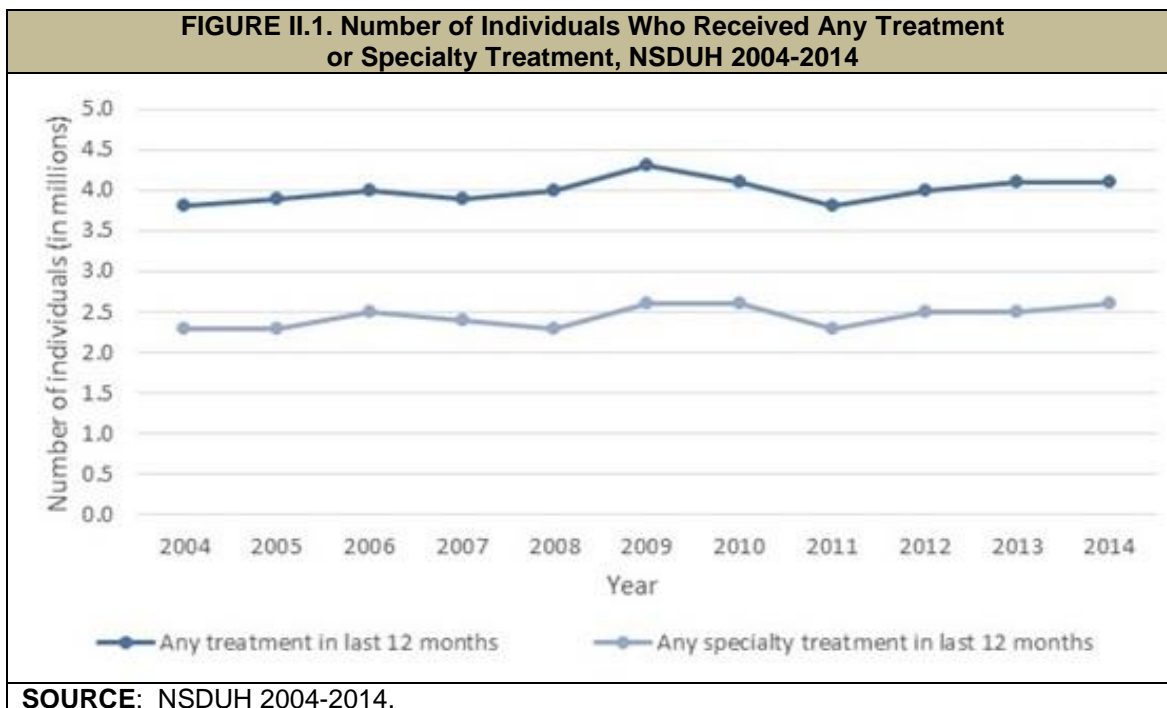
⁷ The survey instrument is available at https://www.dasis.samhsa.gov/dasis2/nssats/nssats_2016_q.pdf.

II. DEMAND FOR SUBSTANCE USE DISORDER TREATMENT

In this section, we examine recent trends in receipt of SUD treatment services by service type and geography. Then we analyze the relationship between the prevalence of SUDs and use of treatment services by type of SUD and geographic area. Last, we look specifically at the relationship between Medicaid coverage expansion and receipt of SUD treatment.

A. How Many People are Receiving SUD Treatment Services and What Services are They Receiving?

Here we analyze information on the number of people receiving SUD treatment services and the type of services they receive as derived from multiple data sources. Based on the National Survey on Drug Use and Health (NSDUH), we begin by looking at whether individuals used any services in the past year and the type of services they used. Then we analyze the number of clients in care at a given point-in-time by service type, based on the N-SSATS. Finally, we assess trends in the distribution of admissions by primary substance.



1. Trends in Receipt of Any or Specialty SUD Treatment in Past Year

We use data from the NSDUH to analyze trends in SUD treatment use in the community-based population in the United States. According to the NSDUH, the number of individuals receiving any SUD treatment in the past year was relatively constant between 2004 and 2014, at about 4 million individuals (Figure II.1).

Type of Treatment	2015	2016
Any treatment in past 12 months	3.7	3.8
Specialty treatment in past 12 months	2.3	2.2

SOURCE: NSDUH 2015 and 2016.

About 60 percent of the individuals who received any treatment (2.2-2.6 million individuals per year) received treatment in a specialty setting, defined by SAMHSA as any of the following types of facilities: hospitals (inpatient only), drug or alcohol rehabilitation facilities (inpatient or outpatient), or mental health centers.⁸

Because of changes in the methodology of the survey between 2014 and 2015 survey estimates from 2015 and later may not be comparable to earlier years. Thus, we present estimates for 2015 and later separately from those in the earlier period. In 2015 there were 3.7 million and 2.3 million individuals receiving any and specialty treatment according to the NSDUH (Table II.1). Between 2015 and 2016 there was no significant change in the number of individuals receiving any and specialty treatment in the past year.

Type of Care	Number (in thousands)			Percentage		
	2012	2013	2014	2012	2013	2014
Total	2,496	2,466	2,606	100	100	100
Specialty settings						
Hospital inpatient	861	879	921	34	36	35
Rehabilitation facility--inpatient	1,010	1,042	1,076	40	42	41
Rehabilitation facility--outpatient	1,505	1,753	1,731	60	71	66
Mental health center--outpatient	1,000	1,176	1,157	40	48	44
Non-specialty setting						
Emergency room	557	574	499	22	23	19
Private doctor's office	470	522	561	19	21	22
Self-help group	1,461	1,505	1,554	59	61	60
Prison or jail ^a	340	189	280	14	8	11

SOURCE: NSDUH 2012-2014.

NOTE: The counts only include individuals who received care in a specialty setting during the year; however, the counts indicate the number of these individuals receiving care in non-specialty settings. Counts do not sum to the total and percentages do not sum to 100% because individuals may receive care in multiple settings.

a. NSDUH surveys individuals living in the community. Individuals living in an institutional setting are excluded. Therefore counts of individuals receiving treatment in a prison or jail only include individuals who have been released from those settings and are living in the community at the time of the survey.

⁸ SAMHSA did not include emergency room, private doctor's office, self-help group, prison or jail, or hospital as an outpatient in the definition of specialty settings.

The distribution of the number of people receiving treatment by treatment setting also remained relatively constant from 2012 to 2014 (Table II.2) and 2015 to 2016 (Table II.3). Outpatient rehabilitation and self-help groups were the most common settings of care. About one-third of individuals who received specialty treatment received some services in an inpatient hospital; about 20 percent received emergency room care.

TABLE II.3. Number of Individuals Receiving Any Specialty SUD Treatment by the Settings in Which They Received Care, NSDUH 2015-2016				
Type of Care	Number (in thousands)		Percentage	
	2015	2016	2015	2016
Total	2,346	2,229	100	100
Specialty settings				
Hospital inpatient	702	732	30	33
Rehabilitation facility--inpatient	974	918	42	41
Rehabilitation facility--outpatient	1,524	1,446	65	65
Mental health center--outpatient	1,093	1,054	47	47
Non-specialty setting				
Emergency room	429	489	18	22
Private doctor's office	445	540	19	24
Self-help group	1,389	1,183	59	53
Prison or jail ^a	221	202	9	9
SOURCE: NSDUH 2015-2016.				
NOTE: The counts only include individuals who received care in a specialty setting during the year; however, the counts indicate the number of these individuals receiving care in non-specialty settings. Counts do not sum to the total and percentages do not sum to 100% because individuals may receive care in multiple settings. The 2015 and 2016 estimates are not comparable to estimates from prior years due to methodological changes in the survey.				
a. NSDUH surveys individuals living in the community. Individuals living in an institutional setting are excluded. Therefore counts of individuals receiving treatment in a prison or jail only include individuals who have been released from those settings and are living in the community at the time of the survey.				

2. Trends in Point-in-Time Clients in Care, by Care Setting

In contrast to the consistency of NSDUH findings, analysis of N-SSATS indicates notable shifts between 2013 and 2015 in client counts and the distribution of clients by service type (Table II.4).⁹ Overall, N-SSATS client counts indicate a small increase in clients in care between 2013 and 2015 (4.5 percent). This increase was driven by large increases in several service types: outpatient pharmacotherapy for opioid use disorders (14.8 percent), residential detoxification (34.2 percent) and short-term care (34.8 percent), and hospital inpatient detoxification (114.9 percent) and treatment (33.7 percent). There was little change in the number of clients in regular outpatient care.

The observed increases in clients receiving pharmacotherapy reflect national efforts to improve quality of care by increasing access to these evidence-based treatments. Pharmacotherapy use is associated with more consecutive weeks of

⁹ For the NSDUH SAMHSA defines specialty treatment based on the setting of care as listed above. The N-SSATS universe is limited to specialty treatment facilities. These facilities have units or programs focused on provision of SUD treatment. Thus, facilities may not be defined as “specialty” in both surveys. For example, a general hospital or mental health center would not be included in the N-SSATS universe unless they have a treatment program or unit designated for SUD treatment. These settings are, however, consider specialty treatment for NSDUH.

abstinence from illicit opioids (Fiellin et al. 2014) and reduced mortality due to overdose (Brugal et al. 2005; Clark et al. 2011; Cousins et al. 2016; Degenhardt et al. 2009; Pierce et al. 2016).

TABLE II.4. Services Provided by Setting of Care, N-SSATS 2013 and 2015						
Type of Care	Number of Clients			Percentage of All Clients in Care		
	2013	2015	% Change	2013	2015	% Change
Total	1,249,629	1,305,647	4.5%	100.0	100.0	0.0%
Outpatient	1,127,235	1,161,456	3.0%	90.2	89.0	-1.4%
Regular	603,315	604,819	0.2%	48.3	46.3	-4.1%
Intensive	147,162	128,536	-12.7%	11.8	9.8	-16.4%
Detoxification	13,839	14,457	4.5%	1.1	1.1	0.0%
Day treatment/partial hospitalization	22,828	23,138	1.4%	1.8	1.8	-3.0%
Methadone/buprenorphine maintenance or injectable naltrexone	340,091	390,506	14.8%	27.2	29.9	9.9%
Residential (non-hospital)	107,727	119,900	11.3%	8.6	9.2	6.5%
Detoxification	10,244	13,748	34.2%	0.8	1.1	28.4%
Short-term	27,184	36,651	34.8%	2.2	2.8	29.0%
Long-term	70,299	69,501	-1.1%	5.6	5.3	-5.4%
Hospital inpatient	14,667	24,291	65.6%	1.2	1.9	58.5%
Detoxification	5,768	12,394	114.9%	0.5	0.9	105.7%
Treatment	8,899	11,897	33.7%	0.7	0.9	28.0%
Clients receiving methadone, buprenorphine, or injectable naltrexone treatment	382,237	439,602	15.0%	30.6	33.7	10.1%
Clients receiving methadone	330,308	356,843	8.0%	26.4	27.3	3.4%
Clients receiving buprenorphine	48,148	75,724	57.3%	3.9	5.8	50.5%
Clients receiving injectable naltrexone	3,781	7,035	86.1%	0.3	0.5	78.1%
SOURCE: N-SSATS 2013 and 2015.						
NOTE: N-SSATS surveys the universe of specialty SUD treatment facilities. In 2013 and 2015, respectively, the survey had a 94% and 92% response rate. Estimates are not adjusted for facility or item non-response. For inpatient and residential services counts indicate the number of clients in treatment on the last working day in March of each survey year. For outpatient services counts indicate the number of clients receiving services during March who are still enrolled in treatment on the last working day in March. Care categories defined to align with the American Society of Addiction Medicine levels of care.						

Discrepancies between trends in the N-SSATS and NSDUH are expected due to differences in the scope of the surveys and measures of service use (Batts et al. 2014). Although both NSDUH and N-SSATS collect information on the number of individuals in care at specialty SUD treatment facilities, they differ in how they measure this population. The NSDUH measures the number of individuals reporting any receipt of treatment in the past year in a specialty setting, whereas for N-SSATS specialty facilities report the number of clients in treatment on a single day in each year (the last working day in March of each survey year). Outpatient client counts in N-SSATS include individuals receiving services during March who are still enrolled in treatment on the last working day in March. If individuals experience a longer duration of care or repeat admissions to the same type of care, NSDUH will show no change in the number of individuals with service use; N-SSATS client counts, on the other hand, will increase under these circumstances. The lack of change in the population with service use in the past year in NSDUH, paired with the increases in client counts observed in the N-SSATS, suggests that the increase in outpatient clients observed in N-SSATS stems from a longer duration of care or repeated admissions rather than an increase in the total number of individuals receiving treatment in the course of a year. Analysis of the distribution of length of stay in the Treatment Episode Data Set (TEDS) Discharge file in

2012 relative to 2014 (Table II.5) supports a small 2 percentage point decline in the number of discharges with length of stay 30 days or less and corresponding 2 percentage point increase stays greater than 180 days.

TABLE II.5. Distribution of Discharges by Length of Stay, TEDS 2012 and 2014		
Length of Stay	2012	2014
1 to 30 days	47.8	45.9
31 to 45 days	6.8	6.7
46 to 60 days	5.3	5.3
61 to 90 days	9.0	9.0
91 to 120 days	7.4	7.5
121 to 180 days	8.9	9.2
181 to 365 days	9.8	10.5
More than a year	4.9	6.0
SOURCE: TEDS 2012 and 2014 (CBHSQ 2017a and 2017b).		
NOTE: Individual states report discharges to SUD treatment facilities within their state to TEDS. The scope of SUD treatment providers included in each state's data may vary over time and based on differences across states in state licensure, certification, accreditation, and disbursement of public funds. At a minimum, facilities receiving federal substance abuse treatment block grant funds are included. The following states did not report usable data for the year 2012: Kansas, Mississippi, and New Mexico. The following states did not report usable data for the year 2014: Mississippi, Florida, Georgia, Kansas, West Virginia, and New Mexico.		

Differences in the scope of the two surveys can explain why the N-SSATS reports show increases in residential and hospital inpatient care, whereas the NSDUH results show constant use of these services. NSDUH surveys residents in households with a fixed address and individuals in non-institutional group quarters. It excludes individuals who are institutionalized or homeless and not in a shelter from its respondent pool. Thus, the NSDUH will not accurately assess the number of individuals receiving institutional services. Specifically, NSDUH will not count hospital services provided to individuals who enter a hospital but who do not re-enter the community due to drug overdose death. Thus, N-SSATS is a more accurate source of trends in institutional service use.

3. Trends in the Primary Substance for Treatment Admission

According to the data collected in TEDS, over the last decade the primary substance for which individuals receive SUD treatment has shifted. Alcohol use disorders as a primary substance accounted for the highest proportion of clients in care in 2004 (40 percent) and 2014 (36 percent), but the proportion represented by these admissions has declined (Table II.6). The proportion of admissions for a disorder related to cocaine as a primary substance also has declined, from 14 percent to 5 percent. In contrast, the proportion of admissions for heroin and non-heroin opiates and synthetics as a primary substance rose from 18 percent to 30 percent.

TABLE II.6. Number and Percentage of Specialty SUD Treatment Admissions by Primary Substance, TEDS 2004 and 2014				
	Number		Percentage	
	2004	2014	2004	2014
Total	1,808,469	1,614,358	100	100
Alcohol	729,366	585,024	40	36
Marijuana	285,193	247,461	16	15
Heroin	262,518	357,293	15	22
Cocaine	248,492	87,510	14	5
Methamphetamine/amphetamine	142,510	143,659	8	9
Non-heroin opiates/synthetic	62,895	134,401	3	8
Other or not reported	77,495	59,010	4	4

SOURCE: TEDS 2004 and 2014 (SAMHSA 2016).
NOTE: Individual states report admissions to SUD treatment facilities within their state to TEDS. The scope of SUD treatment providers included in each state's data may vary over time and based on differences across states in state licensure, certification, accreditation, and disbursement of public funds. At a minimum, facilities receiving federal substance abuse treatment block grant funds are included. Alaska, Arkansas, and District of Columbia reported either no data, or less than a full calendar year of data for 2004. South Carolina did not report usable data for the year 2014.

B. How Does Service Receipt Vary Geographically, by Level of Urbanicity and by Facility Operation?

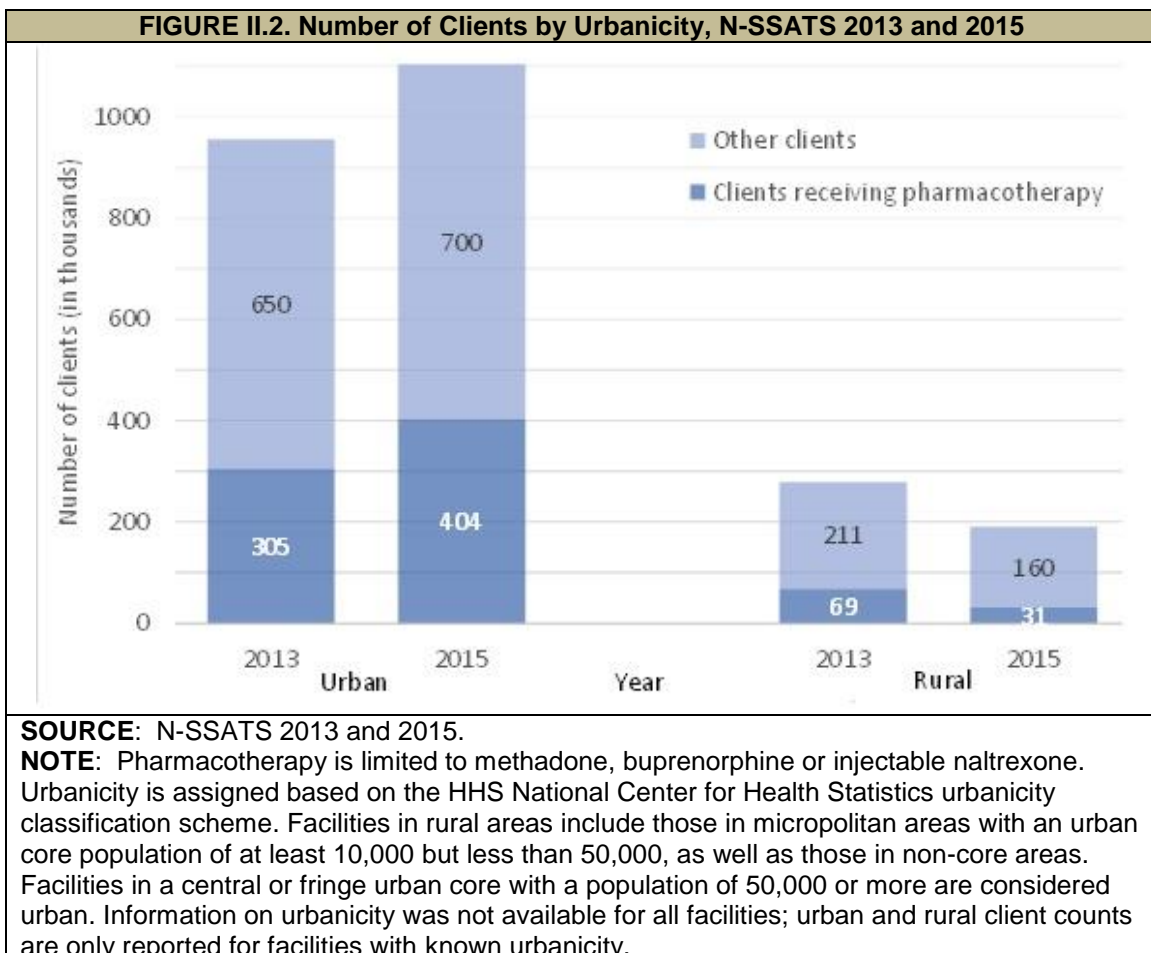
Geographically. SUD prevalence and treatment use varies based on geography. Geographic variation results from cultural and environmental influences on disorder prevalence as well as differences in jurisdictional policies, treatment funding and availability, and availability of other social services. Below, we discuss the geographic variations in service receipt, reflected in Table B.1 through Table B.4.b of Appendix B.

National and regional average changes in clients by type of care between 2013 and 2015 mask substantial variation by state. Across all regions, there was a substantial increase in clients in inpatient care (65.6 percent). We also observed substantial increases for each of the four regions (Table B.1), but the increase in the Midwest was much lower than for the other regions (16.8 percent). Within each region, however, changes in inpatient care varied substantially by state (Table B.2). Residential clients increased by 11.3 percent nationally but, as was true for inpatient care, results varied by region. At the extremes, the number of residential clients in the Midwest declined by 9.6 percent, whereas the number in the South increased by 28.5 percent. Outpatient client counts increased modestly in each region.

Use of pharmacotherapies targeted to alcohol and opioid dependence substantially increased in all regions (Table B.3.a and Table B.3.b). Buprenorphine and injectable naltrexone had higher percentage increases, but these medications were less commonly used in 2013 than methadone. Rates of change varied dramatically across states, with some states seeing declines in pharmacotherapy use (particularly for methadone), whereas others saw a surge in use (Table B.4.a and Table B.4.b).

Urbanicity. Variation in treatment use based on the level of urbanicity may be expected due to access barriers for individuals in more rural areas. Jackson and

Shannon (2012) reviewed the literature on barriers to treatment access for rural residents and found: (1) rural residents are less likely to have access to health insurance; (2) there is a shortage of providers in rural areas; and (3) people in need of treatment in rural areas must travel longer distances to facilities. Cummings and colleagues (2014) used the 2009 N-SSATS and the Area Resource File to look at access to outpatient SUD treatment for Medicaid enrollees. This study found that rural counties are less likely than urban counties to have at least one outpatient SUD facility that accepts Medicaid. Lenardson and Gale (2007) compared SUD treatment offered in rural and urban counties using variables in the 2004 N-SSATS. Comparing the number of facilities and treatment beds to population size revealed that rural areas actually had a larger number of treatment facilities, but the facilities had fewer inpatient beds available per population. In addition, few facilities in rural counties not adjacent to a metropolitan area provided detoxification, transitional housing services, or intensive outpatient care. Nearly all opioid treatment programs (OTPs) were located in urban areas.



The number of clients in each care setting declined substantially in rural areas and increased in urban areas between 2013 and 2015 (Figure II.2). The number of clients receiving pharmacotherapy also declined substantially in rural areas and increased in urban areas with the exception of clients receiving buprenorphine which stayed fairly

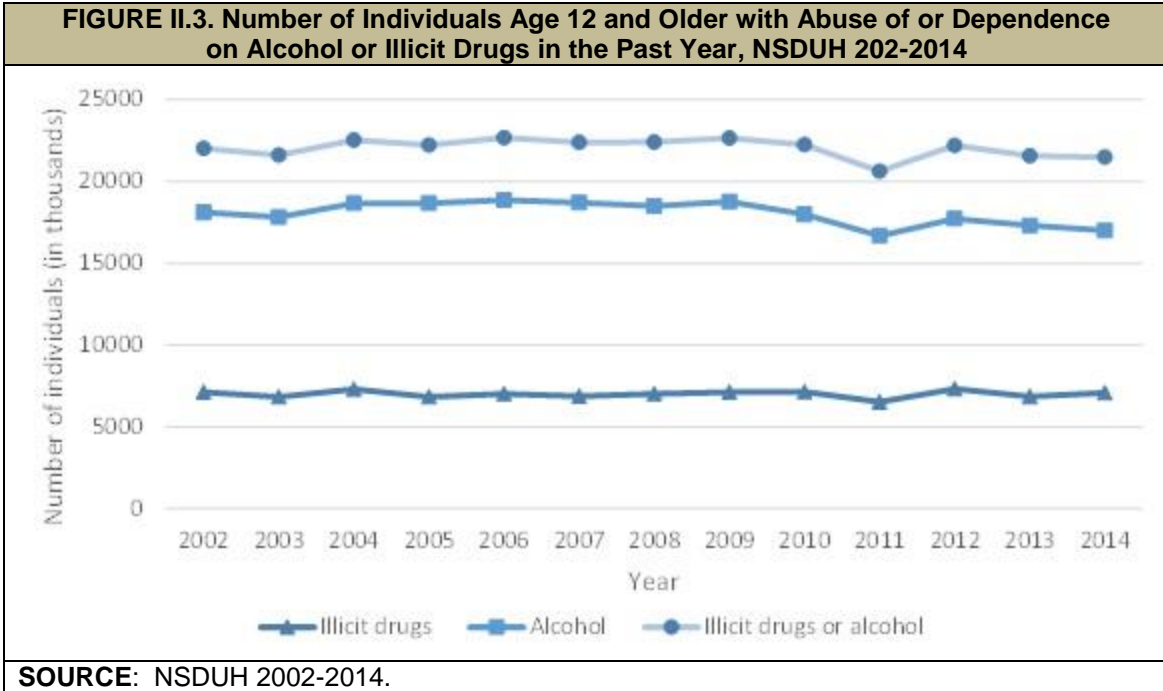
constant in rural areas (Table B.3.a). According to the U.S. Department of Agriculture (2016) the population living in rural areas was fairly constant in this period while the population living in urban areas has increased steadily at approximately 1 percent annually. Given the treatment access barriers for individuals living in rural areas that pre-date this period and the consistent size of the population in these areas the substantial declines in treatment use in rural areas warrant further investigation.

Facility operation. Facility operation may affect the characteristics of clients served and types of services offered as facilities that are publicly owned or non-profits may have distinct missions to provide charitable care or act as the provider of last resort. Between 2013 and 2015 clients served in public facilities (Table B.1) declined substantially for outpatient care (13.7 percent) and somewhat for residential care (4.3 percent). Meanwhile clients served in private for-profit and private non-profit facilities expanded in these settings. This shift may be related to increased rates of insurance coverage. Inpatient clients increased substantially for facilities of all operation types.

C. What is the Relationship between the Prevalence of SUDs and Demand for Care? How Does the Relationship Vary Geographically?

According to NSDUH, the number of individuals with SUDs was relatively constant between 2004 and 2014 (Figure II.3). The aggregate estimates, however, mask substantial shifts in the substances with which the disorders are associated (Table B.5). Cocaine/crack-related, hallucinogen-related, inhalant-related, and alcohol-related disorders have declined over the last decade, whereas heroin, non-medical use of psychotherapeutics, and use of pain relievers have increased.

The direction of trends in the percent of the population with use disorders was similar across age groups (Table II.7). Between 2002 and 2015, the proportion of the population with an SUD declined for all age groups for alcohol and cocaine and increased for heroin. In contrast, the proportion of the population with marijuana use disorders remained constant among individuals 26 and older, but declined for individuals 12-17 and 18-25. Due to the survey sample size and prevalence of disorders, it is difficult to detect trends in disorder prevalence among more detailed subgroups within the 26 and older group with a single year of NSDUH data. Han et al. (2017) pooled two years of NSDUH data to compare the proportion of individuals 50 and older with alcohol use disorders in 2005-2006 to 2013-2014. In contrast to the results for the 26 or older group, they found the proportion of individuals 50 and older with an alcohol use disorder increased from 3.0 percent to 3.7 percent (a 23.3 percent increase). There is concern that SUD prevalence may increase among older age groups over time as the baby boomers age given their higher rates of substance use relative to previous generations (Elinson 2015).



According to the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (“DSM-IV-TR” 2017), which was used to develop the diagnostic criteria in the NSDUH for having an SUD an individual must have serious negative consequences to qualify as having a disorder. For substance use dependence an individual must have three or more symptoms of dependence such as withdrawal symptoms, increased tolerance, repeated unsuccessful attempts to quit, having given up social, occupational or recreational activities or using the substance in larger amounts and for longer periods of time than intended. For abuse the individual must continue use despite having at least one negative consequence due to use including failure to fulfill a major work, school or home role, recurrent use in hazardous situations, recurrent legal issues, or social and interpersonal problems caused by use. Individuals meeting criteria for a disorder continue substance use despite serious negative consequences in their personal lives.

TABLE II.7. Percentage of Population with an SUD by Type of Substance and Age Group, NSDUH 2002 and 2015

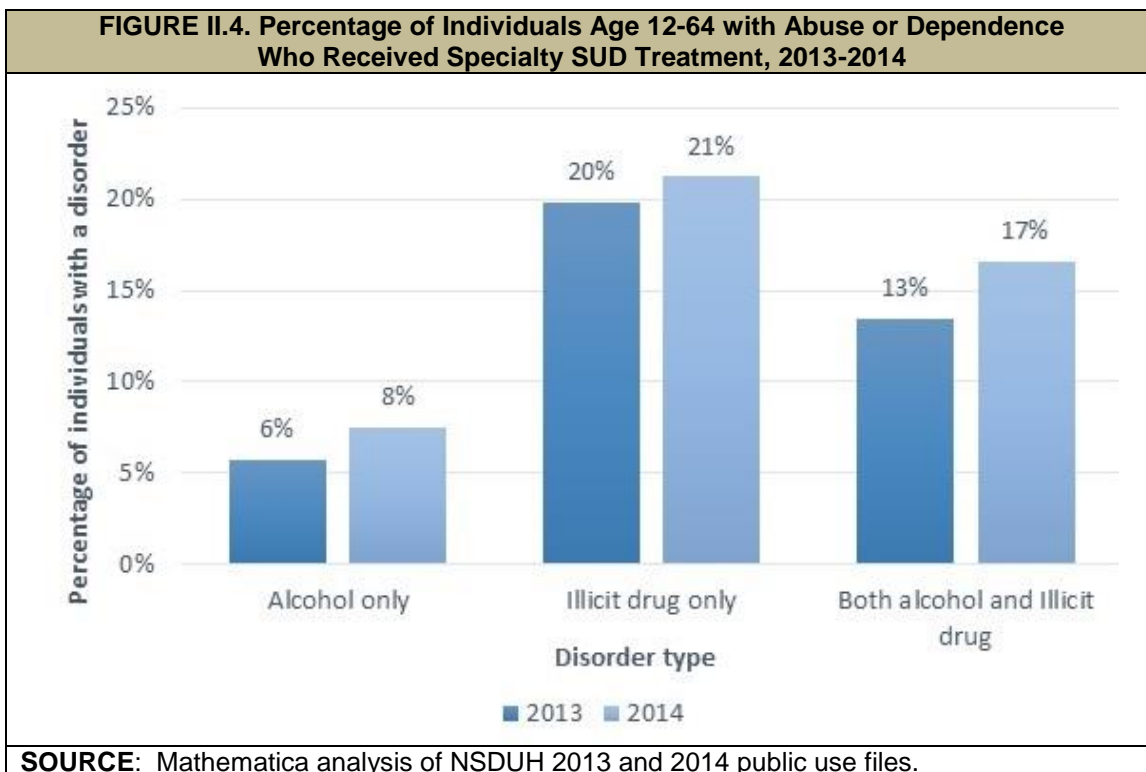
	Age 12-17		Age 18-25		Age 26 or Older	
	2002	2015	2002	2015	2002	2015
Alcohol use	5.9*	2.5	17.7*	10.9	6.2*	5.4
Marijuana use	4.3*	2.6	6.0*	5.1	0.8	0.8
Cocaine use	0.4*	0.1	1.2*	0.7	0.6*	0.3
Heroin use	0.1	0.0	0.2*	0.4	0.1*	0.2

SOURCE: NSDUH 2002 and 2015 (CBHSQ 2016b).

* Estimate is significantly different from 2015 estimate at the 0.5% level.

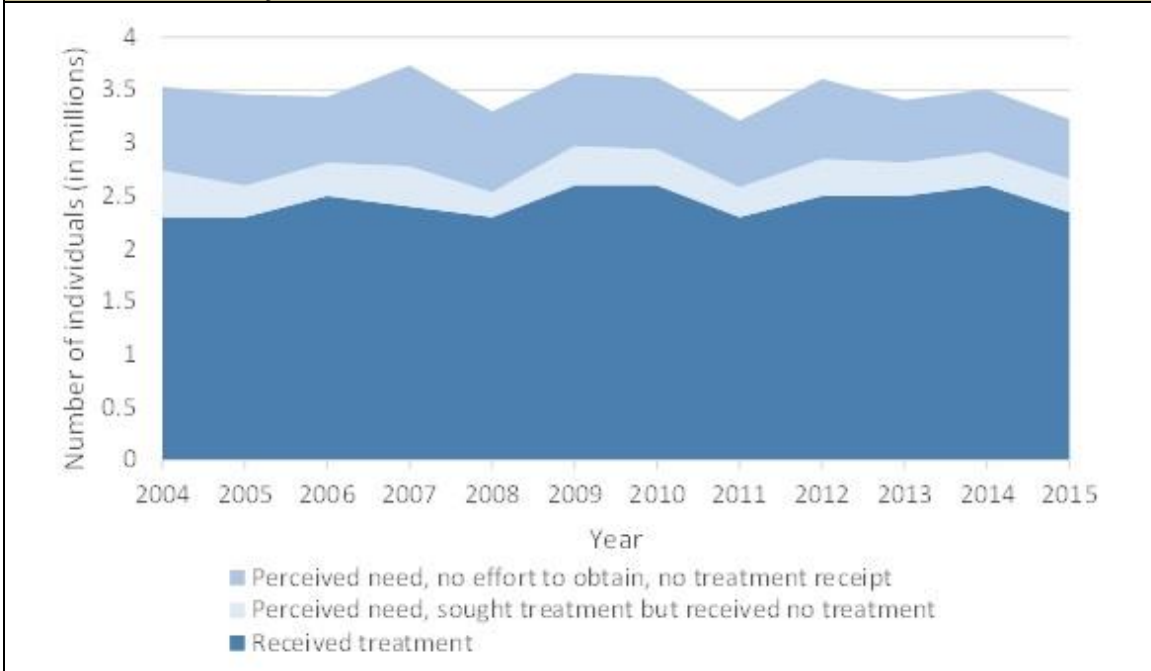
Based on the NSDUH survey, there is a substantial gap between the number of people with an SUD and the number of individuals who receive specialty treatment in a given year. In 2014, an estimated 20.3 million United States residents aged 12-64 met criteria for an SUD in the past year. Among this group, less than 10 percent of individuals abusing or dependent on alcohol only received specialty SUD treatment in

the past year (Figure II.4). The treatment rate was higher (about 20 percent) among individuals abusing or dependent on illicit drugs only. About 15 percent of those abusing or dependent on both illicit drugs and alcohol received treatment. Differences between the 2013 and 2014 rates are not statistically significant. According to a review by Foster (2014), treatment rates among individuals with SUDs are substantially lower than those for common health conditions, such as hypertension (77 percent), diabetes (73 percent), and major depression (71 percent). However, an individual’s need for professional support to address an SUD may depend on several factors, such as the severity of the disorder, comorbid health conditions, personal coping skills, the individual’s environment, and available sources of informal specialty support (Mechanic 2003). Treatment rates vary little across states (Table B.6).



Individuals who meet the criteria for an SUD but do not receive treatment fall into three groups: (1) those who do not feel they need treatment; (2) those who feel they need treatment but do not seek it; and (3) those who feel they need and seek treatment but do not receive it. Based on the 2015 NSDUH, Lipari et al. (2016) found that 95.4 percent of people who met the criteria for an SUD but did not receive specialty treatment did not feel they needed treatment (19.3 million people). Among the remaining small percentage (4.6 percent, or 880,000 people) who felt they needed treatment but did not get it, 64.4 percent (about 567,000 people) reported making no effort to get treatment, whereas 35.6 percent (about 313,000 people) reported they did make such efforts. Figure II.5 displays trends in the number of individuals who received specialty SUD treatment, felt they needed treatment but did not seek it, and felt they needed treatment and sought it but did not receive it. These numbers were relatively constant from 2004 through 2014.

FIGURE II.5. Number of Individuals Who Received Specialty SUD Treatment or Felt They Needed but Did Not Receive Treatment, NSDUH, 2004-2014



SOURCE: NSDUH 2004-2014.

NOTE: The figure depicts treatment receipt within the past 12 months.

D. What Evidence Exists about How Increases in Medicaid Enrollment Have Impacted Demand?

In Phase 1 of this project we reviewed the literature on the relationship between Medicaid insurance coverage and SUD treatment use. We found only a few studies in the literature that have explicitly examined how health insurance coverage impacts demand for SUD treatment services; furthermore, many of these studies did not employ experimental designs, so the findings may be confounded by other factors. Although a rigorous study with experimental design found that insurance coverage has a positive effect on the use of general health services (Newhouse and the Insurance Experiment Group 1993), findings for SUD treatment could differ for several reasons. First, SUD treatment is typically provided outside of the general health sector, and insurance coverage for these services may be less comprehensive, have a limited network of providers, and require greater out-of-pocket costs for the client, thereby deterring treatment use. The social stigma attached to SUDs and SUD treatment may also limit treatment seeking despite insurance coverage. In addition, states and the Federal Government (through block grants) fund SUD treatment directly, particularly for those who are uninsured. Thus, although other types of care may be more affordable for those who are insured, the availability of publicly funded SUD treatment for individuals without insurance may mean that access to Medicaid coverage has less impact on SUD treatment use than use of other types of health care services.

The findings from the limited studies we identified on the relationship between Medicaid coverage and SUD treatment use indicate that individuals with Medicaid coverage are more likely to use SUD treatment than those with private insurance or who are uninsured (Bouchery et al. 2012; Epstein et al. 2004; Larson et al. 2005). This finding may be due to out-of-pocket expenses being lower under Medicaid. It may also be due to differences in the care management and benefit packages provided through Medicaid and private insurance plans. Since these studies did not use an experimental design the findings may be due to characteristics of the Medicaid population that were not controlled for in the models. In particular, individuals who are eligible for Medicaid may be enrolled in Medicaid by a treatment provider.

For Phase 2 of this study data from the NSDUH on Medicaid enrollment and treatment use prior to (2009-2013) and following ACA implementation (2014) was available for analysis. We used these data to estimate how increased rates of Medicaid enrollment influenced SUD treatment use. First, among individuals with SUDs we estimated changes in Medicaid enrollment rates and the number of individuals with SUD who gained Medicaid coverage as a result of increased enrollment rates. Then we estimated treatment use rates among those with SUDs and assessed how access to Medicaid coverage likely affected treatment use among individuals who gained Medicaid coverage.

According to our analysis of the NSDUH, the proportion of individuals ages 12-64 with SUDs who were enrolled in Medicaid rose from 13.4 percent in the five years from 2009 to 2013 to 18.1 percent in 2014--a statistically significant change (Table II.8). There was a corresponding decline in the percentage uninsured from 24.8 percent in 2009-2013 to 20.0 percent in 2014. This change may be related to expansion of Medicaid eligibility under the ACA. The opioid epidemic and efforts to increase treatment use for individuals affected may also have contributed to increased Medicaid enrollment among individuals with SUDs.

Because of the higher Medicaid enrollment rate observed in 2014, we estimate that approximately 944,000 more individuals with SUDs were enrolled in Medicaid in 2014 than would have been expected, given the Medicaid enrollment rates observed between 2009 and 2013 (Table II.9). This represents a 34 percent increase in the size of the Medicaid population with SUDs. We estimate this by projecting what Medicaid enrollment would have been among individuals with SUDs given the average enrollment rate in 2009-2013 compared to the observed enrollment rate in 2014. The steps of this calculation are presented in Table II.9. The first step was to determine the actual number of individuals enrolled in Medicaid with SUDs in 2014. Then we calculated the ratio of the observed average Medicaid enrollment rate in 2009-2013 relative to that for 2014 based on the estimates in Table II.8. We multiplied these ratios by the actual number of Medicaid enrollees with an SUD in each diagnostic category in 2014 to calculate projected Medicaid enrollment for 2014 given the average enrollment rate between 2009 and 2013. We then subtracted the projected enrollment levels for 2009-

2013 from the actual enrollment levels in 2014 to estimate the increase in the number of enrollees.

TABLE II.8. Percentage of Individuals Ages 12-64 with SUDs Who Were Enrolled in Medicaid or Uninsured in 2009-2013 versus 2014, by SUD Type						
Type of Substance	2009-2013			2014		
	Mean	Lower Bound for 95% CL	Upper Bound for 95% CL	Mean	Lower Bound for 95% CL	Upper Bound for 95% CL
Medicaid Enrolled						
Total	13.4	12.8	14.1	18.1	16.7	19.6
Alcohol dependence	11.1	9.9	12.3	16.6	14.0	19.2
Other alcohol and marijuana disorders	11.7	11.0	12.5	14.9	13.4	16.4
Other drug abuse or dependence disorders	23.1	21.4	24.7	30.9	27.3	34.5
Uninsured						
Total	24.8	23.7	25.9	20.0	18.3	21.7
Alcohol dependence	25.4	23.9	26.8	23.6	20.2	27.0
Other alcohol and marijuana disorders	22.7	21.4	24.0	17.0	14.9	19.1
Other drug abuse or dependence disorders	30.4	28.1	32.8	22.5	18.5	26.6

SOURCE: NSDUH 2009-2014.

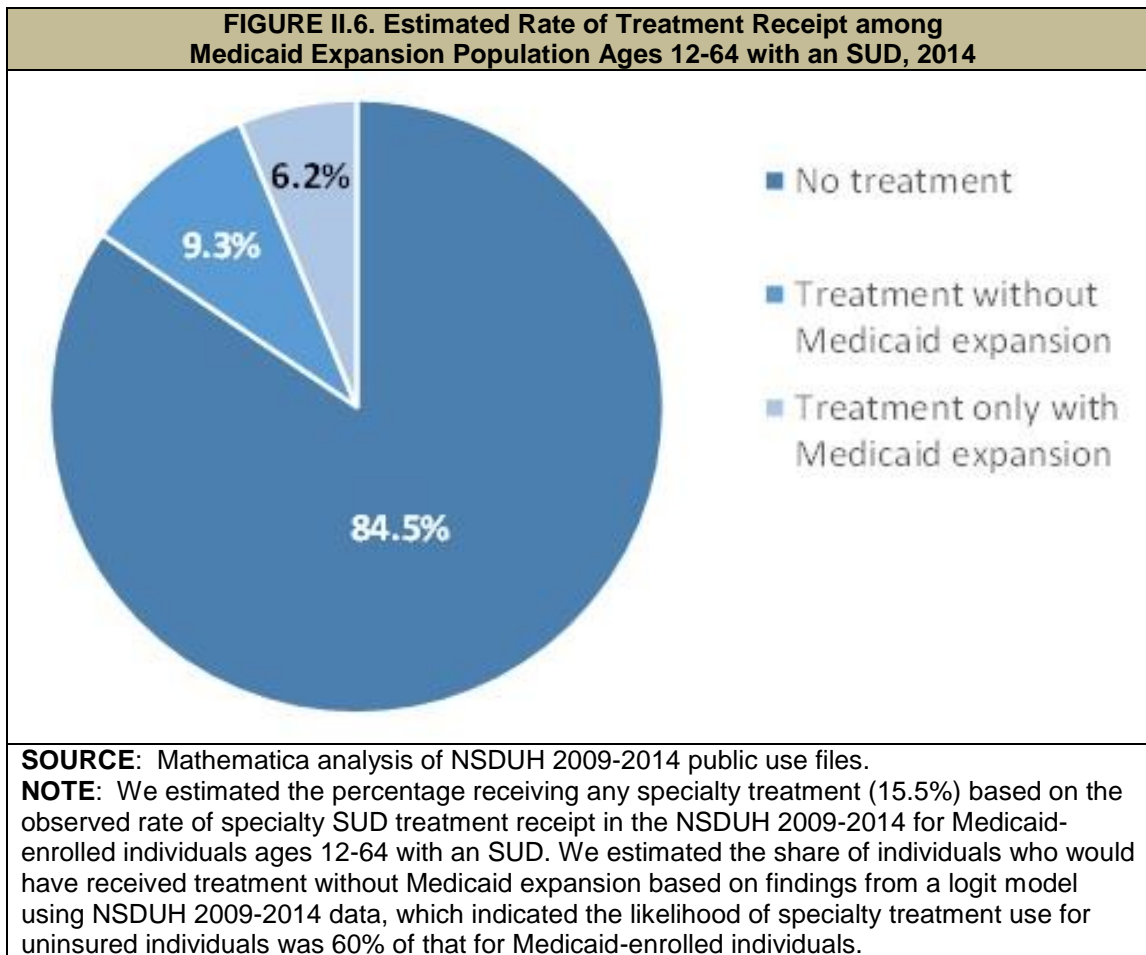
TABLE II.9. Estimated Increase in Medicaid Enrollment Associated with Medicaid Expansion for Individuals Ages 12-64 with an SUD, by SUD Type				
Type of Substance	2014 Medicaid Enrollment ^a	2009-2013 Medicaid Enrollment Rate as a Percentage of 2014 Rate ^b	Projected 2014 Medicaid Enrollment Based on 2009-2013 Enrollment Rates ^c	Estimated Increase in Medicaid Enrollment Associated with Medicaid Expansion ^d
Total	3,684,517	74	2,740,333	944,184
Alcohol dependence	1,042,102	67	699,424	342,678
Other alcohol and marijuana disorders	1,571,584	79	1,241,446	330,138
Other drug abuse or dependence disorders	1,070,831	75	799,463	271,368

SOURCE: Mathematica analysis of NSDUH 2009-2014 public use files.

a. These counts are estimated based on the NSDUH survey sample.
b. This is the mean percentage of individuals ages 12-64 with an SUD enrolled in Medicaid in 2009-2013 divided by that for 2014. Means for these periods are those presented in Table II.4.
c. This number is the 2014 Medicaid enrollment times the 2009-2013 Medicaid enrollment rate as a percentage of the 2014 rate.
d. This number is the difference between 2014 Medicaid enrollment and the projected Medicaid enrollment based on 2009-2013 enrollment rates. The estimated increase in Medicaid enrollment may result from Medicaid eligibility expansion under the ACA, or other changes such as new policies implemented to address the opioid epidemic.

According to the NSDUH, in 2014 most Medicaid-enrolled individuals with an SUD, 85 percent, did not receive any specialty treatment. Assuming their treatment use rates are similar to those of the Medicaid population overall, most of the individuals whose enrollment is associated with Medicaid expansion (about 798,000, or 85 percent of the 944,000) did not receive any specialty SUD treatment in 2014 (Figure II.6). Individuals who are uninsured access treatment at a lower rate than those on Medicaid; a logit model predicting specialty treatment use for the NSDUH using data from 2009 to 2014 indicated that the likelihood of specialty SUD treatment for someone who was uninsured was 60 percent of that for an individual who was Medicaid insured. Thus, we would expect 60 percent of those whose enrollment in Medicaid was associated with Medicaid

expansion who received SUD treatment in 2014 would have received specialty SUD treatment even if they were uninsured. The remaining approximately 59,000 (40 percent) would not have received specialty treatment in the absence of Medicaid enrollment.¹⁰



A limitation to this analysis is that we assume that the SUD treatment use rate for the Medicaid expansion population with SUDs is the same as that for other Medicaid enrollees with SUDs. To assess the importance of this limitation, we compared treatment use rates by disorder type in 2014 to the average for 2009-2013. Despite the 34 percent increase in the number of individuals enrolled in Medicaid with SUDs specialty treatment use rates were unchanged between the two periods suggesting that the expansion population had similar rates of treatment use.

¹⁰ We conducted a logistic regression using data from the 2009-2014 NSDUH to estimate the increase in the likelihood of receiving treatment that was associated with being enrolled in Medicaid relative to being uninsured. The regression controlled for age, gender, race/ethnicity, education level, household income, marital status, age of first alcohol/illicit drug use, cigarette use, criminal activity, health status, population density, work status, SUD type, and year. Holding all other characteristics constant at the average for the population, the regression analysis indicated that, at the margin, the likelihood of specialty SUD treatment for someone who was uninsured was 60 percent of that for an individual who was Medicaid insured.

TABLE II.10. Percentage of Individuals Ages 12-64 with SUDs Who Were Enrolled in Medicaid Who Used Specialty Treatment in 2009-2013 versus 2014, by SUD Type						
Type of Substance	2009-2013			2014		
	Mean	Lower Bound for 95% CL	Upper Bound for 95% CL	Mean	Lower Bound for 95% CL	Upper Bound for 95% CL
Total	14.5	12.7	16.3	15.5	11.8	19.2
Alcohol dependence	10.7	7.3	14.0	11.1	5.5	16.8
Other alcohol and marijuana disorders	8.3	6.3	10.3	9.6	4.4	14.9
Other drug abuse or dependence disorders	28.2	24.2	32.2	28.2	20.1	36.4

SOURCE: Mathematica analysis of NSDUH 2009-2014 public use files.

Another limitation of this analysis is that it included only individuals with SUDs as identified by responses to questions in the NSDUH survey. Some individuals receive treatment for substance use, but do not meet criteria for an SUD in the past year. These may be individuals who previously met criteria for a disorder and are continuing to receive treatment to reduce the likelihood of relapse. According to the NSDUH, on average between 2009-2013 and in 2014, respectively, about 292,000 and 261,000 individuals enrolled in Medicaid who did not meet criteria for an SUD in the past year received specialty treatment (Table II.11). The difference between these estimates is not statistically significant suggesting the Medicaid expansion did not substantially change the number of individuals in this population receiving specialty treatment.

TABLE II.11. Number of Individuals Ages 12-64 Not Meeting Criteria for an SUD Who Received Specialty SUD Treatment in 2009-2013 versus 2014, by Medicaid Enrollment						
Type of Substance	2009-2013			2014		
	Mean	Lower Bound for 95% CL	Upper Bound for 95% CL	Mean	Lower Bound for 95% CL	Upper Bound for 95% CL
Medicaid enrolled	291,898	243,132	340,664	261,103	179,849	342,356
Not Medicaid enrolled	672,861	588,171	757,551	728,473	540,615	916,332

SOURCE: Mathematica analysis of NSDUH 2009-2014 public use files.

III. SUPPLY OF SUBSTANCE USE TREATMENT

In this section, we present our findings on the supply of SUD treatment services. The primary data source for these analyses is the information collected on the workforce questions added to the 2016 N-SSATS. These data are supplemented with information from the N-SSATS on trends in facility acceptance of insurance and utilization rates in beds designated for SUD treatment as well as data from Bureau of Labor Statistics (BLS) on trends in hourly wages.

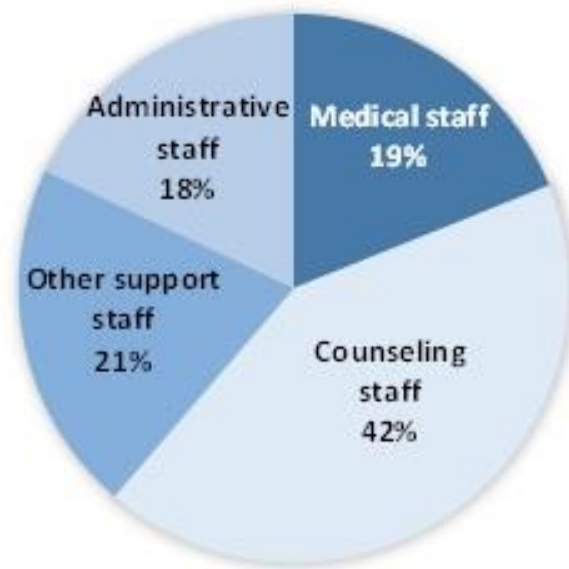
A. What are the Professions and SUD Treatment Credentials of the Current Workforce?

Provision of SUD treatment requires a mix of counselors, medical professionals, and support staff. The level and type of staff needed vary across care types and settings, based on the needs of the clients in care. In this section, we present findings from recent N-SSATS 2016 survey data that characterize this multifaceted workforce, providing information on its overall size, composition, education, and training.

1. *What is the Size of the SUD Treatment Workforce?*

According to the N-SSATS survey, 256,449 paid staff members (representing 197,559 full-time equivalent [FTE] positions) and 14,458 unpaid staff members (representing 6,726 FTE positions) worked in specialty SUD treatment facilities in 2016 (Table B.7 and Table B.8). We define an FTE as 40 working hours per week. About two-fifths of the paid FTEs were degreed and no-degree counseling staff (Figure III.1). The other three-fifths of the paid FTEs were about evenly divided between medical staff (that is, physicians, pharmacists, nurses, and mid-level professionals), other support staff (that is, peer support staff, care managers, patient navigators, other recovery support staff, other clinical staff and interns, pharmacy assistants, contractors/per diem staff, and intake coordinators), and administrative staff.

FIGURE III.1. Distribution of Paid FTEs by Staff Type, 2016



SOURCE: N-SSATS 2016.

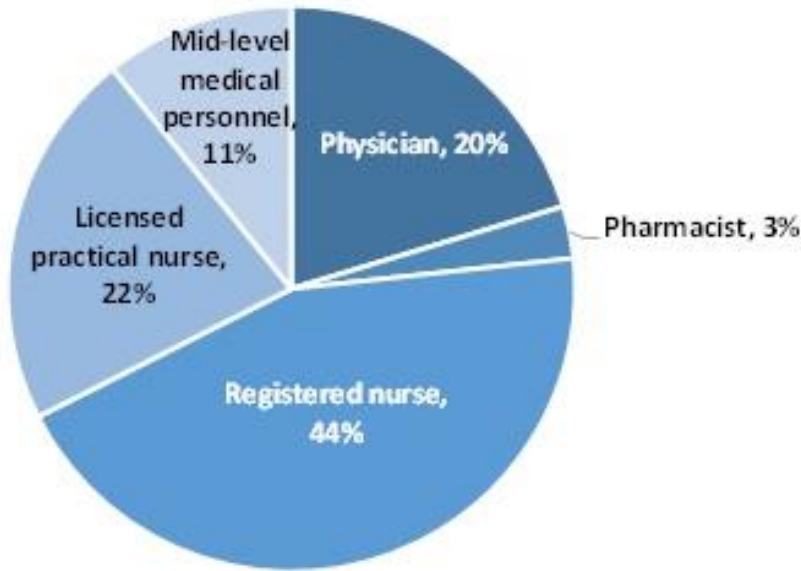
NOTE: FTE is based on 40 working hours per week.

2. What is the Education Level of Medical and Counseling Staff?

The training and educational attainment of staff in specialty SUD treatment facilities varied. There are few standards for such staffing. State and federal regulations allow SUD treatment facilities substantial flexibility in selecting the number and types of professionals they employ. Thus, facilities can align their staff with the needs of their client population and the services they offer. In this section, we provide an overview of SUD specialty facility staffing nationally, based on Table B.7. More detailed information by state and facility characteristics is provided in Appendix B (Table B.9.a, Table B.10.a, and Table B.11.a).

Physicians and other prescribers are particularly important in expanding the use of pharmacotherapy. The SAMHSA-HRSA Center for Integrated Health Solutions (2014) identified lack of available prescribers as a barrier to expanding pharmacotherapy use. Physicians accounted for 20 percent (7,576 FTEs) of the medical staff at specialty SUD treatment facilities (Figure III.2). These physicians are supplemented by 4,043 FTEs for mid-level medical personnel (including nurse practitioners, physician assistants, and advanced practice nurses) who can also prescribe. Although they make up a small share of all medical staff (3 percent), pharmacists, who accounted for 1,110 FTEs, are also important in supporting opioid treatment facilities. Nurses are the most common type of medical staff in specialty SUD treatment facilities. About two-thirds of nursing staff are registered nurses (16,515 FTEs) and one-third are licensed practical nurses (8,073 FTEs).

FIGURE III.2. Distribution of FTE Medical Staff, by Training

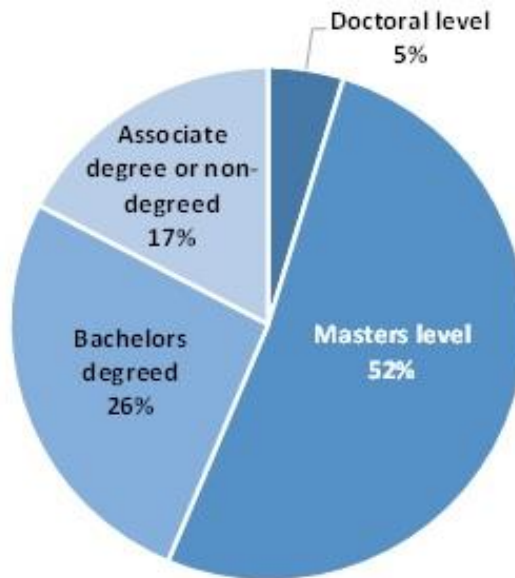


SOURCE: N-SSATS 2016.

NOTE: FTE is based on 40 working hours per week.

Counseling staff in SUD treatment facilities have high rates of post-graduate education. A substantial majority (57 percent) of counselors (including degreed and non-degreed counseling staff) in these facilities have a graduate degree (Figure III.3). Only 17 percent of counselors have less than a bachelor's degree.

FIGURE III.3. Distribution of FTE Counseling Staff, by Education Level



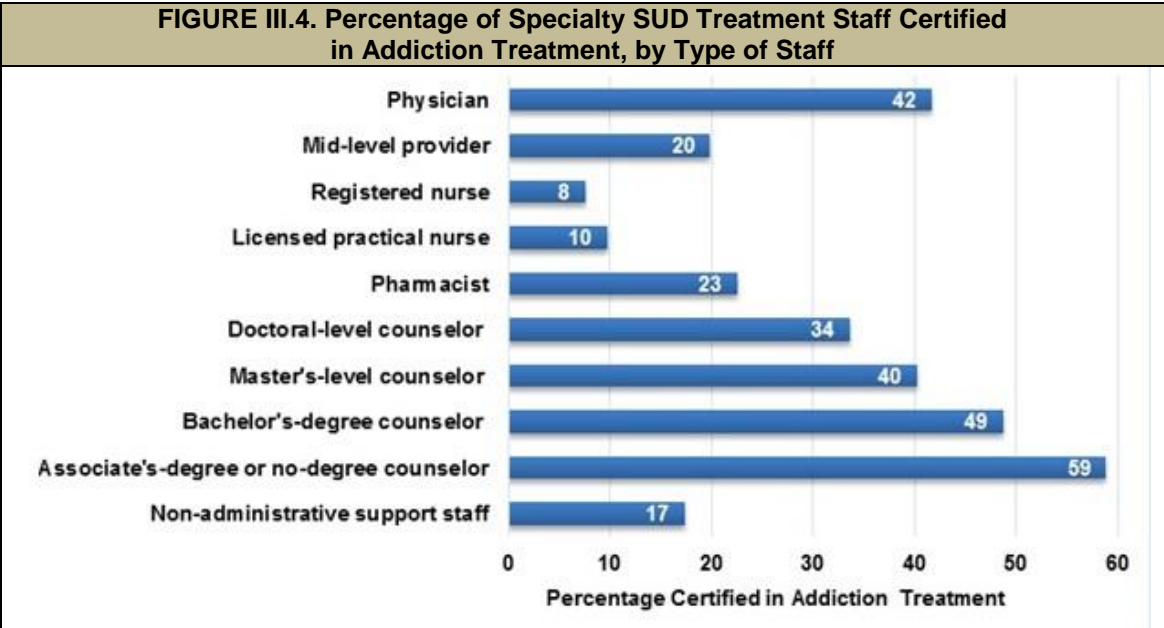
SOURCE: N-SSATS 2016.

NOTE: FTE is based on 40 working hours per week.

3. What Percentage of Specialty SUD Treatment Staff are Certified in Addiction Treatment?

Although counseling staff in SUD treatment facilities have high rates of post-graduate education, this advanced education may not translate into greater knowledge specific to SUD treatment, as many graduate programs in social work and psychology do not provide specialized training in SUDs. Community colleges provide much of the specialized academic training in SUDs (McCarty 2002; Institute of Medicine 2006). Addiction counselors can demonstrate their competency by obtaining certification through organizations such as IC&RC and NAADAC. Certification is available for different levels of staff and requires education/training, work experience, and an exam focused on SUDs and addiction. Certification in addiction treatment was more common among counselors with less educational attainment. In fact, as shown in Figure III.4, only 40 percent and 34 percent of master’s-level and doctoral-level counselors, respectively, are certified in addiction treatment in contrast to 49 percent and 59 percent, respectively, for bachelor’s degree and associate’s degree or no-degree counselors. Overall, 31 percent of non-administrative staff in specialty SUD treatment facilities are certified in addiction treatment.

This section provides an overview of staff certification in addiction at SUD specialty facilities nationally. More detailed information on certification by state and facility characteristics is provided in Appendix B (Table B.9.b, Table B.10.b, and Table B.11.b).



SOURCE: N-SSATS 2016.
NOTE: Non-administrative support staff includes pharmacy assistants, peer support staff, care managers, patient navigators, other recovery support workers, interns, contractors, per diem staff, intake coordinators, and other clinical staff not included in other groups.

B. What is the Current Capacity of Service Providers to Supply SUD Treatment Services? How Does Provider Capacity Differ Across Geographic Areas? What Disparities in Care Access are Evident? How Does Provider Capacity Differ in Relation to Various Services, such as Inpatient, Residential, Intensive Outpatient, Outpatient, and Pharmacotherapy?

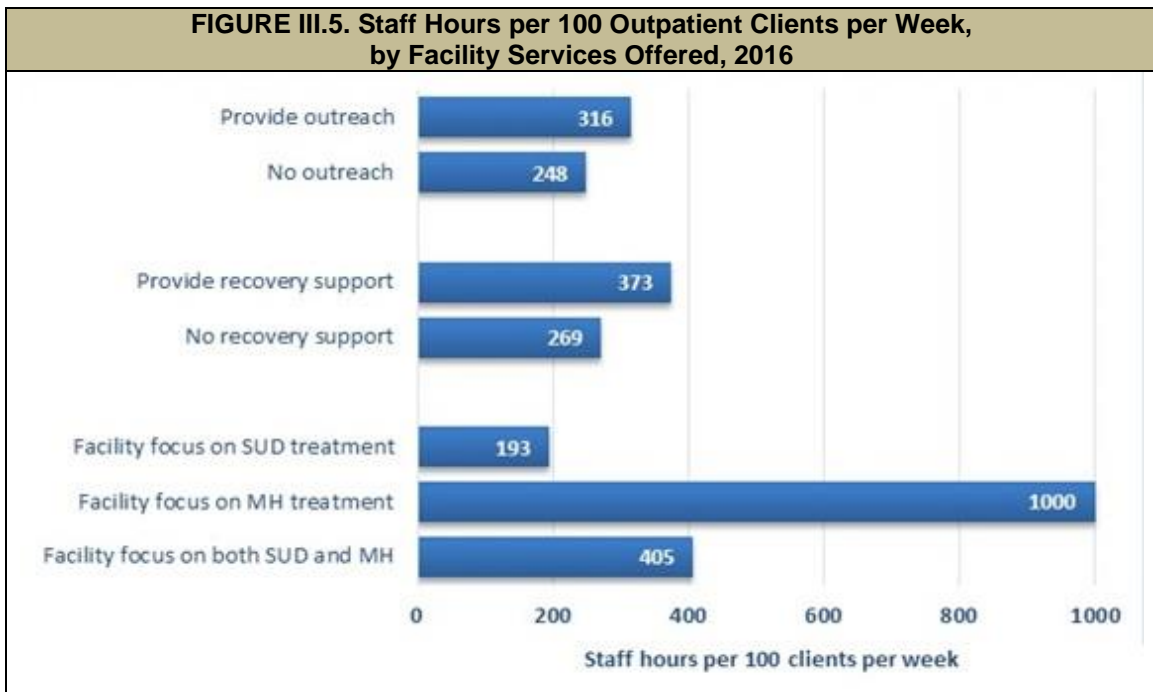
There are limited data available to assess treatment system capacity despite its importance and relevance in further policymaking. In this section, we provide information on the number of staff hours utilized per week for every 100 outpatient clients and the variation in this metric based on facility characteristics. We also provide data on access to pharmacotherapy and utilization rates for designated residential and inpatient care beds.

1. *For Every 100 Clients in Outpatient Care, How Many Hours of Care are provided per Week by Type of Staff? How Does the Level of Hours provided Vary by State, Types of Services Offered, and Other Facility Characteristics?*

In this section, we report staff hours per week for every 100 clients in care by type of staff and facility characteristics. We limit this analysis to facilities that provide only outpatient treatment. The level and distribution of staff hours provided differs substantially based on whether pharmacotherapies are offered at the facility. Overall, on average, for every 100 clients in care, outpatient facility staff provide 292 hours of services per week (Table III.1). Fewer staff hours were used per 100 clients in facilities providing pharmacotherapies (242 hours per week) than in those not providing pharmacotherapies (393 hours per week). In both groups, the bulk of hours were provided by counseling staff (66 percent across all facilities); however, medical staff accounted for a greater share of hours in facilities providing pharmacotherapy (25 percent) than those that did not (10 percent). Facilities providing no pharmacotherapy used substantially more counseling and recovery support staff hours than those providing pharmacotherapy. Detailed information on the level and distribution of staff hours per client per week by state are listed in Table B.12.a, Table B.12.b, and Table B.12.c.

TABLE III.1. Staff Hours per 100 Outpatient Clients per Week, by Type of Staff and Availability of Pharmacotherapy, 2016						
Type of Staff	Number			Percentage		
	All Facilities	Facilities Providing an Pharmacotherapies	Facilities Providing No Pharmacotherapy	All Facilities	Facilities Providing an Pharmacotherapies	Facilities Providing No Pharmacotherapy
Total	292	242	393	100	100	100
Medical staff	52	60	38	18	25	10
Physician	15	15	14	5	6	4
Pharmacy staff	3	3	2	1	1	1
Mid-level medical personnel	9	9	8	3	4	2
Registered nurse	14	15	10	5	6	2
Licensed practical nurse	13	17	4	4	7	1
Counselors	192	147	284	66	61	72
Post-graduate level	113	87	167	39	36	42
Bachelor's degree	51	39	75	17	16	19
Associate's or no-degree	27	20	42	9	8	11
Recovery support staff	47	36	72	16	15	18

SOURCE: N-SSATS 2016.

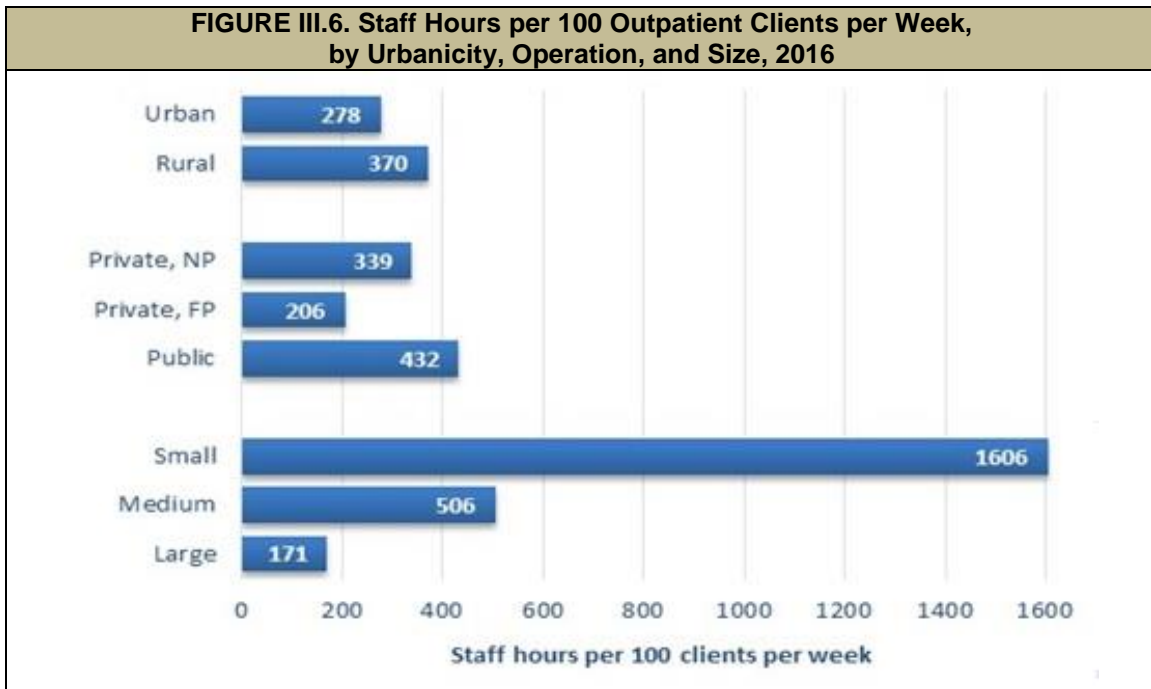


SOURCE: N-SSATS 2016.

NOTE: We identified facilities as providing outreach if they said they offered outreach to persons who may need treatment (SRVC91 = 1). We identified facilities as providing recovery support services if they provided social skills development, mentoring/peer support, assistance in obtaining social services, employment counseling or training, or assistance in locating housing (SRVC96 = 1, SRVC97 = 1, SRVC36 = 1, SRVC39 = 1, and SRVC38 = 1). We determined facility focus based on responses to Question 6.

Unsurprisingly, when we examined disparities across facilities in staff hours per 100 clients per week based on differences in services offered (Table B.13), facilities that reported providing supplemental services such as outreach to individuals in the community who may need treatment and recovery support services averaged higher

staff hours per 100 clients per week (Figure III.5). Most striking were the differences based on facility primary focus. Those that reported a dual focus on mental health and substance abuse treatment (405 hours per 100 clients per week) or primarily mental health treatment (1,000 hours per 100 clients per week) reported substantially higher staff hours per 100 clients per week relative to those whose focus was primarily SUD treatment (193 hours per 100 clients per week).



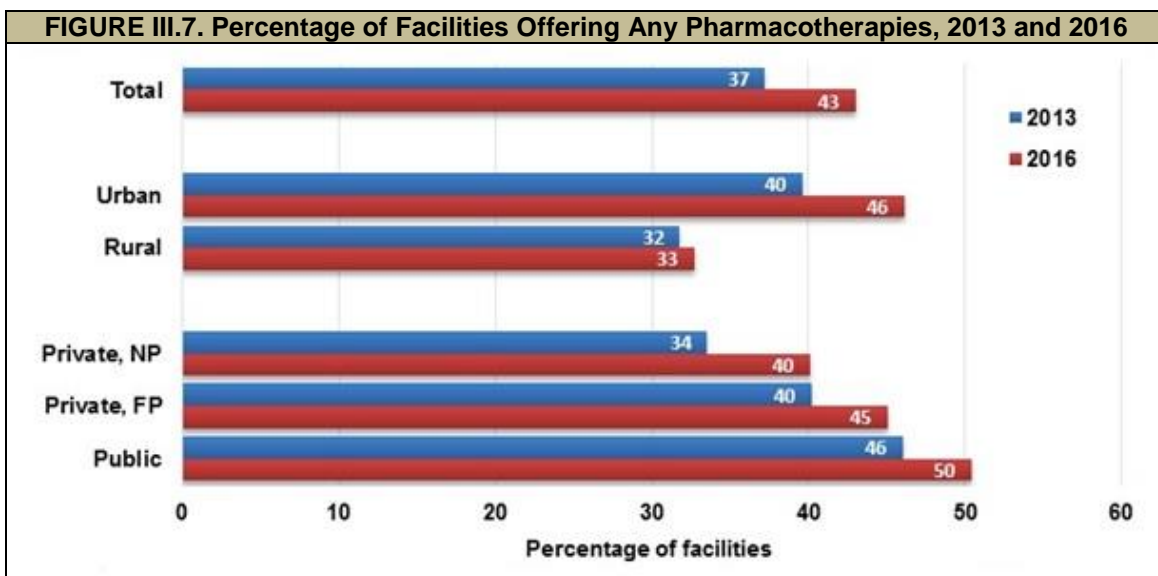
SOURCE: N-SSATS 2016.

NOTE: We assigned urbanicity based on the National Center for Health Statistics urbanicity classification scheme. Facilities in rural areas include those in micropolitan areas with an urban core of at least 10,000 but less than 50,000 population, as well as those in non-core areas. Facilities in a central or fringe urban core of 50,000 or more are considered urban. Information on urbanicity was not available for all facilities; urban and rural estimates are reported only for facilities with known urbanicity. Facility operation was self-designated in N-SSATS Question 7. We determined facility size based on the number of outpatient clients in care. We identified facilities below the 25th and above the 75th percentiles for client count as small and large, respectively. We designated the remaining facilities as medium.

There were also substantial differences in staff hours per 100 clients per week based on facility characteristics such as urbanicity and size (Table B.14). Some of these differences may result from economies of scale achieved in larger facilities. For example, rural facilities and those with fewer clients used substantially more staff hours per 100 clients (Figure III.6). There were also substantial differences based on facility operation. These differences may be related to differences in facility mission that align with operation. Public facilities often serve as the providers of last resort and serve clients with comorbid conditions and limited social and economic supports. Thus, it is not surprising that public facilities reported the highest numbers of hours per 100 clients (432 hours per 100 clients per week) followed by non-profit facilities (339 hours per 100 clients per week).

2. What Proportion of Facilities Provide Pharmacotherapy?

Pharmacotherapy has been demonstrated to be both clinically and cost effective for alcohol and opioid disorders (Mann et al. 2014; Baser et al. 2011). Although there is strong evidence that use of pharmacotherapy in managing SUDs provides substantial cost savings, this approach is not widespread. The proportion of facilities offering any pharmacotherapy, including those related to opioid use, has expanded in recent years as efforts to improve the quality of SUD treatment have focused on promoting its use. Overall, in urban and rural areas and across all facility operation types, the percentage of facilities offering any pharmacotherapies and specifically, opioid-related pharmacotherapies, has increased modestly from 2013 to 2016 (Figure III.7 and Figure III.8). Overall, however, only 43 percent of facilities offered any pharmacotherapies in 2016.

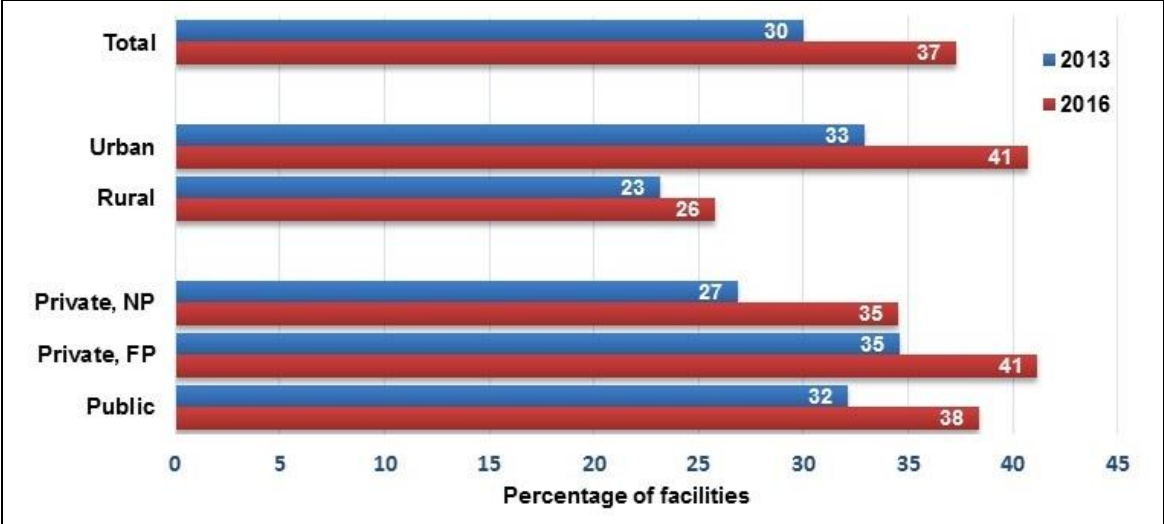


SOURCE: N-SSATS 2016.

NOTE: We assigned urbanicity assigned based on the National Center for Health Statistics urbanicity classification scheme. Facilities in rural areas include those in micropolitan areas with an urban core of at least 10,000 but less than 50,000 population, as well as those in non-core areas. Facilities in a central or fringe urban core of 50,000 or more are considered urban. Facility operation was self-designated in N-SSATS Question 7.

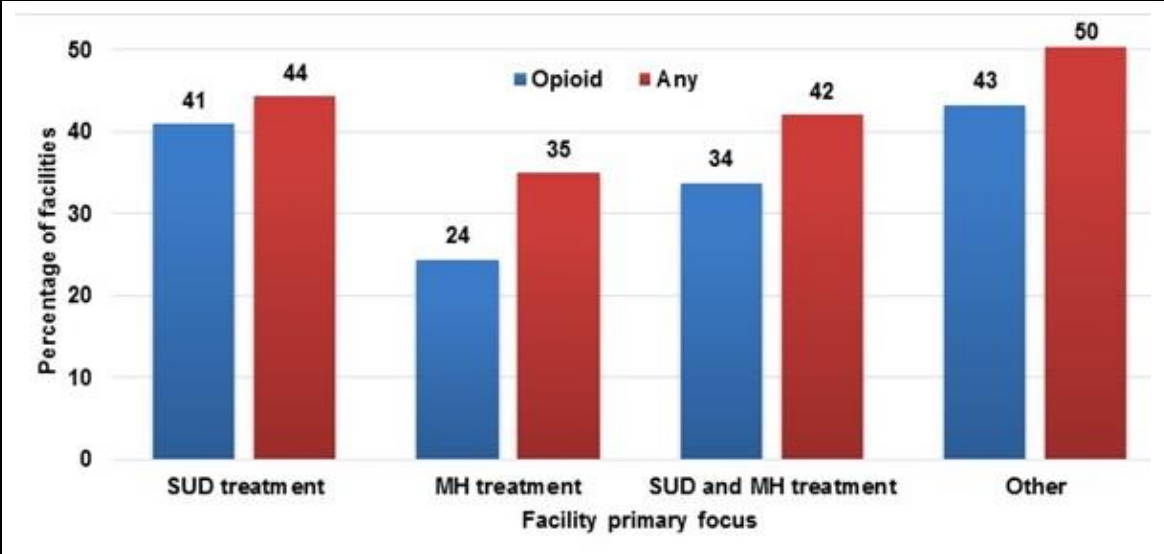
Facility primary focus is associated with the availability of pharmacotherapies. Facilities indicating their primary focus was mental health treatment were substantially less likely to offer any pharmacotherapies (35 percent) than their counterparts focusing on SUDs (44 percent) or SUDs and mental health treatment (42 percent) (Figure III.9). This difference was more substantial when we assessed provision of pharmacotherapies for opioid-related disorders. Only 24 percent of facilities focusing on mental health treatment offered pharmacotherapy for opioid disorders. In contrast, 41 percent and 34 percent of facilities focusing on SUD treatment and SUD and mental health treatment, respectively, provided opioid-related pharmacotherapies.

FIGURE III.8. Percentage of Facilities Offering Opioid-Related Pharmacotherapies, 2013 and 2016



SOURCE: N-SSATS 2016.
NOTE: We assigned urbanicity based on the National Center for Health Statistics urbanicity classification scheme. Facilities in rural areas include those in micropolitan areas with an urban core of at least 10,000 but less than 50,000 population, as well as those in non-core areas. Facilities in a central or fringe urban core of 50,000 or more are considered urban. Facility operation was self-designated in N-SSATS Question 7.

FIGURE III.9. Percentage of Facilities Offering Opioid-Related and Any Pharmacotherapies, 2016



SOURCE: N-SSATS 2016.
NOTE: Facility focus was determined based on responses to Question 6.

According to the SAMHSA-HRSA Center for Integrated Health Solutions (2014), several barriers limit the use of pharmacotherapy. These barriers include lack of available prescribers, agency regulatory policies that restrict or forbid pharmacotherapy use, provider workforce attitudes, insurer limits on dosages prescribed (that is, annual

or lifetime medication limits), insurer authorization requirements, requirements that behavioral therapies be tried first, lack of support staff for providers administering pharmacotherapy, and inconsistent credentialing or licensure requirements for counseling staff to be reimbursed for pharmacotherapy-related services. Cunningham et al. (2009) identified somewhat different obstacles to widespread adoption of pharmacotherapy, including regulatory restrictions, lack of access to medical personnel trained in delivering such treatment, and physician reluctance. Friedman et al. (2012) identified lack of qualified medical staff as a reason for lack of pharmacotherapy in the criminal justice system. Roman et al. (2011) asserted that limited knowledge about SUD treatment medications among the public hinders its use. Mass media advertising of prescription medications for other health conditions has accelerated use of those medications; broader public knowledge of the benefits of pharmacotherapy for SUDs could encourage its more widespread use.

Mark et al. (2015) demonstrated how Medicaid coverage restrictions can be a substantial barrier to provision of pharmacotherapy. They analyzed data from 2013 Medicaid pharmacy documents, 2011 and 2012 Medicaid state drug utilization records, and a 2013 American Society of Addiction Medicine survey. Only 13 state Medicaid programs included all medications approved for alcohol and opioid dependence on their preferred drug lists. The most commonly excluded were extended-release naltrexone (19 programs), acamprosate (19 programs), and methadone (20 programs). Almost all Medicaid programs required prior authorization for combined buprenorphine-naloxone and had lifetime limits.

Many of the barriers to expansion of pharmacotherapy are related to the workforce. The number of medical staff qualified to provide pharmacotherapy services and the staff supporting them needs to increase for pharmacotherapy provision to expand. Training primary care providers to provide pharmacotherapy in primary care or other integrated care settings such as HIV or mental health clinics can improve treatment access and abstinence at six months (NIDA 2017; Korthuis et al. 2017). Primary care providers can act independently or work collaboratively with SUD treatment specialist in these models. In addition to increasing the number of qualified providers workforce attitudes toward pharmacotherapy, such as requiring behavioral therapies be tried first, need to change to attain widespread adoption. Last, consistent credentialing and licensure requirements are needed across states and insurers for professionals providing pharmacotherapy services. The HHS Opioid Strategy announced in April 2017 aims to continue the department's efforts to improve access to "treatment, and recovery services, including the full range of medication-assisted treatments" (HHS 2017); also, despite the barriers, the ACA has resulted in expansions in the number of physicians waived to prescribe buprenorphine (Knudsen et al. 2015).

3. *What is the Utilization Rate for Residential and Inpatient Beds Designated for SUD Treatment?*

The N-SSATS reports the number of beds designated for SUD treatment in residential and inpatient hospital specialty treatment settings. Capacity in these care

settings can be assessed by estimating a utilization rate based on the number of clients in care relative to the number of designated beds. Facilities providing outpatient care generally do not have a consistent definition of available capacity. Thus, we were not able to assess utilization rates in outpatient settings.

Despite increases in designated beds, treatment capacity in the residential and inpatient hospital settings appears insufficient to meet demand in 2015 (Table B.17). Nationally, there was a 4 percent increase in designated residential beds and a 26 percent increase in inpatient hospital beds between 2013 and 2015. Despite these increases, the utilization rate for residential beds increased from 97 percent to 106 percent and that for inpatient hospital beds from 97 percent to 109 percent.¹¹ In 18 states, residential bed utilization rates across all facilities were over 100 percent in 2015; the same number of states had inpatient bed utilization rates over 100 percent.

C. What is the Current Capacity of SUD Treatment Organizations to Participate in Efforts to Integrate SUD Treatment within the Broader Health Care System? To What Degree are SUD Treatment Providers Used to Billing Medicaid?

Many SUD treatment providers have traditionally relied on grant funding. As potential clients obtain insurance coverage as a result of insurance coverage expansions, there is concern that providers are not prepared to accept Medicaid and private insurance. The N-SSATS annually asks specialty SUD treatment facilities what forms of payment they accept for services. The facilities represented in the N-SSATS are a census of public and private facilities with SUD treatment programs, including hospital, residential, and outpatient treatment providers. These facilities account for the majority of SUD treatment spending in the United States. Table III.2 identifies the percentage of these facilities that reported accepting private health insurance and Medicaid coverage in 2013 and 2016. Between 2013 and 2016, there was a small increase in the percentage of facilities accepting private health insurance (66 percent in 2013 versus 70 percent in 2016) and Medicaid insurance (60 percent in 2013 versus 63 percent in 2016). Small proportional increases in insurance acceptance occurred in all regions and across all facility types except “any inpatient setting.” It is notable that there was no change in Medicaid acceptance in states that had less than a 10 percent increase in Medicaid enrollment or in “any inpatient setting.”

¹¹ Utilization rate is calculated by dividing the number of clients in care by the total number of designated beds. The utilization rate will exceed 100 percent when clients are placed in beds not specifically designated for substance use treatment.

TABLE III.2. Percentage of Facilities Accepting Indicated Insurance Type						
Facility Type	Proportion Accepting Private Health Insurance			Proportion Accepting Medicaid		
	2013	2016	% Change	2013	2016	% Change
Total	66	70	4	60	63	5
Urbanicity						
Urban	64	67	4	56	59	4
Rural	71	76	8	67	74	11
Region						
Northeast	70	73	4	77	78	1
Midwest	76	78	2	64	67	5
South	61	63	4	56	58	3
West	60	64	8	47	51	9
States in which Medicaid enrollment increased more than 10% between January 2014 and January 2015						
Yes	63	66	5	53	59	10
No	69	71	4	65	65	0
Operation						
Private NP	66	68	2	69	71	4
Private FP	64	69	8	41	45	10
Public	65	67	3	62	67	8
Facility Setting						
Outpatient only	67	70	4	63	66	5
Residential only	46	50	9	40	41	4
Residential and outpatient	71	74	5	51	54	7
Any inpatient hospital	93	92	-1	86	86	0
SOURCE: N-SSATS, 2013 (Question 25) and 2016 (Question 27).						
NOTE: We calculated the percentage of facilities accepting private insurance and Medicaid by dividing the number of facilities reporting that they accept the indicated insurance type by the total number of facilities in the various categories. We excluded United States territories from the "Region" and "States in which Medicaid enrollment increased more than 10% between January 2014 and January 2015." We assigned urbanicity based on the National Center for Health Statistics urbanicity classification scheme. Facilities in rural areas include those in micropolitan areas with an urban core of at least 10,000 but less than 50,000 population, as well as those in non-core areas. Facilities in a central or fringe urban core of 50,000 or more are considered urban. Facility operation was self-designated in N-SSATS Question 4 in 2013 and Question 7 in 2016.						

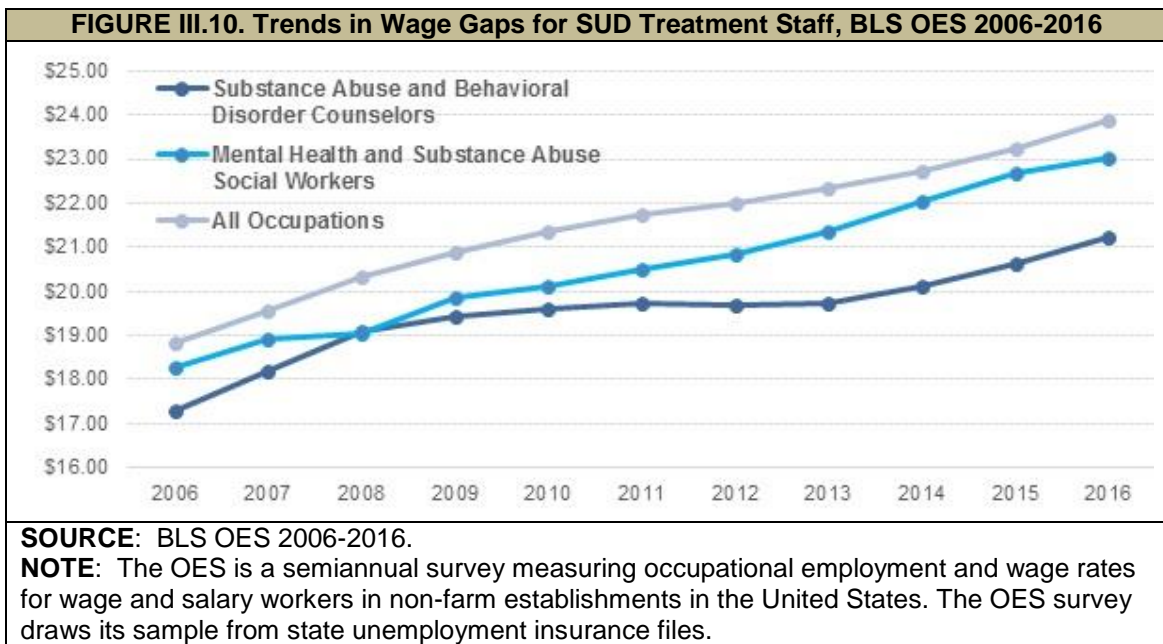
D. How Have Wages for SUD Treatment Staff Changed Over the Last Decade?

Although most SUD counselors and social workers hold post-graduate degrees, average hourly wages for SUD treatment professionals are substantially lower than the average wage for all occupations. BLS collects hourly wage data in its Occupation Employment Survey (OES), including the following two occupational categories that include SUD counselors and social workers: (1) substance abuse and behavioral disorder counselors; and (2) mental health and substance abuse social workers. Wages for these two occupations have been below the average for all occupations for the last decade (Figure III.10). Trends in wage growth over the last decade resulted in expansion of these wage gaps for SUD treatment professionals, particularly substance abuse counselors:

- **2006 to 2009.** Wages *increased substantially* for all occupations (3.5 percent annually) and for the occupations including SUD counselors (4.0 percent annually) and social workers (2.8 percent annually).
- **2009 to 2012.** Wages of substance abuse counselors lost ground relative to other occupations, as there was *little wage growth* for the occupation category

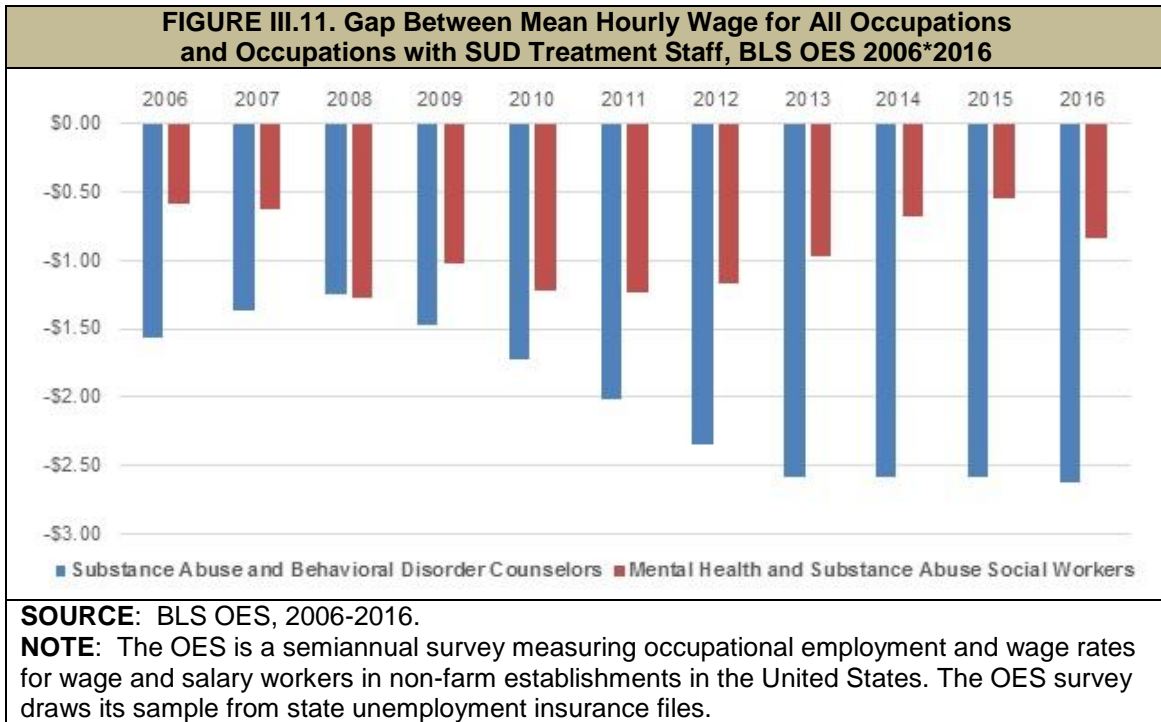
including them (0.4 percent annually). Wage growth continued for other occupations (1.7 percent annually), including substance abuse social workers (1.6 percent annually), albeit at a slower rate than in previous years. The lack of growth in this period was likely due to the economic recession and associated reductions in state revenue.

- **2012 and 2016. *Slow wage growth continued*** for all occupations and those including SUD counselor and social worker occupation categories (about 1.8 percent annually). Wage growth for substance abuse counselors increased at the same rate as other occupations but did not make up for losses in wages relative to other occupations that occurred during the recession.



Over the last decade, these wage growth trends resulted in an expansion of the gap between the mean wage for all occupations and that for the occupation including SUD treatment counselors (from \$1.56 to \$2.63 per hour). The wage gap for social workers relative to other occupations has fluctuated over the years (from about \$0.54 in 2015 to about \$1.27 in 2008) (Figure III.11).

To provide specific example of wages for alternative career paths, we selected two health care professions requiring similar or fewer years of education. In 2016, the mean hourly wages for SUD counselors were \$5 and \$13 lower, respectively, than those for marriage and family therapists and registered nurses.



The SUD treatment field’s current high turnover rate is commonly attributed to inadequate compensation. Compensation for behavioral health professionals is significantly lower than for other health and non-health professions requiring similar levels of training (Hyde 2013; Bukach 2017). The clinical directors interviewed as part of the national Vital Signs survey of specialty SUD treatment facilities noted that low compensation makes hiring and retaining qualified staff a challenge (Ryan et al. 2012). Efforts to increase the labor supply in the SUD treatment field through training programs without an associated increase in reimbursement for services through insurance or other funding sources are likely to result in reduced wage levels and even lower retention as individuals in the SUD treatment field recognize the potential to increase their earnings by shifting to other professions.

IV. DISCUSSION

Policymakers at all levels of government have targeted increasing SUD treatment use to address escalating drug overdose deaths related to the opioid epidemic and improve societal welfare. Meanwhile, rates of SUD treatment use generally have been constant for more than a decade despite the substantial recent increase in insurance coverage for SUD treatment. Individuals with SUD treatment needs overwhelmingly indicate that they do not feel a need for treatment and, even among the small minority who believe that they might benefit from treatment, most make no effort to obtain it. Thus, expanding treatment use will require a multifaceted approach including increasing public awareness of treatment effectiveness, reducing stigma associated with SUD treatment, addressing financial barriers, and increasing primary care physicians' role in screening, treatment and referral.

On the supply side, low wage rates for SUD treatment professionals are associated with high turnover and difficulty in hiring qualified staff. Individuals trained to provide SUD treatment quickly move on to other professions that offer better working conditions, wages, and benefits (Hyde 2013; Ryan et al. 2012; Bukach 2017). There is also concern that low treatment reimbursement rates and restrictions on SUD treatment coverage under Medicaid may be a barrier to expanding treatment in some states (Dickson 2015).

Overall, the role of Medicaid in funding SUD treatment services has expanded since 2014 although many of the individuals who gained Medicaid coverage would have received SUD treatment through another funding source such as state and local funding or federal block grants. In parallel to this shift in funding source there has been a shift from care provision in publicly operated facilities to increased use of privately operated facilities. There is an opportunity for policymakers to redirect the public funding and resources to activities encouraging expanded treatment use and providing a continuum of care that addresses the chronic nature of SUDs. Likewise state Medicaid programs have the potential to play an important role in transforming the SUD treatment system and HHS Centers for Medicare and Medicaid Services (CMS) is taking an active role encouraging states to make reforms. CMS is conducting an Innovation Accelerator Program (IAP) to support state efforts to expand SUD treatment under Medicaid. The IAP supports efforts to improve care quality and continuity, enhance performance monitoring capacity, identify beneficiaries in need of treatment, develop a continuum of care that addresses the variety treatment needs and the chronic nature of SUDs, and target reimbursement models to incentivize better outcomes (CMS 2017). In addition, CMS has been working with states to improve access to and quality of SUD treatment through Medicaid Section 1115 demonstrations (CMS 2017b).

The impact of a number of recent federal efforts to increase SUD treatment use and the quality of SUD treatment services is not fully captured in the data available for

this study. The initiatives include the CMS IAP program as well as several SAMHSA grant programs intended to expand access to SUD treatment (McCance-Katz et al. 2017). The Opioid State Targeted Response grants provided \$485 million to states and United States territories in fiscal year 2017 primarily to expand treatment, recovery support and prevention activities. The Medication-Assisted Treatment for Prescription Drug and Opioid Addiction program expands pharmacotherapy access by providing grants to states with the highest rates of treatment admissions for opioid addiction. There are also a number of federally-funded efforts to expand access to SUD screening and treatment in primary care settings and rural areas including integrating SUD treatment into community mental health centers, use of telemedicine, efforts to educate primary care providers on addiction risks and treatment, partnerships between primary care and specialty providers, and expansion of buprenorphine waived primary care providers and the number of patients that can be treated under each waiver. Future years of data should be monitored to assess the impact of these initiatives.

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APPENDIX A. DATA SOURCES

In this appendix, we provide a brief description of the three data sources we used to develop the analyses in this report.

A. National Survey of Substance Abuse Treatment Services (N-SSATS)

The N-SSATS is an ideal source for analyzing trends in clients who are receiving specialty SUD treatment as well as trends in SUD treatment facility characteristics. It is an annual survey of the universe of specialty SUD treatment facilities. Counts of clients in care (on the last working day in March of each survey year) were collected annually through 2013 and biannually thereafter. Key strengths of the survey include its comprehensiveness in terms of the inclusion of facilities and the types of information collected. The N-SSATS, which includes all known specialty SUD treatment facilities in the United States, consistently achieves response rates greater than 90 percent. This allows for detailed analysis of small states or subgroups.

The N-SSATS data, however, are limited in several ways. Specifically, N-SSATS excludes non-specialty providers, solo practitioners, and facilities serving only criminal justice populations. The exclusion of solo practitioners might be particularly important to analysis of programs such as those implementing Hub and Spoke models, which seek to increase treatment access at non-specialty providers. The exclusion of facilities that target only criminal justice populations might limit the potential for analyzing programs that target people exiting criminal justice institutions; however, many of these people might be served by facilities included in N-SSATS. N-SSATS does include information on whether facilities have programs that focus on criminal justice clients (excluding programs for those convicted of driving under the influence/driving while intoxicated).

The N-SSATS estimates presented in this report were directly extracted from N-SSATS reports and special tabulations. We summarize the data presented in those reports or present tabulations produced by the SAMHSA from the workforce questions and other questions included in the N-SSATS 2016 survey. For example, Mathematica assigned states to a category identifying “States in which Medicaid enrollment increased more than 10 percent between January 2014 and January 2015” or not based on Medicaid enrollment reports. Then client counts from the N-SSATS reports were summarized for the states in each group to produce the estimates for these categories reported in Appendix B.

B. National Survey on Drug Use and Health (NSDUH)

The NSDUH is designed to track the prevalence of SUDs in the United States by type of substance. The NSDUH is an annual survey of the civilian, non-institutionalized population ages 12 and older in the United States. As a population survey, it provides the most comprehensive information about the number of people who meet diagnostic criteria for an SUD, who misuse prescription opioids, and who have accessed any SUD treatment service in the past year. The NSDUH includes a sufficient sample of respondents to develop state-level estimates when two years of survey data are combined; however, standard errors for estimates are often quite large for smaller states, making it impossible to identify small changes in disorder prevalence or treatment use.

There are a number of limitations to the NSDUH survey data. NSDUH provides limited information on the type of substance use treatment services received and no information on the intensity of services that respondents received. The survey excludes people who are homeless and not in a shelter, as well as those who are institutionalized, including those residing in hospitals, residential treatment settings, jails, or prisons. NSDUH does include individuals who have been released from prison or institutional care. Overall, estimates of the prevalence of alcohol and illicit drug use disorders based on the NSDUH reflect the household population only, and thus, are likely to understate national prevalence since groups with high prevalence are excluded. In addition to the exclusion of the subpopulations that have higher prevalence of SUDs (Office of Applied Studies 2002), the self-reported nature of the data collection likely results in some underreporting (Harrell 1997).

SAMHSA redesigned the NSDUH between the 2014 and 2015 surveys. Due to methodological changes associated with the redesign estimates from 2015 and later years are not comparable to earlier years. Updates to the prescription drug questions were a key component of the redesign (Center for Behavioral Health Statistics and Quality 2015):

- Beginning in 2015, prescription drug questions were restructured to collect more information on use and misuse of specific prescription drugs. The definition of misuse was also changed with respondents being given more specific examples of misuse. In particular, prior to 2015 the definition of misuse did not include overuse of prescribed medication.
- Methamphetamine was included as a prescription stimulant prior to 2015. However, most methamphetamine that is used in the United States is manufactured illegally, not prescribed. Therefore, beginning in 2015, a new methamphetamine module was added to address both prescription and non-prescribed use.

- To help respondents categorize substances, the term "Molly" was added to questions about Ecstasy use in the hallucinogens module and use of felt tip pens and computer keyboard cleaner were added to the inhalants module.

The redesign also affected the abuse and dependence modules in the following key ways:

- The logic for routing individuals to the substance abuse and dependence modules was updated.
- Sedative withdrawal was updated to require two or more symptoms of withdrawal instead of one or more.
- Dependence and abuse questions were added for methamphetamine.

The NSDUH estimates presented in this report were directly extracted from NSDUH reports prepared by SAMHSA or summarize data presented in those reports, with the exception of the analysis of Medicaid coverage in Section II.D.

C. Treatment Episode Data Set (TEDS)

Relative to the N-SSATS and the NSDUH, the TEDS provides more detailed information on treatment services and the characteristics of clients at admission and discharge. The TEDS aggregates admissions data collected in individual state administrative data systems. States collect these data to monitor their SUD treatment systems. Reporting requirements can vary substantially by state. Generally, facilities that receive public funds or that are licensed or certified by a state substance abuse agency are included in the state administrative systems. The universe of their admissions is reported to TEDS. The scope of facilities reporting in a given state may change over time.

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APPENDIX B. DETAILED TABLES

TABLE B.1. Distribution of Specialty Treatment Receipt by Geographic Location and Type of Service, 2013 and 2015

Geographic Area	Total			Outpatient			Residential			Inpatient		
	2013	2015	% Change	2013	2015	% Change	2013	2015	% Change	2013	2015	% Change
Total	1,249,629	1,305,647	4.5	1,127,235	1,161,456	3.0	107,727	119,900	11.3	14,667	24,291	65.6
States in which Medicaid enrollment increased more than 10% between January 2014 and January 2015												
Yes	595,725	632,949	6.2	541,402	570,134	5.3	48,288	51,953	7.6	6,035	10,862	80.0
No	638,421	661,025	3.5	573,454	583,257	1.7	56,877	64,933	14.2	8,090	12,835	58.7
Region												
Northeast	320,089	333,922	4.3	290,975	298,862	2.7	24,956	26,535	6.3	4,158	8,525	105.0
Midwest	257,983	262,161	1.6	234,244	240,128	2.5	21,603	19,539	-9.6	2,136	2,494	16.8
South	345,446	377,894	9.4	308,139	328,054	6.5	31,593	40,582	28.5	5,714	9,258	62.0
West	310,628	319,997	3.0	281,498	286,347	1.7	27,013	30,230	11.9	2,117	3,420	61.5
Urbanicity												
Urban	954,890	1,103,406	15.6	860,436	979,226	13.8	83,150	102,633	23.4	11,304	21,547	90.6
Rural	279,167	190,478	-31.8	254,331	174,075	-31.6	22,015	14,253	-35.3	2,821	2,150	-23.8
Operation												
Private, NP	638,858	670,593	5.0	553,157	570,450	3.1	79,714	88,260	10.7	5,987	11,883	98.5
Private, FP	430,362	475,531	10.5	407,562	447,302	9.8	17,292	21,375	23.6	5,508	6,854	24.4
Public	180,409	159,523	-11.6	166,516	143,704	-13.7	10,721	10,265	-4.3	3,172	5,554	75.1

SOURCE: N-SSATS 2013 and 2015.

NOTE: Inpatient and residential client counts represent the number of clients receiving services on March 31 of the indicated year (see Questions 28a and 29a in N-SSATS 2013 and Questions 29a and 30a in N-SSATS 2015). Outpatient client counts represent the number of clients who received outpatient services in March of the indicated year and who were still enrolled in care at the facility where they received those services on March 31 (see Question 30a in N-SSATS 2013 and Question 31a in N-SSATS 2015). Total clients is the sum of inpatient, residential, and outpatient clients. United States territories are excluded from the categories for: (1) region; and (2) states in which Medicaid enrollment increased more than 10% between January 2014 and January 2015. The percent increase in Medicaid enrollment for each state was determined based on Medicaid enrollment reports. Therefore, the totals for these categories are lower than the reported total in the first line of the table. Urbanicity is assigned based on the National Center for Health Statistics urbanicity classification scheme. Facilities in rural areas include those in micropolitan areas with an urban core population of at least 10,000 but less than 50,000, as well as those in non-core areas. Facilities in a central or fringe urban core with a population of 50,000 or more are considered urban. Information on urbanicity was not available for all facilities; urban and rural client counts are only reported for facilities with known urbanicity. Facility operation was self-designated in N-SSATS Question 4 in 2013 and Question 7 in 2015.

TABLE B.2. Distribution of Specialty Treatment Receipt by State and Type of Service, 2013 and 2015

State	% Change in Medicaid Enrollment (Jan 2014 to Jan 2015) ^a	Total			Outpatient			Residential			Inpatient		
		2013	2015	% Change	2013	2015	% Change	2013	2015	% Change	2013	2015	% Change
Total	14.1	1,249,629	1,305,647	4.5	1,127,235	1,161,456	3.0	107,727	119,900	11.3	14,667	24,291	65.6
Alabama	8.9	15,089	14,548	-3.6	13,632	13,125	-3.7	1,205	1,391	15.4	252	32	-87.3
Alaska	7.0	3,900	3,363	-13.8	3,531	2,932	-17.0	359	431	20.1	10	NA	NA
Arizona	22.8	31,832	33,978	6.7	29,449	30,671	4.1	2,016	2,845	41.1	367	462	25.9
Arkansas	9.7	5,927	7,154	20.7	5,124	4,704	-8.2	715	2,415	237.8	88	35	-60.2
California	24.0	117,159	111,961	-4.4	101,899	95,834	-6.0	14,300	14,156	-1.0	960	1,971	105.3
Colorado	26.5	42,256	34,793	-17.7	40,306	33,452	-17.0	1,804	1,186	-34.3	146	155	6.2
Connecticut	4.1	33,267	37,817	13.7	31,148	35,970	15.5	1,823	1,540	-15.5	296	307	3.7
Delaware	3.4	5,278	10,327	95.7	4,969	6,495	30.7	170	3,800	2135.3	139	32	-77.0
District of Columbia	9.1	3,833	2,824	-26.3	3,324	2,392	-28.0	468	431	-7.9	41	1	-97.6
Florida	9.1	53,641	63,287	18.0	45,069	51,823	15.0	7,786	8,531	9.6	786	2,933	273.2
Georgia	1.3	24,003	25,379	5.7	21,630	22,845	5.6	2,062	1,987	-3.6	311	547	75.9
Hawaii	2.5	5,205	5,768	10.8	4,820	5,113	6.1	385	611	58.7	NA	44	NA
Idaho	2.3	6,619	6,287	-5.0	6,467	6,125	-5.3	137	148	8.0	15	14	-6.7
Illinois	14.5	42,945	44,616	3.9	39,856	41,234	3.5	2,876	3,176	10.4	213	206	-3.3
Indiana	7.0	28,288	25,465	-10.0	27,466	23,861	-13.1	531	930	75.1	291	674	131.6
Iowa	4.0	9,731	8,975	-7.8	8,946	8,180	-8.6	738	747	1.2	47	48	2.1
Kansas	-1.5	10,863	11,471	5.6	9,916	10,603	6.9	935	834	-10.8	12	34	183.3
Kentucky	16.5	24,071	23,565	-2.1	21,175	20,697	-2.3	2,509	2,347	-6.5	387	521	34.6
Louisiana	4.8	9,903	12,011	21.3	8,241	9,930	20.5	1,464	1,765	20.6	198	316	59.6
Maine	-5.4	11,373	10,849	-4.6	10,865	10,483	-3.5	362	289	-20.2	146	77	-47.3
Maryland	14.0	42,128	46,913	11.4	39,992	44,659	11.7	1,704	1,989	16.7	432	265	-38.7
Massachusetts	12.8	44,133	45,438	3.0	40,227	40,734	1.3	3,171	3,602	13.6	735	1,102	49.9
Michigan	23.0	47,749	46,781	-2.0	42,045	43,577	3.6	5,241	3,043	-41.9	463	161	-65.2
Minnesota	7.0	18,034	19,235	6.7	14,223	15,676	10.2	3,753	3,487	-7.1	58	72	24.1
Mississippi	0.6	6,726	4,699	-30.1	5,360	3,547	-33.8	994	841	-15.4	372	311	-16.4
Missouri	-17.1	23,028	25,015	8.6	21,600	22,590	4.6	1,279	2,223	73.8	149	202	35.6
Montana	17.9	4,429	5,064	14.3	3,809	4,785	25.6	488	187	-61.7	132	92	-30.3
Nebraska	1.6	6,374	5,735	-10.0	5,690	4,909	-13.7	684	824	20.5	NA	2	NA
Nevada	42.0	7,048	6,930	-1.7	6,403	6,179	-3.5	492	487	-1.0	153	264	72.5
New Hampshire	30.1	6,702	8,164	21.8	6,326	7,766	22.8	367	394	7.4	9	4	-55.6
New Jersey	26.1	36,605	36,708	0.3	33,068	32,578	-1.5	2,813	3,404	21.0	724	726	0.3
New Mexico	15.7	12,868	15,062	17.1	10,949	14,499	32.4	1,808	449	-75.2	111	114	2.7
New York	9.7	114,660	113,713	-0.8	103,167	101,982	-1.1	9,839	9,986	1.5	1,654	1,745	5.5
North Carolina	3.2	40,575	42,026	3.6	37,394	38,374	2.6	2,481	3,196	28.8	700	456	-34.9
North Dakota	9.0	1,785	2,404	34.7	1,222	1,949	59.5	510	396	-22.4	53	59	11.3
Ohio	25.2	37,262	45,129	21.1	34,397	42,006	22.1	2,365	2,406	1.7	500	717	43.4
Oklahoma	0.6	16,700	16,783	0.5	15,356	15,512	1.0	1,204	1,171	-2.7	140	100	-28.6

TABLE B.2 (continued)

State	% Change in Medicaid Enrollment (Jan 2014 to Jan 2015) ^a	Total			Outpatient			Residential			Inpatient		
		2013	2015	% Change	2013	2015	% Change	2013	2015	% Change	2013	2015	% Change
Oregon	25.0	21,898	30,401	38.8	20,537	29,047	41.4	1,299	1,258	-3.2	62	96	54.8
Pennsylvania	4.1	57,715	59,584	3.2	52,011	53,822	3.5	5,245	5,433	3.6	459	329	-28.3
Puerto Rico	NA	15,169	11,358	-25.1	12,119	7,817	-35.5	2,511	2,971	18.3	539	570	5.8
Rhode Island	23.2	10,404	14,269	37.1	10,039	9,005	-10.3	323	1,723	433.4	42	3,541	8,331.0
South Carolina	-2.8	15,824	18,236	15.2	14,906	16,473	10.5	552	614	11.2	366	1,149	213.9
South Dakota	2.5	3,267	2,964	-9.3	2,569	2,308	-10.2	623	585	-6.1	75	71	-5.3
Tennessee	13.4	14,149	22,445	58.6	11,698	20,187	72.6	2,010	1,994	-0.8	441	264	-40.1
Texas	6.3	34,704	35,293	1.7	28,843	26,984	-6.4	5,065	6,391	26.2	796	1,918	141.0
Utah	0.5	12,586	12,496	-0.7	11,183	11,070	-1.0	1,389	1,379	-0.7	14	47	235.7
Vermont	8.2	5,230	7,380	41.1	4,124	6,522	58.1	1,013	164	-83.8	93	694	646.2
Virginia	-6.8	22,838	22,305	-2.3	21,879	20,807	-4.9	712	1,174	64.9	247	324	31.2
Washington	24.2	42,030	50,633	20.5	39,680	43,724	10.2	2,210	6,762	206.0	140	147	5.0
West Virginia	14.8	10,057	10,099	0.4	9,547	9,500	-0.5	492	545	10.8	18	54	200.0
Wisconsin	-10.4	28,657	24,371	-15.0	26,314	23,235	-11.7	2,068	888	-57.1	275	248	-9.8
Wyoming	-2.6	2,798	3,261	16.5	2,465	2,916	18.3	326	331	1.5	7	14	100.0
U.S. territories	NA	314	315	0.3	260	248	-4.6	51	43	-15.7	3	24	700.0

SOURCE: N-SSATS 2013 and 2015.

NOTE: Inpatient and residential client counts represent the number of clients receiving services on March 31 of the indicated year (see Questions 28a and 29a in N-SSATS 2013 and Questions 29a and 30a in N-SSATS 2015). Outpatient client counts represent the number of clients who received outpatient services in March of the indicated year and who were still enrolled in care at the facility where they received those services on March 31 (see Question 30a in N-SSATS 2013 and Question 31a in N-SSATS 2015). Total clients is the sum of inpatient, residential, and outpatient clients.

a. The percent increase in Medicaid enrollment for each state was determined based on Medicaid enrollment reports.

TABLE B.3.a. Number of Clients Receiving Medications by Geographic Location and Facility Characteristics, 2013 and 2015

	Total			Receiving Methadone			Receiving Buprenorphine			Receiving Injectable Naltrexone		
	2013	2015	% Change	2013	2015	% Change	2013	2015	% Change	2013	2015	% Change
Total	382,237	439,602	15	330,308	356,843	8	48,148	75,724	57	3,781	7,035	86
States in which Medicaid enrollment increased more than 10% between January 2014 and January 2015												
Yes	166,201	206,158	24	140,659	166,890	19	24,043	35,575	48	1,499	3,693	146
No	208,168	228,187	10	182,208	185,422	2	23,711	39,436	66	2,249	3,329	48
Region												
Northeast	128,212	138,585	8	112,198	114,087	1	15,093	22,620	50	921	1,878	104
Midwest	57,894	71,447	23	48,286	53,687	11	8,539	15,579	82	1,069	2,181	104
South	121,655	145,753	20	103,161	116,555	13	17,441	27,649	59	1,053	1,549	47
West	65,682	78,560	19	58,296	67,983	16	6,681	9,163	37	705	1,414	101
Urbanicity												
Urban	304,932	403,601	32	265,239	332,937	26	36,896	64,372	74	2,797	6,292	125
Rural	68,511	30,744	-55	56,702	19,375	-66	10,858	10,639	-2	951	730	-23
Facility focus												
SUD treatment	NA	376,265	NA	NA	327,936	NA	NA	44,616	NA	NA	3,713	NA
MH treatment	NA	4,233	NA	NA	1,416	NA	NA	2,568	NA	NA	249	NA
SUD and MH treatment	NA	45,718	NA	NA	18,244	NA	NA	24,671	NA	NA	2,803	NA
Other	NA	13,386	NA	NA	9,247	NA	NA	3,869	NA	NA	270	NA
Operation												
Private, NP	130,181	153,994	18	111,313	121,499	9	17,610	29,149	66	1,258	3,346	166
Private, FP	214,533	252,423	18	189,264	213,421	13	23,152	36,286	57	2,117	2,716	28
Public	37,523	33,185	-12	29,731	21,923	-26	7,386	10,289	39	406	973	140

SOURCE: N-SSATS 2013 and 2015.

NOTE: The number of clients receiving methadone, buprenorphine, or injectable naltrexone is based on counts of clients receiving these services as reported in Questions 28c, 29c, and 30c in N-SSATS 2013 and Questions 29c, 30c, and 31c in N-SSATS 2015. Total clients is the sum of methadone, buprenorphine, or injectable naltrexone clients. United States territories are excluded from the categories for: (1) region; and (2) states in which Medicaid enrollment increased more than 10% between January 2014 and January 2015. The percent increase in Medicaid enrollment for each state was determined based on Medicaid enrollment reports. Therefore, the totals for these categories are lower than the reported total in the first line of the table. Urbanicity is assigned based on the National Center for Health Statistics urbanicity classification scheme. Facilities in rural areas include those in micropolitan areas with an urban core population of at least 10,000 but less than 50,000, as well as those in non-core areas. Facilities in a central or fringe urban core with a population of 50,000 or more are considered urban. Information on urbanicity was not available for all facilities; urban and rural client counts are only reported for facilities with known urbanicity. Facility operation was self-designated in N-SSATS Question 4 in 2013 and Question 7 in 2015. Facility focus was not asked on the N-SSATS 2013 survey.

TABLE B.3.b. Proportion of Clients Receiving Medications by Geographic Location, 2013 and 2015

	Total			Receiving Methadone			Receiving Buprenorphine			Receiving Injectable Naltrexone		
	2013	2015	% Change	2013	2015	% Change	2013	2015	% Change	2013	2015	% Change
Total	31	34	10	26	27	3	4	6	51	0	1	78
States in which Medicaid enrollment increased more than 10% between January 2014 and January 2015												
Yes	28	33	17	24	26	12	4	6	39	0	1	132
No	33	35	6	29	28	-2	4	6	61	0	1	43
Region												
Northeast	40	42	4	35	34	-3	5	7	44	0	1	95
Midwest	22	27	21	19	20	9	3	6	80	0	1	101
South	35	39	10	30	31	3	5	7	45	0	0	34
West	21	25	16	19	21	13	2	3	33	0	0	95
Urbanicity												
Urban	32	37	15	28	30	9	4	6	51	0	1	95
Rural	25	16	-34	20	10	-50	4	6	44	0	0	13
Operation												
Private, NP	20	23	13	17	18	4	3	4	58	0	0	153
Private, FP	50	53	6	44	45	2	5	8	42	0	1	16
Public	21	21	0	16	14	-17	4	6	58	0	1	171

SOURCE: N-SSATS 2013 and 2015.

NOTE: The percentage of clients receiving methadone, buprenorphine, or injectable naltrexone is based on counts of clients receiving these services (as reported in Table B.3.a) divided by the total number of clients (indicated in Table B.1). United States territories are excluded from the categories for: (1) region; and (2) states in which Medicaid enrollment increased more than 10% between January 2014 and January 2015. The percent increase in Medicaid enrollment for each state was determined based on Medicaid enrollment reports. Urbanicity is assigned based on the National Center for Health Statistics urbanicity classification scheme. Facilities in rural areas include those in micropolitan areas with an urban core population of at least 10,000 but less than 50,000, as well as those in non-core areas. Facilities in a central or fringe urban core with a population of 50,000 or more are considered urban. Information on urbanicity was not available for all facilities; urban and rural estimates are only reported for facilities with known urbanicity. Facility operation was self-designated in N-SSATS Question 4 in 2013 and Question 7 in 2015.

TABLE B.4.a. Number of Clients Receiving Medications by State, 2013 and 2015

	Total			Receiving Methadone			Receiving Buprenorphine			Receiving Injectable Naltrexone		
	2013	2015	% Change	2013	2015	% Change	2013	2015	% Change	2013	2015	% Change
Total	383,130	439,602	15	331,215	356,843	8	48,134	75,724	57	3,781	7,035	86
Alabama	8,785	8,457	-4	7,738	7,639	-1	967	787	-19	80	31	-61
Alaska	285	444	56	144	331	130	137	91	-34	4	22	450
Arizona	7,585	8,291	9	6,425	7,107	11	1,040	987	-5	120	197	64
Arkansas	992	1,484	50	831	1,095	32	161	389	142	NA	NA	NA
California	33,301	38,607	16	30,899	35,231	14	2,154	2,922	36	248	454	83
Colorado	2,561	2,290	-11	2,084	1,934	-7	379	256	-32	98	100	2
Connecticut	16,540	14,658	-11	15,531	14,072	-9	980	544	-44	29	42	45
Delaware	2,826	5,834	106	2,422	3,266	35	380	2,425	538	24	143	496
District of Columbia	1,856	1,428	-23	1,760	1,315	-25	93	104	12	3	9	200
Florida	16,471	20,978	27	14,441	17,670	22	1,700	2,922	72	330	386	17
Georgia	10,542	11,990	14	10,194	11,212	10	297	659	122	51	119	133
Hawaii	700	745	6	612	623	2	87	121	39	1	1	0
Idaho	147	678	361	NA	312	NA	137	353	158	10	13	30
Illinois	13,230	15,053	14	11,922	13,559	14	1,199	1,303	9	109	191	75
Indiana	10,037	8,393	-16	9,265	7,073	-24	744	1,178	58	28	142	407
Iowa	692	889	28	623	783	26	69	106	54	NA	NA	NA
Kansas	2,284	2,585	13	2,077	2,313	11	207	261	26	NA	11	NA
Kentucky	4,719	5,136	9	1,626	2,955	82	3,079	2,158	-30	14	23	64
Louisiana	2,193	4,731	116	1,907	3,502	84	271	1,153	325	15	76	407
Maine	4,503	5,304	18	3,658	3,751	3	838	1,529	82	7	24	243
Maryland	22,278	26,692	20	19,564	22,927	17	2,622	3,533	35	92	232	152
Massachusetts	19,626	22,146	13	15,479	17,633	14	3,861	4,113	7	286	400	40
Michigan	9,116	12,064	32	7,851	9,806	25	1,187	1,900	60	78	358	359
Minnesota	5,048	6,258	24	4,533	5,530	22	483	667	38	32	61	91
Mississippi	257	274	7	183	176	-4	70	97	39	4	1	-75
Missouri	3,817	4,764	25	2,704	3,083	14	738	1,155	57	375	526	40
Montana	382	773	102	174	489	181	190	284	49	18	NA	NA
Nebraska	954	688	-28	553	619	12	78	52	-33	323	17	-95
Nevada	1,572	1,847	17	1,493	1,555	4	75	261	248	4	31	675
New Hampshire	2,656	4,754	79	2,340	2,748	17	311	1,991	540	5	15	200
New Jersey	12,818	14,506	13	11,704	13,103	12	1,036	1,166	13	78	237	204
New Mexico	2,752	5,029	83	2,407	4,088	70	332	890	168	13	51	292
New York	43,740	41,502	-5	38,873	34,535	-11	4,540	6,394	41	327	573	75
North Carolina	14,930	19,382	30	11,499	13,665	19	3,369	5,637	67	62	80	29
North Dakota	9	109	1,111	NA	NA	NA	9	84	833	NA	25	NA
Ohio	7,580	14,092	86	4,908	6,147	25	2,618	7,347	181	54	598	1,007
Oklahoma	3,279	3,760	15	3,091	3,500	13	188	227	21	NA	33	NA
Oregon	4,348	5,322	22	4,045	4,663	15	288	601	109	15	58	287
Pennsylvania	23,096	24,262	5	20,623	20,408	-1	2,308	3,530	53	165	324	96
Puerto Rico	8,761	5,230	-40	8,348	4,515	-46	380	702	85	33	13	-61

TABLE B.4.a (continued)

	Total			Receiving Methadone			Receiving Buprenorphine			Receiving Injectable Naltrexone		
	2013	2015	% Change	2013	2015	% Change	2013	2015	% Change	2013	2015	% Change
Rhode Island	4,243	7,552	78	3,517	6,213	77	715	1,078	51	11	261	2,273
South Carolina	5,020	5,334	6	4,323	4,524	5	671	799	19	26	11	-58
South Dakota	83	10	-88	82	5	-94	1	5	400	NA	NA	NA
Tennessee	2,974	5,721	92	2,427	4,421	82	488	1,179	142	59	121	105
Texas	12,497	12,126	-3	11,662	9,833	-16	673	2,189	225	162	104	-36
Utah	3,028	3,489	15	2,635	2,459	-7	345	790	129	48	240	400
Vermont	1,435	3,901	172	918	1,624	77	504	2,275	351	13	2	-85
Virginia	6,655	7,096	7	5,323	5,735	8	1,278	1,319	3	54	42	-22
Washington	8,950	10,953	22	7,495	9,191	23	1,335	1,534	15	120	228	90
West Virginia	5,510	5,330	-3	4,299	3,120	-27	1,134	2,072	83	77	138	79
Wisconsin	5,279	6,542	24	4,003	4,769	19	1,206	1,521	26	70	252	260
Wyoming	188	92	-51	NA	NA	NA	182	73	-60	6	19	217

SOURCE: N-SSATS 2013 and 2015.

NOTE: The number of clients receiving methadone, buprenorphine, or injectable naltrexone is based on counts of clients receiving these services, as reported in Questions 28c, 29c, and 30c in N-SSATS 2013 and Questions 29c, 30c, and 31c in N-SSATS 2015. Total clients is the sum of methadone, buprenorphine, or injectable naltrexone clients.

TABLE B.4.b. Proportion of Clients Receiving Medications by State, 2013 and 2015

	Total			Receiving Methadone			Receiving Buprenorphine			Receiving Injectable Naltrexone		
	2013	2015	% Change	2013	2015	% Change	2013	2015	% Change	2013	2015	% Change
Total	31	34	10	27	27	3	4	6	51	0	1	78
Alabama	58	58	0	51	53	2	6	5	-16	1	0	-60
Alaska	7	13	81	4	10	167	4	3	-23	0	1	538
Arizona	24	24	2	20	21	4	3	3	-11	0	1	54
Arkansas	17	21	24	14	15	9	3	5	100	0	0	NA
California	28	34	21	26	31	19	2	3	42	0	0	92
Colorado	6	7	9	5	6	13	1	1	-18	0	0	24
Connecticut	50	39	-22	47	37	-20	3	1	-51	0	0	27
Delaware	54	56	6	46	32	-31	7	23	226	0	1	205
District of Columbia	48	51	4	46	47	1	2	4	52	0	0	307
Florida	31	33	8	27	28	4	3	5	46	1	1	-1
Georgia	44	47	8	42	44	4	1	3	110	0	0	121
Hawaii	13	13	-4	12	11	-8	2	2	26	0	0	-10
Idaho	2	11	386	NA	5	NA	2	6	171	0	0	37
Illinois	31	34	10	28	30	9	3	3	5	0	0	69
Indiana	35	33	-7	33	28	-15	3	5	76	0	1	463
Iowa	7	10	39	6	9	36	1	1	67	NA	NA	NA
Kansas	21	23	7	19	20	5	2	2	19	NA	0	NA
Kentucky	20	22	11	7	13	86	13	9	-28	0	0	68
Louisiana	22	39	78	19	29	51	3	10	251	0	1	318
Maine	40	49	23	32	35	7	7	14	91	0	0	259
Maryland	53	57	8	46	49	5	6	8	21	0	0	126
Massachusetts	44	49	10	35	39	11	9	9	3	1	1	36
Michigan	19	26	35	16	21	27	2	4	63	0	1	368
Minnesota	28	33	16	25	29	14	3	3	29	0	0	79
Mississippi	4	6	53	3	4	38	1	2	98	0	0	-64
Missouri	17	19	15	12	12	5	3	5	44	2	2	29
Montana	9	15	77	4	10	146	4	6	31	0	NA	NA
Nebraska	15	12	-20	9	11	24	1	1	-26	5	0	-94
Nevada	22	27	19	21	22	6	1	4	254	0	0	688
New Hampshire	40	58	47	35	34	-4	5	24	426	0	0	146
New Jersey	35	40	13	32	36	12	3	3	12	0	1	203
New Mexico	21	33	56	19	27	45	3	6	129	0	0	235
New York	38	36	-4	34	30	-10	4	6	42	0	1	77
North Carolina	37	46	25	28	33	15	8	13	62	0	0	25
North Dakota	1	5	799	NA	NA	NA	1	3	593	NA	1	NA
Ohio	20	31	54	13	14	3	7	16	132	0	1	814
Oklahoma	20	22	14	19	21	13	1	1	20	NA	0	NA
Oregon	20	18	-12	18	15	-17	1	2	50	0	0	179
Pennsylvania	40	41	2	36	34	-4	4	6	48	0	1	90
Puerto Rico	58	46	-20	55	40	-28	3	6	147	0	0	-47

TABLE B.4.b (continued)												
	Total			Receiving Methadone			Receiving Buprenorphine			Receiving Injectable Naltrexone		
	2013	2015	% Change	2013	2015	% Change	2013	2015	% Change	2013	2015	% Change
Rhode Island	41	53	30	34	44	29	7	8	10	0	2	1,630
South Carolina	32	29	-8	27	25	-9	4	4	3	0	0	-63
South Dakota	3	0	-87	3	0	-93	0	0	451	NA	NA	NA
Tennessee	21	25	21	17	20	15	3	5	52	0	1	29
Texas	36	34	-5	34	28	-17	2	6	220	0	0	-37
Utah	24	28	16	21	20	-6	3	6	131	0	2	404
Vermont	27	53	93	18	22	25	10	31	220	0	0	-89
Virginia	29	32	9	23	26	10	6	6	6	0	0	-20
Washington	21	22	2	18	18	2	3	3	-5	0	0	58
West Virginia	55	53	-4	43	31	-28	11	21	82	1	1	78
Wisconsin	18	27	46	14	20	40	4	6	48	0	1	323
Wyoming	7	3	-58	NA	NA	NA	7	2	-66	0	1	172

SOURCE: N-SSATS 2013 and 2015.
NOTE: The percentage of clients receiving methadone, buprenorphine, or injectable naltrexone is based on counts of clients receiving these services (as reported in Table B.2) relative to the total number of clients (indicated in Table B.4.a).

**TABLE B.5. Substance Dependence or Abuse for Specific Substances in the Past Year
Among Persons Age 12 or Older, 2002-2015**

Past Year Dependence or Abuse	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Illicit drugs ^a	7,116	6,835	7,298	6,833	7,024	6,866	7,012	7,114	7,144	6,531	7,312	6,852	7,077	7,737 ⁿ
Marijuana and hashish	4,294	4,198	4,469	4,090	4,184	3,941	4,228	4,322	4,505	4,165	4,304	4,206	4,176	4,007
Cocaine	1,488**	1,515**	1,571**	1,549**	1,665**	1,604**	1,412**	1,108	1,012	821	1,119	855	913	896
Heroin	214**	189**	270**	227**	324**	214**	283**	369*	361**	426	467	517	586	591
Hallucinogens	426**	321	449**	371*	380*	369*	362*	373*	402**	342	331	277	246	267 ⁿ
Inhalants	180*	169*	233**	221**	176*	164*	175*	164*	169*	141	164	132	96	121 ⁿ
Non-medical use of psychotherapeutics ^{b,c}	2,018*	1,923**	2,048*	1,959**	2,036*	2,167	2,177	2,297	2,378	2,139	2,597	2,281	2,417	2,742 ⁿ
Pain relievers	1,509*	1,424**	1,388**	1,546*	1,636	1,715	1,715	1,878	1,923	1,768	2,056	1,879	1,918	2,038 ⁿ
Tranquilizers	509	435	573	419	403	443	453	476	522	400	629	423	472	688 ⁿ
Stimulants ^d	436	378	470	409	388	405	351	380	358	329*	535	469	476	426 ⁿ
Sedatives	154	158	128	97	121	154	127	147	162	78	135	99	143	154 ⁿ
Alcohol	18,100*	17,805	18,654**	18,658**	18,852**	18,687**	18,478**	18,763**	17,967	16,672	17,714	17,298	16,994	15,736
Both illicit drugs and alcohol ^a	3,210**	3,054*	3,445**	3,273**	3,215**	3,184**	3,102**	3,243**	2,889	2,598	2,840	2,589	2,592	2,663 ⁿ
Illicit drugs or alcohol ^a	22,006	21,586	22,506	22,218	22,661*	22,369	22,388	22,634	22,221	20,605	22,187	21,561	21,480	20,810 ⁿ

SOURCE: Results for 2002 to 2014 are extracted from Table 7.50A in Center for Behavioral Health Statistics and Quality 2015. Results for 2015 are extracted from Table 7.40A in the Center for Behavioral Health Statistics and Quality 2016.

NOTE: Dependence or abuse is based on definitions found in the fourth edition of the DSM.

a. Illicit drugs include marijuana and hashish, cocaine (including crack), heroin, hallucinogens, inhalants, and prescription psychotherapeutics used non-medically including data from original NSDUH questions regarding methamphetamines but not new items added in 2005 and 2006 NSDUH.

b. Estimates in these designated rows do not include data from new methamphetamine items added in 2005 and 2006.

c. Non-medical use of prescription psychotherapeutics includes the non-medical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

n. Estimates are not comparable to prior years due to changes in the survey methodology.

*The difference between this estimate and the 2014 estimate is statistically significant at the 0.05 level.

**The difference between this estimate and the 2014 estimate is statistically significant at the 0.01 level.

	Drug Use Disorders			Alcohol Use Disorders		
	With a Disorder (thousands)	With a Disorder but Not Receiving Treatment		With a Disorder (thousands)	With a Disorder but Not Receiving Treatment	
		Number (thousands)	Percentage		Number (thousands)	Percentage
Total	6,964	6,202	89	17,147	16,351	95
Alabama	107	98	92	233	225	97
Alaska	19	16	84	39	37	95
Arizona	177	157	89	418	383	92
Arkansas	58	53	91	128	126	98
California	876	791	90	2,127	2,030	95
Colorado	128	113	88	329	304	92
Connecticut	88	75	85	206	199	97
Delaware	27	20	74	48	46	96
District of Columbia	20	18	90	55	52	95
Florida	410	369	90	1,008	976	97
Georgia	238	208	87	506	482	95
Hawaii	26	25	96	78	73	94
Idaho	31	28	90	88	83	94
Illinois	267	246	92	661	636	96
Indiana	155	132	85	364	347	95
Iowa	56	52	93	160	154	96
Kansas	55	49	89	174	166	95
Kentucky	96	82	85	202	200	99
Louisiana	112	96	86	228	222	97
Maine	30	26	87	65	64	98
Maryland	140	123	88	331	311	94
Massachusetts	173	156	90	383	361	94
Michigan	205	181	88	510	497	97
Minnesota	107	97	91	286	274	96
Mississippi	65	59	91	141	138	98
Missouri	129	112	87	320	310	97
Montana	18	17	94	65	59	91
Nebraska	37	33	89	115	110	96
Nevada	62	55	89	158	150	95
New Hampshire	32	27	84	87	83	95
New Jersey	178	160	90	486	459	94
New Mexico	51	44	86	118	113	96
New York	483	420	87	1,101	1,014	92
North Carolina	229	201	88	501	476	95

TABLE B.6 (continued)						
	Drug Use Disorders			Alcohol Use Disorders		
	With a Disorder (thousands)	With a Disorder but Not Receiving Treatment		With a Disorder (thousands)	With a Disorder but Not Receiving Treatment	
		Number (thousands)	Percentage		Number (thousands)	Percentage
North Dakota	14	12	86	47	44	94
Ohio	267	229	86	646	619	96
Oklahoma	74	64	86	200	183	92
Oregon	99	89	90	233	217	93
Pennsylvania	297	253	85	717	684	95
Rhode Island	30	26	87	69	64	93
South Carolina	102	89	87	235	229	97
South Dakota	15	13	87	53	47	89
Tennessee	125	116	93	293	290	99
Texas	464	441	95	1,396	1,358	97
Utah	61	55	90	124	118	95
Vermont	17	14	82	39	36	92
Virginia	171	154	90	484	464	96
Washington	159	141	89	383	355	93
West Virginia	46	42	91	100	92	92
Wisconsin	126	112	89	376	356	95
Wyoming	11	9	82	36	35	97

SOURCE: Data were extracted from “2013-2014 National Surveys on Drug Use and Health: Model-Based Estimated Totals” (CBHSQ 2015) as follows: number of individuals with illicit drug disorder in past year from Table 18, number of individuals with alcohol use disorder from Table 16, number with an illicit drug use disorder not receiving treatment from Table 21, and number with an alcohol use disorder not receiving treatment from Table 22. The authors calculated the percentage not receiving treatment by dividing the number of individuals with a disorder not receiving treatment by the total number of individuals with a disorder.

TABLE B.7. Total Paid Staff Working in Specialty SUD Treatment Facilities in the United States, by Profession, 2016

Profession	Total Staff Members		Total FTEs ^a		Percentage Certified in Addiction Treatment
	Number	Percentage	Number	Percentage	
Total	256,449	100	197,559	100	27
Medical staff	55,665	22	37,317	19	19
Physician	14,811	6	7,576	4	42
Pharmacist	2,016	1	1,110	1	23
Registered nurse	22,238	9	16,515	8	8
Licensed practical nurse	10,316	4	8,073	4	10
Mid-level medical personnel	6,284	2	4,043	2	20
Counseling staff	104,742	41	83,776	42	45
Doctoral-level counselor	5,534	2	3,944	2	34
Master's-level counselor	54,629	21	43,267	22	40
Bachelor's degree counselor	26,447	10	22,038	11	49
Associate's degree or no-degree counselor	18,132	7	14,527	7	59
Non-administrative support staff	54,988	21	41,009	21	17
Pharmacy assistant	834	<1	684	<1	6
Peer support staff	11,523	4	8,877	4	21
Care manager or patient navigator	10,741	4	9,318	5	18
Other recovery support worker	18,236	7	14,233	7	12
Interns, contractors or per diem staff, and intake coordinators	11,504	4	6,402	3	20
Other clinical staff	2,150	1	1,495	1	32
Administrative support staff	41,054	16	35,457	18	7

SOURCE: N-SSATS 2016, Question 22.

a. One FTE is 40 working hours per week.

TABLE B.8. Total Unpaid Staff Working in Specialty SUD Treatment Facilities in the United States, by Profession, 2016

Profession	Total Staff Members		Total FTEs ^a		Percentage Certified in Addiction Treatment
	Number	Percentage	Number	Percentage	
Total (all types of professions)	14,458	100	6,726	100	21
Doctoral-level medical staff	1,114	8	408	6	35
Nursing staff or mid-level provider	1,316	9	818	12	13
Post-graduate level counselor	2,228	15	1,134	17	25
Bachelor's degree counselor	1,349	9	659	10	33
Associate's degree or no-degree counselor	869	6	442	7	48
Pharmacy assistant	63	<1	32	<1	13
Peer support staff	1,026	7	337	5	18
Care manager or patient navigator	188	1	93	1	29
Other recovery support worker	759	5	238	4	14
Administrative staff	1,032	7	618	9	18
Interns, contractors or per diem staff, and intake coordinators	4,418	31	1,914	28	11
Other clinical staff	97	1	32	<1	31

SOURCE: N-SSATS 2016, Question 23.

a. One FTE is 40 working hours per week.

TABLE B.9.a. Number and FTEs for Paid Medical Staff by Profession and State, 2016

State	Number of Staff						Number of FTE ^a					
	Total	Physician	Pharmacist	Registered Nurse	Licensed Practical Nurse	Mid-Level Medical Personnel	Total	Physician	Pharmacist	Registered Nurse	Licensed Practical Nurse	Mid-Level Medical Personnel
Total	55,665	14,811	2,016	22,238	10,316	6,284	37,318	7,576	1,110	16,515	8,073	4,043
Alabama	493	119	48	153	132	41	295	52	19	103	96	26
Alaska	146	61	4	35	21	25	98	32	4	28	16	18
Arizona	1,232	267	21	583	143	218	868	153	14	443	115	143
Arkansas	271	75	18	69	60	49	185	37	10	59	48	30
California	4,120	1,595	362	938	767	458	2,358	705	55	705	605	287
Colorado	655	208	24	211	71	141	398	113	22	140	41	83
Connecticut	1,129	302	39	379	213	196	654	150	13	244	140	108
Delaware	212	49	9	78	45	31	147	23	9	70	29	15
District of Columbia	112	38	5	33	15	21	63	18	3	17	10	15
Florida	3,680	972	135	1,170	965	438	2,797	653	77	961	799	308
Georgia	1,686	323	109	731	382	141	1,165	160	47	598	276	84
Hawaii	121	61	0	44	6	10	51	24	0	19	2	6
Idaho	198	38	11	63	32	54	102	15	3	42	18	24
Illinois	1,898	732	49	710	263	144	1,028	291	38	426	190	82
Indiana	1,224	251	24	622	199	128	889	169	17	472	148	82
Iowa	336	82	5	151	43	55	215	37	5	112	29	32
Kansas	582	130	20	200	133	99	475	87	13	180	120	75
Kentucky	840	195	19	415	109	102	511	92	15	300	54	50
Louisiana	742	213	24	208	255	42	476	100	15	148	192	21
Maine	488	113	21	264	26	64	295	57	8	167	20	44
Maryland	1,211	385	10	302	342	172	796	198	7	215	274	103
Massachusetts	1,953	516	34	818	355	230	1,278	251	20	629	238	140
Michigan	2,504	877	101	985	330	211	1,608	469	83	630	267	159
Minnesota	1,049	142	45	466	301	95	632	56	21	266	227	62
Mississippi	534	91	16	293	83	51	399	60	13	242	49	36
Missouri	933	210	14	443	209	57	752	127	12	406	166	41
Montana	580	113	51	291	76	49	517	106	40	257	72	42
Nebraska	375	108	32	117	41	77	240	71	24	79	34	33
Nevada	522	69	15	340	66	32	410	35	13	289	51	22
New Hampshire	331	144	6	51	40	90	258	104	1	47	34	72
New Jersey	1,360	423	30	586	189	132	772	184	12	400	112	64
New Mexico	492	158	41	162	57	74	309	70	18	124	42	54
New York	3,927	1,094	63	1,679	639	451	2,328	454	42	1,137	458	239
North Carolina	2,350	615	58	1,113	301	263	1,700	400	47	832	251	170
North Dakota	276	38	9	165	33	31	215	30	8	133	25	19
Ohio	2,109	593	57	812	433	214	1,413	284	38	627	333	131
Oklahoma	550	139	49	153	154	55	421	81	47	116	138	39
Oregon	517	140	25	153	114	85	350	65	23	113	101	48

TABLE B.9.a (continued)

State	Number of Staff						Number of FTE ^a					
	Total	Physician	Pharmacist	Registered Nurse	Licensed Practical Nurse	Mid-Level Medical Personnel	Total	Physician	Pharmacist	Registered Nurse	Licensed Practical Nurse	Mid-Level Medical Personnel
Pennsylvania	2,904	729	79	1,088	804	204	2,039	304	67	824	718	126
Puerto Rico	615	219	13	317	57	9	409	111	12	237	42	8
Rhode Island	283	65	11	130	34	43	200	30	3	115	28	25
South Carolina	695	126	50	396	72	51	494	74	33	289	53	44
South Dakota	190	30	12	78	28	42	99	7	2	42	22	25
Tennessee	1,270	222	26	527	284	211	883	108	17	361	245	152
Texas	2,373	334	43	1,374	508	114	1,950	201	33	1,140	486	90
Utah	722	210	38	235	87	152	381	73	11	168	48	81
Vermont	224	61	10	80	38	35	150	42	3	60	21	25
Virginia	1,344	293	56	610	304	81	897	145	25	438	232	56
Washington	757	227	20	238	118	154	482	114	8	154	95	111
West Virginia	702	144	16	265	197	80	542	79	9	241	153	60
Wisconsin	1,541	438	35	858	110	100	1,072	257	28	641	84	63
Wyoming	101	27	2	48	4	20	52	13	1	28	2	8
Other U.S. Territories	207	7	2	8	28	162	203	5	2	6	28	162

SOURCE: N-SSATS 2016, Question 22.
a. One FTE is 40 working hours per week.

TABLE B.9.b. Percentage of Medical Staff Certified in Addiction Treatment by Profession and State, 2016

	Total	Physician	Pharmacist	Registered Nurse	Licensed Practical Nurse	Mid-Level Medical Personnel
Total	19	42	23	8	10	20
Alabama	21	39	21	9	17	32
Alaska	17	28	0	9	14	8
Arizona	14	30	14	8	5	17
Arkansas	13	28	6	7	8	6
California	40	59	85	12	18	34
Colorado	19	39	0	9	3	14
Connecticut	24	47	28	8	18	26
Delaware	21	57	0	8	7	23
District of Columbia	39	45	40	36	60	19
Florida	21	36	22	12	16	26
Georgia	14	43	9	4	8	20
Hawaii	30	43	NA	11	0	40
Idaho	14	45	9	5	6	7
Illinois	27	48	8	13	16	14
Indiana	7	21	0	2	4	13
Iowa	7	18	0	1	5	11
Kansas	8	22	5	0	4	13
Kentucky	11	33	0	3	2	16
Louisiana	15	43	0	5	2	12
Maine	16	49	5	5	15	9
Maryland	26	50	10	13	11	27
Massachusetts	20	44	3	8	12	21
Michigan	12	23	1	7	7	9
Minnesota	17	45	16	10	11	25
Mississippi	6	26	0	1	1	12
Missouri	12	35	0	3	5	25
Montana	7	12	6	7	3	6
Nebraska	15	23	3	11	12	17
Nevada	16	42	0	9	9	9
New Hampshire	21	42	17	2	2	6
New Jersey	25	48	13	11	14	33
New Mexico	18	30	15	9	12	16
New York	26	57	10	15	9	20
North Carolina	15	37	5	4	5	21
North Dakota	5	5	0	1	0	39
Ohio	19	38	4	10	13	13
Oklahoma	11	29	2	4	5	7

TABLE B.9.b (continued)						
	Total	Physician	Pharmacist	Registered Nurse	Licensed Practical Nurse	Mid-Level Medical Personnel
Oregon	17	40	0	12	1	13
Pennsylvania	12	36	3	2	5	14
Puerto Rico	33	47	23	23	32	33
Rhode Island	27	54	27	15	15	30
South Carolina	9	33	6	1	14	8
South Dakota	5	13	0	3	4	5
Tennessee	13	44	8	2	9	11
Texas	12	48	7	4	9	20
Utah	36	57	8	19	25	45
Vermont	18	38	40	5	11	17
Virginia	11	30	7	6	2	15
Washington	32	55	35	13	13	43
West Virginia	9	35	0	2	1	9
Wisconsin	13	35	9	3	1	18
Wyoming	16	33	0	8	0	15
Other U.S. Territories	7	43	0	25	7	5

SOURCE: N-SSATS 2016, Question 22.

NOTE: The percentages of staff who are certified in addiction treatment are calculated by dividing the number of staff certified in addiction treatment by the total number of staff in facilities that reported information on staff certification. Nearly all (99.8%) of the reported staff worked in facilities that reported counts of certified staff.

TABLE B.10.a. Number of FTEs for Paid Counseling and Support Staff by Profession and State, 2016

State	Number of Staff						Number of FTE ^a Staff					
	Total	Counselors			Support Staff		Total	Counselors			Support Staff	
		Post-Graduate Level	Bachelor's Degree	Associate's Degree or No-Degree	Non-Administrative	Administrative		Post-Graduate Level	Bachelor's Degree	Associate's Degree or No-Degree	Non-Administrative	Administrative
Total	200,784	60,163	26,447	18,132	54,988	41,054	160,241	47,210	22,038	14,527	41,008	35,457
Alabama	1,450	637	130	41	320	322	1,112	482	118	26	214	272
Alaska	1,083	284	143	133	299	224	1,035	278	135	121	279	223
Arizona	6,442	1,590	668	368	2,639	1,178	5,320	1,255	533	296	2,199	1,038
Arkansas	1,188	356	177	154	232	269	907	252	149	123	159	223
California	19,155	3,871	1,865	4,331	5,591	3,498	14,907	2,918	1,500	3,348	4,036	3,105
Colorado	3,935	1,435	643	337	754	766	3,042	1,140	508	238	526	629
Connecticut	3,576	1,363	383	221	976	633	2,820	1,093	318	175	676	558
Delaware	520	167	95	46	87	125	427	137	74	41	65	112
District of Columbia	400	128	53	42	99	78	298	91	44	37	67	60
Florida	12,359	3,215	1,238	648	5,096	2,163	9,938	2,560	1,027	524	3,896	1,932
Georgia	5,153	1,702	770	506	1,214	961	3,616	1,085	489	412	784	846
Hawaii	1,953	603	309	218	532	291	1,082	340	233	180	207	123
Idaho	1,438	587	173	84	305	289	976	376	121	61	168	250
Illinois	7,193	2,263	1,345	612	1,378	1,595	5,410	1,702	1,053	476	938	1,241
Indiana	4,853	1,590	1,079	335	893	956	4,157	1,335	972	285	709	855
Iowa	1,662	496	446	119	277	324	1,395	423	360	115	212	285
Kansas	2,366	748	255	129	711	523	2,019	646	218	123	564	468
Kentucky	4,482	1,322	628	389	1,275	868	3,248	1,011	401	73	1,043	720
Louisiana	1,694	466	176	91	573	388	1,386	373	138	74	466	334
Maine	1,608	510	222	109	430	338	1,244	372	182	98	315	278
Maryland	4,338	1,296	644	475	939	984	3,414	999	524	387	650	853
Massachusetts	6,239	2,314	634	459	1,679	1,153	4,807	1,778	535	329	1,197	968
Michigan	7,790	3,167	601	287	1,932	1,803	6,340	2,418	515	235	1,590	1,582
Minnesota	4,460	912	1,057	333	1,286	872	3,639	748	928	284	933	745
Mississippi	1,474	545	172	61	454	242	1,203	455	148	52	325	222
Missouri	4,269	908	366	206	1,966	822	3,421	760	303	163	1,438	758
Montana	979	151	118	59	350	301	870	137	110	46	317	259
Nebraska	1,515	551	124	51	459	330	1,232	420	111	47	355	298
Nevada	1,253	247	173	59	460	314	992	200	127	54	339	273
New Hampshire	1,633	662	156	58	275	482	1,435	558	153	52	205	467
New Jersey	4,383	1,531	580	384	956	932	3,418	1,153	491	350	638	787
New Mexico	1,993	720	135	111	464	563	1,630	555	113	83	372	506
New York	11,661	3,487	1,705	1,737	2,143	2,589	8,820	2,667	1,422	1,376	1,279	2,076
North Carolina	6,723	2,391	964	417	1,465	1,487	5,445	1,913	799	370	1,121	1,242
North Dakota	1,204	269	203	72	436	224	997	225	172	51	354	194
Ohio	8,738	2,601	1,269	807	2,170	1,891	7,276	2,237	1,135	686	1,562	1,656
Oklahoma	3,080	1,174	379	93	764	670	2,520	883	307	87	626	617

TABLE B.10.a (continued)

State	Number of Staff						Number of FTE ^a Staff					
	Total	Counselors			Support Staff		Total	Counselors			Support Staff	
		Post-Graduate Level	Bachelor's Degree	Associate's Degree or No-Degree	Non-Administrative	Administrative		Post-Graduate Level	Bachelor's Degree	Associate's Degree or No-Degree	Non-Administrative	Administrative
Oregon	3,212	932	539	434	615	693	2,730	767	487	396	466	614
Pennsylvania	7,585	2,470	1,286	246	1,950	1,634	6,136	1,973	1,109	199	1,457	1,398
Puerto Rico	1,210	257	124	32	447	350	893	194	96	22	317	263
Rhode Island	982	250	181	69	263	219	815	214	172	64	200	164
South Carolina	1,715	684	167	30	412	422	1,405	554	151	28	316	357
South Dakota	936	180	166	106	306	178	822	165	153	100	240	165
Tennessee	4,314	1,128	603	148	1,503	932	3,577	913	532	132	1,156	845
Texas	6,039	1,344	652	648	2,227	1,168	5,051	1,068	558	539	1,818	1,067
Utah	3,828	1,081	295	241	1,607	604	2,947	793	247	189	1,199	519
Vermont	888	366	117	82	159	164	724	309	101	71	103	141
Virginia	4,514	1,718	704	243	1,060	789	3,918	1,505	620	220	880	694
Washington	5,408	1,195	929	991	1,229	1,063	4,680	1,029	832	863	1,002	953
West Virginia	1,409	430	236	71	354	318	1,195	358	206	63	282	286
Wisconsin	3,683	1,571	324	183	706	899	2,857	1,138	269	142	519	790
Wyoming	683	279	33	16	208	147	571	240	27	13	171	120
Other U.S. Territories	138	21	15	10	64	28	123	15	15	9	57	27

SOURCE: N-SSATS 2016, Question 22.

a. One FTE is 40 working hours per week.

TABLE B.10.b. Percentages of Counseling and Other Support Staff Certified in Addiction Treatment by Profession and State, 2016

State	Total	Counselors			Support Staff	
		Post-Graduate Level	Bachelor's Degree	Associate's Degree or No-Degree	Non-Administrative	Administrative
Total	30	40	49	59	17	7
Alabama	39	53	62	44	29	10
Alaska	26	45	42	38	9	8
Arizona	13	30	15	17	7	2
Arkansas	24	24	40	45	18	5
California	44	39	65	76	34	14
Colorado	37	47	53	68	21	9
Connecticut	23	32	37	39	13	7
Delaware	32	43	68	37	15	2
District of Columbia	40	51	75	90	10	8
Florida	20	36	32	33	11	8
Georgia	20	25	32	24	17	3
Hawaii	33	66	20	34	18	5
Idaho	38	50	61	73	20	7
Illinois	41	49	53	68	36	15
Indiana	17	30	19	12	8	2
Iowa	34	43	59	30	15	2
Kansas	34	55	92	53	10	7
Kentucky	26	32	43	86	9	3
Louisiana	23	33	64	69	8	5
Maine	36	56	67	50	16	7
Maryland	45	56	84	71	25	10
Massachusetts	17	21	31	31	11	4
Michigan	29	45	42	51	19	4
Minnesota	43	53	87	67	16	10
Mississippi	11	17	10	20	8	2
Missouri	26	53	71	71	11	4
Montana	29	71	85	78	6	5
Nebraska	28	55	41	63	6	4
Nevada	32	63	64	80	15	7
New Hampshire	17	17	29	47	22	7
New Jersey	30	51	40	37	12	6
New Mexico	29	38	61	76	22	6
New York	38	42	65	60	29	9
North Carolina	32	51	41	44	19	5
North Dakota	19	32	59	8	3	0

TABLE B.10.b (continued)						
State	Total	Counselors			Support Staff	
		Post-Graduate Level	Bachelor's Degree	Associate's Degree or No-Degree	Non-Administrative	Administrative
Ohio	33	40	54	64	25	6
Oklahoma	30	50	34	29	19	4
Oregon	36	38	60	71	23	6
Pennsylvania	18	26	29	25	10	3
Puerto Rico	35	49	55	78	34	15
Rhode Island	26	45	39	49	12	5
South Carolina	32	52	60	60	13	4
South Dakota	36	66	66	60	12	6
Tennessee	14	16	11	29	13	12
Texas	33	38	75	79	16	9
Utah	21	41	41	27	9	6
Vermont	31	55	38	13	9	1
Virginia	15	22	18	38	7	2
Washington	45	45	69	74	30	13
West Virginia	10	22	6	13	7	1
Wisconsin	33	45	58	87	19	3
Wyoming	22	33	55	75	13	2
Other U.S. Territories	16	43	60	40	0	0

SOURCE: N-SSATS 2016, Question 22.

NOTE: The percentages of staff who are certified in addiction treatment are calculated by dividing the number of staff certified in addiction treatment by the total number of staff in facilities that reported information on staff certification. Nearly all (99.6%) of the reported staff worked in facilities that reported counts of certified staff.

TABLE B.11.a. FTE Medical Staff and Percentage Certified in Addiction Treatment by Profession and Facility Characteristic, 2016

Facility Type	FTE ^a Staff						Percentage Certified in Addiction Treatment					
	Total	Physician	Pharmacist	Registered Nurse	Licensed Practical Nurse	Mid-Level Medical Personnel	Total	Physician	Pharmacist	Registered Nurse	Licensed Practical Nurse	Mid-Level Medical Personnel
Total	37,318	7,576	1,110	16,515	8,073	4,043	19	42	23	8	10	20
Facility focus												
SUD treatment	14,184	2,619	264	5,301	4,645	1,355	30	61	40	15	13	31
MH treatment	5,381	922	157	3,239	636	428	5	15	4	2	1	6
SUD and MH treatment	13,782	3,110	432	6,448	2,205	1,586	15	34	10	5	7	18
Other	3,971	926	258	1,527	586	674	4	11	2	1	2	5
Operation												
Private NP	15,569	3,315	361	6,888	2,986	2,019	21	40	42	9	13	19
Private FP	12,889	2,315	248	5,781	3,498	1,048	22	53	14	7	10	29
Public	8,860	1,946	501	3,846	1,589	977	10	25	3	5	3	8
Federally certified OTP												
OTP	6,502	1,023	167	2,116	2,625	571	26	61	17	14	14	31
Not OTP	30,815	6,552	943	14,399	5,448	3,473	18	38	24	6	8	18
Any pharmacotherapy												
Provide	30,509	5,661	951	13,922	6,980	2,994	19	45	24	8	10	19
Do not provide	6,809	1,915	159	2,593	1,093	1,049	20	33	6	8	10	23
Any pharmacotherapy for opioid disorders												
Provide	27,801	5,089	863	12,574	6,589	2,686	20	47	26	8	10	20
Do not provide	9,517	2,487	247	3,941	1,484	1,357	17	31	5	6	8	20

SOURCE: N-SSATS 2016, Question 22.

NOTE: The percentages of staff who are certified in addiction treatment are calculated by dividing the number of staff certified in addiction treatment by the total number of staff in facilities that reported information on staff certification. Nearly all (99.6%) of the reported staff worked in facilities that reported counts of certified staff. Facility operation was self-designated in N-SSATS Question 4 in 2013 and Question 7 in 2015.

a. One FTE is 40 working hours per week.

TABLE B.11.b. FTE Counseling Staff and Percentage Certified in Addiction Treatment by Profession and Facility Characteristic, 2016

Facility Type	FTE ^a Staff						Percentage Certified in Addiction Treatment					
	Total	Counselor			Support Staff		Total	Counselor			Staff Staff	
		Post-Graduate Level	Bachelor's Degree	Associate's Degree or No-Degree	Non-Administrative Staff	Administrative Staff		Post-Graduate Level	Bachelor's Degree	Associate's Degree or No-Degree	Non-Administrative Staff	Administrative Staff
Total	160,241	47,210	22,038	14,527	41,008	35,457	30	40	49	59	17	7
Facility focus												
SUD treatment	73,862	17,537	11,709	9,591	19,796	15,229	41	58	64	67	24	11
MH treatment	18,518	6,503	2,401	785	4,786	4,044	9	16	10	14	4	2
SUD and MH treatment	62,660	21,805	7,550	3,858	14,897	14,550	24	33	37	49	14	5
Other	5,201	1,365	377	294	1,529	1,635	15	25	42	46	7	2
Operation												
Private NP	89,819	26,580	12,901	8,575	22,499	19,264	29	39	46	56	17	7
Private FP	47,773	13,340	6,598	4,128	12,630	11,078	33	43	52	62	21	8
Public	22,649	7,291	2,539	1,824	5,879	5,116	25	34	51	65	9	4
Federally certified OTP												
OTP	16,303	4,676	3,612	2,142	2,379	3,494	39	50	55	62	21	7
Not OTP	143,935	42,533	18,426	12,385	38,629	31,963	29	39	48	58	17	7
Any pharmacotherapy												
Provide	92,710	27,152	12,481	7,759	24,264	21,055	28	39	48	56	16	6
Do not provide	67,530	20,059	9,557	6,768	16,744	14,403	32	41	50	62	20	8
Any pharmacotherapy for opioid disorders												
Provide	81,070	23,334	11,249	6,884	21,245	18,359	29	40	48	57	17	6
Do not provide	79,171	23,877	10,789	7,643	19,763	17,099	31	39	49	60	18	8

SOURCE: N-SSATS 2016, Question 22.

NOTE: The percentages of staff who are certified in addiction treatment are calculated by dividing the number of staff certified in addiction treatment by the total number of staff in facilities that reported information on staff certification. Nearly all (99.6%) of the reported staff worked in facilities that reported counts of certified staff. Facility operation was self-designated in N-SSATS Question 7.

a. One FTE is 40 working hours per week.

TABLE B.12.a. Number of Staff Hours per 100 Outpatient Clients per Week in Specialty SUD Treatment Facilities Providing Only Outpatient Services by Type of Staff and State, 2016 (all facilities)

State	Total	Medical Staff					Counselor			Support Staff
		Physician	Pharmacist	Mid-Level Medical Personnel	Registered Nurse	Licensed Practical Nurse	Post-Graduate Level	Bachelor's Degree	Associate's Degree or No-Degree	
Total	292	15	3	9	14	13	113	51	27	47
Alabama	238	11	8	4	15	21	123	26	3	27
Alaska	537	32	15	16	9	8	213	66	74	104
Arizona	300	9	1	11	8	10	86	42	18	113
Arkansas	295	14	5	12	5	27	136	45	21	31
California	289	19	1	8	7	11	78	41	73	51
Colorado	237	9	3	10	8	3	110	39	16	38
Connecticut	197	10	0	9	8	12	86	26	8	39
Delaware	184	9	13	4	10	15	72	34	10	18
District of Columbia	329	26	4	22	22	10	110	48	54	32
Florida	368	29	3	8	12	22	131	54	13	95
Georgia	312	14	8	5	13	30	128	49	23	42
Hawaii	749	11	0	1	4	2	303	228	152	47
Idaho	384	3	0	13	4	5	193	67	34	65
Illinois	325	24	2	5	13	12	133	66	30	41
Indiana	384	11	2	7	15	12	129	133	39	37
Iowa	455	11	2	14	22	7	175	156	22	46
Kansas	550	20	8	25	34	20	200	64	40	140
Kentucky	247	10	0	6	4	5	112	43	6	61
Louisiana	258	20	7	3	12	21	102	34	19	40
Maine	284	11	4	6	22	7	107	49	18	60
Maryland	201	12	1	6	10	17	66	36	25	26
Massachusetts	187	9	1	8	11	7	112	12	3	25
Michigan	261	15	2	5	9	10	140	24	9	47
Minnesota	437	7	8	9	38	19	116	143	35	62
Mississippi	964	59	12	23	82	18	472	144	16	138
Missouri	275	13	0	6	12	11	84	46	23	80
Montana	473	40	18	24	57	48	99	77	43	68
Nebraska	524	53	18	25	20	15	251	47	26	70
Nevada	249	15	11	6	15	14	65	45	22	56
New Hampshire	107	8	0	6	5	14	35	20	7	11
New Jersey	300	17	2	5	20	8	131	54	34	29
New Mexico	260	13	9	12	17	8	106	24	19	52
New York	192	10	0	5	16	6	79	35	24	17
North Carolina	366	34	4	10	26	17	150	57	24	43
North Dakota	958	52	15	42	111	3	328	85	12	309
Ohio	442	18	5	10	24	17	172	78	33	85
Oklahoma	325	12	13	7	15	18	145	52	8	55
Oregon	327	10	7	8	11	15	125	62	54	36

TABLE B.12.a (continued)

State	Total	Medical Staff					Counselor			Support Staff
		Physician	Pharmacist	Mid-Level Medical Personnel	Registered Nurse	Licensed Practical Nurse	Post-Graduate Level	Bachelor's Degree	Associate's Degree or No-Degree	
Pennsylvania	223	10	1	3	6	15	101	54	6	26
Puerto Rico	167	22	1	3	32	7	47	30	2	23
Rhode Island	264	9	1	11	29	10	76	49	16	63
South Carolina	147	6	5	2	4	5	80	31	5	10
South Dakota	523	6	4	20	19	14	170	149	75	65
Tennessee	421	18	10	29	24	30	136	76	8	90
Texas	240	13	1	8	7	17	57	52	47	38
Utah	269	8	1	14	9	7	128	41	17	45
Vermont	376	18	0	10	13	13	210	72	13	28
Virginia	548	19	4	7	21	28	230	93	21	125
Washington	319	6	0	11	8	6	100	76	75	37
West Virginia	212	11	0	9	8	19	71	54	3	35
Wisconsin	330	22	4	9	22	8	173	36	19	37
Wyoming	350	7	2	7	12	2	192	30	13	85

SOURCE: N-SSATS 2016, Question 22.

TABLE B.12.b. Number of Staff Hours per 100 Outpatient Clients per Week in Specialty SUD Treatment Facilities Providing Only Outpatient Services by Type of Staff and State, 2016 (facilities providing any pharmacotherapy)

State	Total	Medical Staff					Counselor			Support Staff
		Physician	Pharmacist	Mid-Level Medical Personnel	Registered Nurse	Licensed Practical Nurse	Post-Graduate Level	Bachelor's Degree	Associate's Degree or No-Degree	
Total	242	15	3	9	15	17	87	39	20	36
Alabama	194	10	10	3	15	25	94	24	2	12
Alaska	412	28	26	28	11	15	142	26	16	118
Arizona	204	10	1	12	10	15	47	23	12	74
Arkansas	246	17	10	5	6	46	61	47	17	36
California	237	21	1	9	9	17	66	31	50	34
Colorado	268	11	5	13	12	5	123	41	18	40
Connecticut	162	9	0	9	8	13	69	15	7	31
Delaware	176	9	15	4	10	16	63	31	11	18
District of Columbia	219	24	5	20	20	13	37	30	50	20
Florida	308	25	4	9	14	33	83	37	13	89
Georgia	227	13	10	4	9	34	77	40	19	20
Hawaii	190	9	0	1	9	4	71	14	45	35
Idaho	457	7	0	38	5	11	257	53	24	62
Illinois	291	22	2	6	16	16	117	60	22	30
Indiana	342	9	0	7	15	17	99	134	41	21
Iowa	372	8	7	17	28	11	162	84	11	45
Kansas	736	35	15	39	57	31	245	42	55	216
Kentucky	194	10	0	6	8	10	94	37	5	24
Louisiana	212	17	8	4	13	26	83	22	10	30
Maine	207	17	6	9	27	10	52	40	23	22
Maryland	180	13	1	6	11	20	56	33	22	17
Massachusetts	162	10	1	7	14	9	90	9	3	19
Michigan	273	22	3	6	13	17	141	20	9	42
Minnesota	297	7	5	4	14	26	85	91	23	42
Mississippi	1126	188	41	34	167	69	464	54	28	83
Missouri	219	16	0	9	12	14	73	33	13	49
Montana	394	61	5	12	82	65	76	55	29	8
Nebraska	513	40	28	37	30	25	207	31	32	84
Nevada	241	20	13	7	21	19	46	34	18	63
New Hampshire	90	8	0	3	4	15	25	17	8	10
New Jersey	251	14	2	4	23	9	99	47	30	22
New Mexico	234	16	13	14	23	11	75	25	19	39
New York	185	10	0	6	17	6	75	35	20	15
North Carolina	264	31	5	8	28	21	101	28	14	28
North Dakota	1114	76	25	6	163	5	346	20	0	472
Ohio	404	20	6	10	29	22	127	71	27	94
Oklahoma	151	11	12	5	11	17	51	23	3	18
Oregon	307	12	11	11	16	27	80	60	52	37

TABLE B.12.b (continued)

State	Total	Medical Staff					Counselor			Support Staff
		Physician	Pharmacist	Mid-Level Medical Personnel	Registered Nurse	Licensed Practical Nurse	Post-Graduate Level	Bachelor's Degree	Associate's Degree or No-Degree	
Pennsylvania	221	11	1	4	6	21	96	51	6	25
Puerto Rico	151	22	1	2	32	8	39	26	0	21
Rhode Island	279	10	1	12	31	11	75	50	18	70
South Carolina	133	10	11	0	5	12	44	39	8	4
South Dakota	481	8	0	22	16	22	132	137	73	71
Tennessee	247	12	5	15	8	27	77	38	2	62
Texas	201	16	1	8	8	28	36	41	35	28
Utah	222	10	1	18	11	9	88	34	14	38
Vermont	373	19	0	13	17	16	204	62	15	26
Virginia	398	17	4	6	17	31	177	57	18	71
Washington	204	7	1	9	14	14	44	48	44	23
West Virginia	157	11	0	9	7	21	49	45	0	14
Wisconsin	362	26	6	10	28	12	174	48	20	39
Wyoming	388	15	4	9	19	4	210	35	11	80

SOURCE: N-SSATS 2016, Question 22.

TABLE B.12.c. Number of Staff Hours per 100 Outpatient Clients per Week in Specialty SUD Treatment Facilities Providing Only Outpatient Services by Type of Staff and State, 2016 (facilities providing no pharmacotherapy)

State	Total	Medical Staff					Counselor			Support Staff
		Physician	Pharmacist	Mid-Level Medical Personnel	Registered Nurse	Licensed Practical Nurse	Post-Graduate Level	Bachelor's Degree	Associate's Degree or No-Degree	
Total	393	14	2	8	10	4	167	75	42	72
Alabama	370	12	5	8	15	10	210	31	8	71
Alaska	668	36	3	3	7	0	287	107	133	90
Arizona	474	7	0	11	6	2	156	77	29	185
Arkansas	314	12	3	15	5	19	165	44	22	30
California	373	14	2	6	4	2	97	56	112	80
Colorado	186	5	0	5	2	0	89	37	15	33
Connecticut	490	13	0	8	4	0	227	116	16	106
Delaware	250	5	0	4	7	0	145	66	2	21
District of Columbia	720	35	0	31	28	0	370	111	69	76
Florida	459	36	1	6	10	6	204	80	13	103
Georgia	608	18	1	9	26	12	304	82	38	118
Hawaii	1261	12	0	1	0	0	516	424	250	58
Idaho	364	1	0	6	3	3	176	70	37	66
Illinois	374	28	1	3	8	6	156	75	42	56
Indiana	464	14	6	7	14	3	187	132	33	68
Iowa	497	12	0	12	20	4	182	192	27	47
Kansas	361	5	0	10	11	9	153	86	25	63
Kentucky	288	10	0	5	1	0	126	48	7	90
Louisiana	385	29	4	1	7	9	154	66	45	69
Maine	399	3	0	1	13	3	190	62	10	118
Maryland	318	11	1	4	4	2	124	54	42	76
Massachusetts	274	6	0	9	1	0	189	21	3	44
Michigan	249	8	0	3	5	3	139	28	10	52
Minnesota	603	6	12	15	67	10	152	205	48	87
Mississippi	916	21	3	20	57	3	474	170	13	155
Missouri	364	8	0	2	12	7	101	66	40	128
Montana	548	19	30	35	34	31	120	97	55	125
Nebraska	531	63	10	16	13	7	283	58	21	59
Nevada	267	6	7	4	3	3	103	69	30	42
New Hampshire	319	12	0	48	10	6	166	54	0	23
New Jersey	486	28	0	12	10	4	249	82	46	55
New Mexico	306	8	2	8	6	3	161	23	20	76
New York	241	11	0	3	10	0	106	36	45	30
North Carolina	764	44	2	19	19	4	339	172	64	102
North Dakota	731	18	0	94	37	0	302	179	30	71
Ohio	519	15	2	9	12	6	266	94	46	68
Oklahoma	572	14	15	11	20	21	276	94	16	106
Oregon	345	8	4	5	7	4	167	64	55	34

TABLE B.12.c (continued)

State	Total	Medical Staff					Counselor			Support Staff
		Physician	Pharmacist	Mid-Level Medical Personnel	Registered Nurse	Licensed Practical Nurse	Post-Graduate Level	Bachelor's Degree	Associate's Degree or No-Degree	
Pennsylvania	228	9	0	1	4	1	114	62	6	30
Puerto Rico	327	22	0	10	37	0	130	67	21	42
Rhode Island	149	5	0	6	8	0	80	41	0	8
South Carolina	158	3	0	3	3	0	107	26	2	14
South Dakota	564	5	7	18	21	7	207	161	78	60
Tennessee	750	31	18	54	54	37	247	147	20	141
Texas	296	9	1	8	6	1	86	67	64	53
Utah	394	5	0	5	2	1	235	61	24	63
Vermont	386	15	0	0	0	0	229	104	4	34
Virginia	991	24	4	11	33	22	385	198	30	285
Washington	404	6	0	12	3	1	140	96	98	48
West Virginia	464	11	0	10	14	13	172	96	19	128
Wisconsin	277	15	1	6	14	3	172	16	16	34
Wyoming	320	0	0	6	7	0	178	27	15	88

SOURCE: N-SSATS 2016, Question 22.

TABLE B.13. Number of Staff Hours per 100 Outpatient Clients per Week in Specialty SUD Treatment Facilities Providing Only Outpatient Services, by Type of Services Offered at Facility, 2016

Type of Facility	Total	Medical Staff					Counselor			Support Staff
		Physician	Pharmacist	Mid-Level Medical Personnel	Registered Nurse	Licensed Practical Nurse	Post-Graduate Level	Bachelor's Degree	Associate's Degree or No-Degree	
Total	292	15	3	9	14	13	113	51	27	47
Federally certified OTP										
OTP	135	7	2	4	10	21	35	31	17	8
Not OTP	397	20	4	11	16	7	166	64	34	74
MH services										
MH treatment offered	322	17	3	10	15	12	131	53	26	55
Screening only	180	8	1	5	12	14	48	42	32	19
No MH services	154	5	1	3	5	16	35	42	31	14
Screening for conditions other than SUDs										
Yes	293	25	9	18	30	25	81	39	24	42
No	291	12	1	6	10	10	121	54	28	49
Outreach to people who may need treatment										
Yes	316	16	3	9	14	13	118	56	30	56
No	248	13	2	7	13	12	105	42	23	32
Recovery support services										
Yes	373	17	4	10	17	16	132	68	34	76
No	269	14	3	8	13	12	108	46	25	40
Facility focus										
SUD treatment	193	9	1	4	9	13	63	41	28	25
MH treatment	1000	37	5	23	45	13	443	201	35	198
SUD and MH treatment	405	21	4	11	15	8	187	57	25	77
Other	905	101	53	120	133	75	187	48	33	157

SOURCE: N-SSATS 2016, Question 22.

NOTE: Facilities were classified as a federally certified OTP if they indicated in Question 11 that they administer or dispense methadone, buprenorphine, or naltrexone (Vivitrol®) as a federally certified OTP. Facilities were classified as offering MH treatment if they said in response to Question 1a that they provided mental health services to substance abuse treatment clients (MHTXSA). Remaining facilities were classified as only screening if in Question 10 they indicated that they provided screening for mental health disorders (SRVC90) or provided comprehensive mental health assessment or diagnosis (SRVC2). Facilities not classified as offering MH treatment or screening only were classified as having no MH services. Facilities were identified as providing screening services for conditions other than SUDs if they indicated that they provide screening for hepatitis B, hepatitis C, HIV, sexually transmitted diseases, and tuberculosis (SRVC73 = 1, SRVC74 = 1, SRVC14 = 1, SRVC15 = 1, and SRVC16 = 1). Facilities were identified as providing recovery support services if they provide social skills development, mentoring or peer support, assistance obtaining social services, employment counseling or training, or assistance locating housing (SRVC96 = 1, SRVC97 = 1, SRVC36 = 1, SRVC39 = 1, and SRVC38 = 1). Facility focus was determined based on responses to Question 6.

TABLE B.14. Number of Staff Hours 100 Outpatient Clients per Week in Specialty SUD Treatment Facilities Providing Only Outpatient Services, by Facility Characteristics, 2016

Type of Facility	Total	Medical Staff					Counselor			Support Staff
		Physician	Pharmacist	Mid-Level Medical Personnel	Registered Nurse	Licensed Practical Nurse	Post-Graduate Level	Bachelor's Degree	Associate's Degree or No-Degree	
Total	292	15	3	9	14	13	113	51	27	47
Urbanicity										
Urban	278	15	3	7	13	13	110	48	26	44
Rural	370	14	4	11	17	13	138	69	34	69
Operation										
Private NP	339	15	2	10	16	10	140	59	29	58
Private FP	206	11	2	5	6	15	74	41	23	29
Public	432	30	11	19	33	17	156	58	33	74
Located in or operated by a hospital										
Yes	291	14	3	8	12	13	113	52	28	49
No	298	29	5	20	35	13	117	34	17	27
Facility size										
Small	1606	81	17	46	74	28	671	257	137	294
Medium	506	27	5	16	20	11	205	81	44	97
Large	171	8	2	5	9	13	62	33	18	21
Type of insurance accepted										
Medicaid	294	14	2	8	14	12	119	52	25	47
Private insurance	316	17	3	9	15	11	131	51	26	53

SOURCE: N-SSATS 2016, Question 22.

NOTE: Urbanicity is assigned based on the National Center for Health Statistics urbanicity classification scheme. Facilities in rural areas include those in micropolitan areas with an urban core population of at least 10,000 but less than 50,000, as well as those in non-core areas. Facilities in a central or fringe urban core with a population of 50,000 or more are considered urban. Information on urbanicity was not available for all facilities; urban and rural estimates are only reported for facilities with known urbanicity. Facility size was based on the number of outpatient clients in care. Facilities below the 25th percentile and above the 75th percentile for client count were identified as small and large, respectively. Remaining facilities were designated as medium size. Facility operation was self-designated in N-SSATS Question 7.

TABLE B.15. Number and Percentage of Facilities Providing Any Pharmacotherapy or Opioid-Related Pharmacotherapy, by Facility Characteristics, 2013 and 2016

	Number of Facilities						Percentage of Facilities					
	Providing Pharmacotherapies for Opioid Disorders			Providing Any Pharmacotherapies			Providing Pharmacotherapies for Opioid Disorders			Providing Any Pharmacotherapies		
	2013	2016	Change	2013	2016	Change	2013	2016	Change	2013	2016	Change
Total	4,246	5,373	27	5,267	6,191	18	30	37	24	37	43	15
Urbanicity												
Urban	3,272	4,519	38	3,936	5,115	30	33	41	24	40	46	16
Rural	933	814	-13	1,283	1,032	-20	23	26	12	32	33	3
Facility focus												
SUD treatment	NA	3,253	NA	NA	3,519	NA	NA	41	NA	NA	44	NA
MH treatment	NA	242	NA	NA	347	NA	NA	24	NA	NA	35	NA
SUD and MH treatment	NA	1,707	NA	NA	2,126	NA	NA	34	NA	NA	42	NA
Other	NA	171	NA	NA	199	NA	NA	43	NA	NA	50	NA
Operation												
Private, NP	2,101	2,644	26	2,622	3,071	17	27	35	28	34	40	20
Private, FP	1,582	2,101	33	1,838	2,296	25	35	41	19	40	45	12
Public	563	628	12	807	824	2	32	38	20	46	50	9

SOURCE: N-SSATS 2013 and 2016.

NOTE: Urbanicity is assigned based on the National Center for Health Statistics urbanicity classification scheme. Facilities in rural areas include those in micropolitan areas with an urban core population of at least 10,000 but less than 50,000, as well as those in non-core areas. Facilities in a central or fringe urban core with a population of 50,000 or more are considered urban. Information on urbanicity was not available for all facilities; urban and rural data are only reported for facilities with known urbanicity. Facility operation was self-designated in N-SSATS Question 7. Facility focus was not asked on the N-SSATS 2013 survey.

TABLE B.16. Number and Percentage of Facilities Providing Any Pharmacotherapy or Opioid-Related Pharmacotherapy, by State, 2013 and 2016

	Number of Facilities						Percentage of Facilities					
	Providing Pharmacotherapies for Opioid Disorders			Providing Any Pharmacotherapies			Providing Pharmacotherapies for Opioid Disorders			Providing Any Pharmacotherapies		
	2013	2016	Change	2013	2016	Change	2013	2016	Change	2013	2016	Change
Total	4,246	5,373	27	5,267	6,191	18	30	37	24	37	43	15
Alabama	49	52	6	53	57	8	32	38	20	34	42	22
Alaska	16	17	6	22	23	5	17	18	5	24	24	3
Arizona	113	143	27	134	165	23	36	40	11	43	46	8
Arkansas	15	17	13	23	20	-13	17	15	-11	26	18	-32
California	424	477	13	468	517	10	27	33	22	30	36	20
Colorado	104	113	9	251	216	-14	21	28	33	51	54	5
Connecticut	81	115	42	125	142	14	38	51	34	59	63	8
Delaware	18	28	56	18	29	61	43	60	39	43	62	44
District of Columbia	14	16	14	15	16	7	38	47	24	41	47	16
Florida	171	286	67	211	312	48	27	40	45	34	44	28
Georgia	89	115	29	133	142	7	25	37	48	37	45	22
Hawaii	13	16	23	16	19	19	11	9	-13	13	11	-16
Idaho	21	27	29	23	32	39	18	19	5	20	22	14
Illinois	165	189	15	198	208	5	25	28	10	30	31	1
Indiana	60	83	38	94	101	7	22	31	44	34	38	12
Iowa	24	34	42	33	48	45	17	21	25	23	29	28
Kansas	33	35	6	45	58	29	16	17	11	21	29	35
Kentucky	68	94	38	82	104	27	21	26	25	25	29	15
Louisiana	37	50	35	56	70	25	22	32	43	34	45	32
Maine	56	62	11	66	66	0	25	27	7	30	29	-3
Maryland	157	199	27	169	208	23	44	50	14	47	52	10
Massachusetts	155	220	42	181	246	36	49	62	26	57	69	21
Michigan	118	126	7	165	173	5	24	26	9	34	36	7
Minnesota	74	98	32	101	119	18	21	26	27	29	32	13
Mississippi	23	19	-17	30	26	-13	23	20	-12	30	27	-8
Missouri	110	129	17	115	138	20	43	45	6	45	48	8
Montana	19	18	-5	27	26	-4	26	28	7	38	41	8
Nebraska	21	27	29	28	37	32	18	20	8	25	27	11
Nevada	26	33	27	29	39	34	32	41	29	36	49	36
New Hampshire	17	38	124	20	40	100	31	59	92	36	63	72
New Jersey	131	158	21	147	184	25	35	43	21	40	50	26
New Mexico	32	44	38	43	61	42	23	29	24	31	40	28
New York	510	661	30	574	692	21	56	72	27	63	75	18
North Carolina	131	169	29	159	195	23	30	35	14	37	40	9
North Dakota	9	10	11	18	18	0	14	17	20	28	30	8
Ohio	114	184	61	142	202	42	30	45	50	38	50	32
Oklahoma	26	38	46	34	52	53	12	19	60	15	25	67

TABLE B.16 (continued)

	Number of Facilities						Percentage of Facilities					
	Providing Pharmacotherapies for Opioid Disorders			Providing Any Pharmacotherapies			Providing Pharmacotherapies for Opioid Disorders			Providing Any Pharmacotherapies		
	2013	2016	Change	2013	2016	Change	2013	2016	Change	2013	2016	Change
Oregon	42	61	45	56	71	27	17	27	60	23	32	40
Pennsylvania	194	262	35	236	283	20	36	50	38	44	54	22
Puerto Rico	39	37	-5	44	41	-7	24	26	8	27	29	6
Rhode Island	32	39	22	40	42	5	52	75	45	65	81	25
South Carolina	35	37	6	38	41	8	32	32	3	34	36	5
South Dakota	7	13	86	13	16	23	11	21	89	21	26	25
Tennessee	57	85	49	74	94	27	26	37	45	33	41	24
Texas	161	175	9	170	189	11	35	36	3	37	39	5
Utah	64	112	75	73	125	71	37	48	27	43	53	25
Vermont	24	32	33	27	34	26	55	70	28	61	74	20
Virginia	82	94	15	119	121	2	36	41	13	53	53	0
Washington	84	96	14	94	110	17	19	22	20	21	26	23
West Virginia	47	57	21	57	62	9	47	54	16	56	58	4
Wisconsin	113	106	-6	152	130	-14	36	38	7	48	46	-3
Wyoming	19	24	26	23	28	22	36	41	15	43	48	11
Other US Territories	2	3	50	3	3	0	22	30	35	33	30	-10

SOURCE: N-SSATS 2013 and 2016.

**TABLE B.17. Number and Percentage Change in Residential and Inpatient-Designated Beds
and Utilization Rate by State, 2013 and 2015**

	Number of Designated Beds						Utilization Rate					
	Residential			Inpatient Hospital			Residential			Inpatient Hospital		
	2013	2015	Change	2013	2015	Change	2013	2015	Change	2013	2015	Change
Total	100,417	104,012	4	12,213	15,415	26	97	105	9	97	109	12
Alabama	1,212	1,031	-15	252	52	-79	92	95	3	96	54	-44
Alaska	383	347	-9	NA	NA	NA	89	109	23	NA	0-	NA
Arizona	1,853	2,235	21	210	297	41	97	120	23	129	117	-9
Arkansas	798	686	-14	83	46	-45	86	350	308	94	63	-33
California	13,688	13,390	-2	750	477	-36	94	95	1	102	95	-7
Colorado	1,446	1,162	-20	172	184	7	97	93	-5	80	73	-9
Connecticut	1,766	1,491	-16	290	219	-24	100	101	0	98	111	13
Delaware	184	262	42	NA	30	NA	92	1450	1,470	NA	107	NA
District of Columbia	428	396	-7	NA	12	NA	98	109	11	NA	8	NA
Florida	6,020	6,363	6	641	843	32	120	101	-16	94	128	36
Georgia	1,934	1,933	0	284	413	45	98	83	-15	90	110	22
Hawaii	456	466	2	NA	48	NA	84	95	12	0	92	NA
Idaho	162	144	-11	NA	15	NA	70	97	39	NA	93	NA
Illinois	3,099	2,885	-7	328	253	-23	87	100	15	59	65	9
Indiana	541	618	14	237	552	133	82	130	59	75	92	24
Iowa	815	935	15	NA	30	NA	80	73	-9	NA	80	NA
Kansas	765	720	-6	NA	29	NA	85	96	12	NA	79	NA
Kentucky	1,798	2,264	26	291	329	13	102	94	-8	80	126	58
Louisiana	1,615	1,785	11	199	270	36	83	92	10	81	74	-8
Maine	296	257	-13	112	118	5	107	91	-15	108	39	-64
Maryland	2,074	2,063	-1	709	344	-51	70	86	22	57	75	32
Massachusetts	3,211	3,292	3	595	811	36	95	105	11	106	121	14
Michigan	2,985	2,996	0	180	173	-4	163	88	-46	186	45	-76
Minnesota	3,862	3,593	-7	63	95	51	96	93	-4	92	76	-18
Mississippi	1,133	968	-15	259	148	-43	71	69	-3	129	128	0
Missouri	1,107	1,215	10	55	73	33	88	175	99	195	77	-61
Montana	258	222	-14	24	78	225	177	84	-52	529	118	-78
Nebraska	812	748	-8	NA	NA	NA	82	98	20	0	0	0
Nevada	455	543	19	113	143	27	93	90	-4	131	133	1
New Hampshire	368	390	6	NA	15	NA	90	90	0	NA	27	NA
New Jersey	2,541	2,837	12	365	307	-16	105	118	12	95	131	37
New Mexico	481	483	0	137	125	-9	353	83	-77	72	90	25
New York	10,531	10,125	-4	2,067	1,741	-16	91	97	7	79	95	20
North Carolina	2,655	2,591	-2	429	368	-14	92	112	21	129	73	-44
North Dakota	378	440	16	94	83	-12	111	84	-25	56	71	26
Ohio	1,758	1,955	11	586	561	-4	99	102	3	84	88	4
Oklahoma	1,570	1,206	-23	131	113	-14	76	97	27	85	68	-20
Oregon	1,260	1,268	1	83	52	-37	85	97	15	75	185	147

TABLE B.17 (continued)

	Number of Designated Beds						Utilization Rate					
	Residential			Inpatient Hospital			Residential			Inpatient Hospital		
	2013	2015	Change	2013	2015	Change	2013	2015	Change	2013	2015	Change
Pennsylvania	5,756	5,570	-3	529	392	-26	91	95	4	83	62	-25
Puerto Rico	3,027	2,553	-16	178	198	11	75	109	44	251	178	-29
Rhode Island	348	1,721	395	NA	3,543	NA	93	100	8	NA	100	NA
South Carolina	471	692	47	301	209	-31	117	89	-24	116	537	364
South Dakota	543	623	15	87	98	13	115	93	-19	86	69	-19
Tennessee	1,848	1,913	4	142	129	-9	86	93	8	280	95	-66
Texas	5,448	4,809	-12	375	404	8	87	122	40	89	138	56
Utah	896	928	4	NA	49	NA	109	91	-17	NA	71	NA
Vermont	245	213	-13	112	116	4	404	77	-81	82	587	615
Virginia	801	1,060	32	109	277	154	72	95	32	152	113	-26
Washington	2,417	5,729	137	189	192	2	87	117	35	72	77	6
West Virginia	433	552	27	NA	74	NA	91	93	2	NA	55	NA
Wisconsin	1,114	904	-19	130	261	101	74	86	17	102	68	-33
Wyoming	316	388	23	NA	16	NA	103	83	-20	0	31	NA
US territories	56	52	-7	NA	10	NA	89	83	-7	0	240	NA

SOURCE: N-SSATS 2013 Questions 28d and 29d, and N-SSATS 2015, Questions 29d and 30d, indicate hospital-designated and residential-designated beds.
NOTE: Utilization rate is calculated by dividing the number of clients in care by the total number of designated beds.

EXAMINING SUBSTANCE USE DISORDER TREATMENT DEMAND AND PROVIDER CAPACITY IN A CHANGING HEALTH CARE SYSTEM

Reports Available

Examining Substance Use Disorder Treatment Demand and Provider Capacity in a Changing Health Care System: Final Report

HTML <https://aspe.hhs.gov/report/examining-substance-use-disorder-treatment-demand-and-provider-capacity-changing-health-care-system-final-report>

PDF <https://aspe.hhs.gov/pdf-report/examining-substance-use-disorder-treatment-demand-and-provider-capacity-changing-health-care-system-final-report>

Examining Substance Use Disorder Treatment Demand and Provider Capacity in a Changing Health Care System: Initial Findings Report

HTML <https://aspe.hhs.gov/report/examining-substance-use-disorder-treatment-demand-and-provider-capacity-changing-health-care-system-initial-findings-report>

PDF <https://aspe.hhs.gov/pdf-report/examining-substance-use-disorder-treatment-demand-and-provider-capacity-changing-health-care-system-initial-findings-report>

Substance Use Disorder Workforce Issue Brief

HTML <https://aspe.hhs.gov/basic-report/substance-use-disorder-workforce-issue-brief>

PDF <https://aspe.hhs.gov/pdf-report/substance-use-disorder-workforce-issue-brief>