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The U.S. Opioid Epidemic: An Overview of Clinical and Policy Responses to Address Opioid Misuse in the Medicaid Program

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Since 2000, the significant increase in the misuse of opioids, including prescription (e.g., oxycodone) and illicit (e.g., heroin) opioids, has led to the declaration of an "opioid epidemic" by the U.S. Department of Health and Human Services (HHS).[1] Growing rates of opioid misuse have been attributed to the increased rates of hospitalizations and overdose deaths, increased use of drug treatment programs, increased use of medication-assisted therapy (MAT), and other societal costs.[2–7] Notably, this trend is increasingly prevalent among women misusing opioids during pregnancy, resulting in increased rates of infants born with neonatal abstinence syndrome (NAS) and neonatal intensive care unit (NICU) stays.[6] However, it is important to note that there are instances in which women are prescribed opioids during pregnancy for medical reasons. In recent years, a number of clinical guidelines and policy efforts have targeted opioid misuse, including approaches to expand access to MAT and develop targeted MAT programs for pregnant women and postpartum mothers. While these efforts begin to address this issue, additional clinical and policy-based solutions are needed to prevent and treat the growing opioid epidemic in the U.S.

The mission of the Institute for Medicaid Innovation is to improve the lives of Medicaid enrollees through the development, implementation, and diffusion of innovative and evidence-based models of care that promote quality, value, equity and the engagement of patients, families, and communities.

Rise in Opioid Misuse[i] in the U.S.

In the United States, the widespread prevalence of opioid addiction was first documented in the late 1800s; with the use of opioids during the Civil War (1861–1865) and the synthesis of heroin in 1874, the drug quickly become known as a "wonder drug."[8] The medical use of opioids and their lax dispensing requirements led to the beginnings of iatrogenic addiction, or an adverse condition resulting from medical or surgical treatment by a clinician.[8]

Over the decades that followed, opioid addiction grew to include individuals who used these drugs nonmedically, which was often referred to as illicit or "recreational use." This caused usage to reach epidemic levels in urban areas by the 1960s. In

[i] For the purposes of this issue brief, the term "opioid misuse" will be used in place of substance abuse or opioid abuse, to acknowledge the growing use of the term in government publications and clinician guidelines.

1967, as a result of growing misuse of opioids, the Substance Abuse and Mental Health Services Administration (SAMHSA) initiated a project to collect data around heroin use in the National Survey on Drug Use and Health (NSDUH). Heroin use has grown over the years, increasing from 164,000 users in 2002 to 591,000 in 2015.[8,9] Heroin represents one illicit drug in the class of opioids. This class also includes prescription opioid analgesics such as oxycodone, codeine, and morphine (Table 1).

Table 1. List of Drugs in Opioid Class

Agonists			Antagonists	Mixed Agonist-Antagonists
Morphine	Oxycodone	Fentanyl	Naloxone	Pentazocine
Codeine	Propoxyphene	Tramadol	Naltrexone	Buprenorphine
Methadone	Hydromorphone	Heroin		
Meperidine	Hydrocodone			

Source: Hudak, M. L., & Tan, R. C. (2012). Neonatal drug withdrawal. *Pediatrics*, 129(2), e540-e560. doi:10.1542/peds.2011–3212

Definition of Opioid Use Disorder[ii]

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-V), opioid use disorder is defined as:

> ***"A problematic pattern of opioid use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period:***
>
> 1. ***Opioids are often taken in larger amounts or over a longer period than was intended.***
> 2. ***There is a persistent desire or unsuccessful efforts to cut down or control opioid use.***
> 3. ***A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects.***
> 4. ***Craving, or a strong desire or urge to use opioids.***
> 5. ***Recurrent opioid use resulting in a failure to fulfill major role obligations at work, school, or home.***
> 6. ***Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids.***
> 7. ***Important social, occupational, or recreational activities are given up or reduced because of opioid use.***
> 8. ***Recurrent opioid use in situations in which it is physically hazardous.***

[ii] Opioid misuse will also be referred to as "opioid use disorder," to reflect language used in the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition: DSM-5.

9. ***Continued opioid use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.***
10. ***Tolerance, as defined by either of the following:***
11. ***A need for markedly increased amounts of opioids to achieve intoxication or desired effect.***
12. ***A markedly diminished effect with continued use of the same amount of an opioid. (Note: this criterion is not considered to be met for those taking opioids solely under appropriate medical supervision.)***
13. ***Withdrawal, as manifested by either of the following:***
14. ***The characteristic opioid withdrawal syndrome (refer to Criteria A and B of the criteria set for opioid withdrawal).***
15. ***Opioids (or a closely related substance) are taken to relieve or avoid withdrawal symptoms. (Note: This criterion is not considered to be met for those individuals taking opioids solely under appropriate medical supervision).”***[10]

The prevalence of opioid use disorder is roughly 0.37 percent among adults 18 years of age and older.[11] Among adolescents, opioid use disorder is approximately 1.0 percent.[12] While opioid use disorder rates are higher among adult men than adult women (0.49 percent vs. 0.26 percent), female adolescents are more likely to develop the condition.[11,12] One study that surveyed high school students for alcohol and opioid use disorders found that female respondents accounted for roughly 66 percent of medical users and 70 percent of self-treaters[iii].[13]

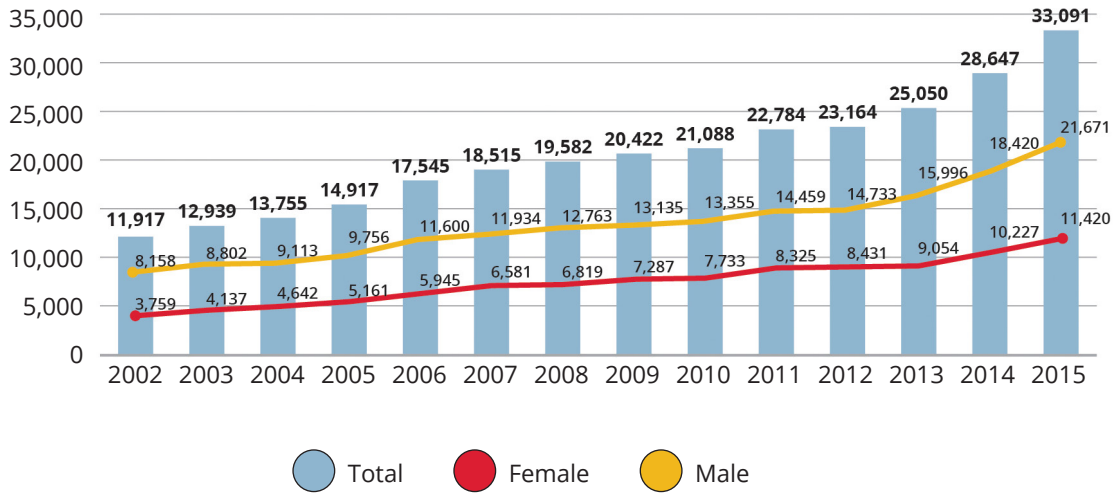
The rise in misuse of prescription opioids has significantly contributed to opioid-related hospitalizations.

- From 2000 to 2012, the rate of adult inpatient stays related to opioid misuse and dependence has nearly doubled.[14]
    - Overall, the rate of opioid-related inpatient stays has increased almost 65 percent, a 5.7 percent average annual growth rate from 2005 to 2014.[15]
    - During this same time period, opioid-related emergency department visits increased by 99 percent, an 8.0 percent average annual growth rate.[15]

[iii] Self-treating is defined as the use of prescription opioids to self-treat physical pain and/or psychological symptoms following traumatic or stressful events.

Since 2000, drug overdose deaths from opioids have increased by 200 percent (Figure 1).[16] In fact, drug overdose has become the leading cause of injury death.[17]

Figure 1. National Overdose Deaths from Opioid Drugs, 2002–2015



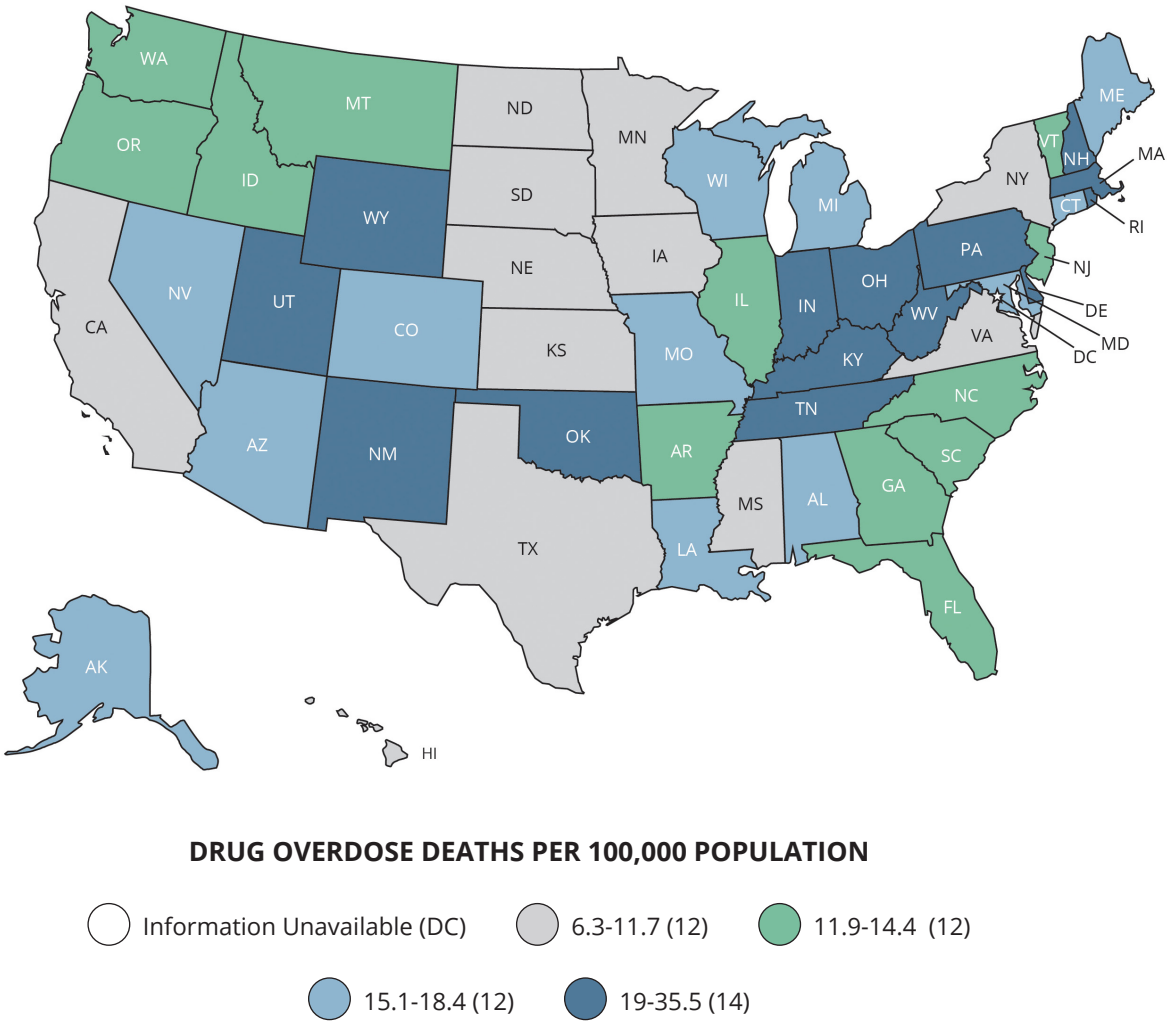
Source: National Center for Health Statistics, CDC Wonder

- In 2014, 26,647 deaths (61 percent of drug overdose deaths) resulted from misuse of opioids, including heroin.[16] This represents a 14 percent increase in the rate of opioid overdose deaths since 2013.[16] The states with the highest drug overdose death rates include Delaware, Kentucky, Massachusetts, New Hampshire, New Mexico, Ohio, Oklahoma, Pennsylvania, Rhode Island, Tennessee, Utah, West Virginia, and Wyoming (Figure 2).[16] Refer to Appendix A for more detailed information regarding drug overdose deaths by state.
- Six of the top ten drugs contributing to overdose deaths in 2014 are opioids (Table 2).[18]
- From 2014 to 2015, the overdose death rate associated with synthetic opioids other than methadone (e.g., fentanyl) increased by 72.2 percent.[19] Overdose death rates associated with heroin increased by 20.6 percent.[19]
- In 2015, opioid-related drug overdose reached over 33,000—an estimated 20,101 drug overdose deaths resulted from misuse of prescription opioids and 12,990 resulted from heroin use.[19] This is roughly four times the rate of opioid overdose deaths in 1999.[20]

States with the Highest Drug Overdose Death Rates in 2014

Delaware
Kentucky
Massachusetts
New Hampshire
New Mexico
Ohio
Oklahoma
Pennsylvania
Rhode Island
Tennessee
Utah
West Virginia
Wyoming

Figure 2. Age-Adjusted Drug Overdose Death Rates, United States, 2014



Source: Rudd, R. A., Aleshire, N., Zibbell, J. E., & Gladden, M. (2016). Increases in Drug and Opioid Overdose Deaths—United States, 2000–2014. *Morbidity and Mortality Weekly Report, 64*(50), 1378–82.

Table 2. Top 10 Drugs Involved in Drug Overdose Deaths: United States, 2014

Rank	2010			2014		
	Drug	Number of Deaths	Percent	Drug	Number of Deaths	Percent
1	**Oxycodone**	**5,256**	**13.7**	**Heroin**	**10,863**	**23.1**
2	**Methadone**	**4,408**	**11.5**	*Cocaine*	*5,856*	*12.4*
3	*Cocaine*	*4,312*	*11.2*	**Oxycodone**	**5,417**	**11.5**
4	*Alprazolam*	*3,677*	*9.6*	*Alprazolam*	*4,217*	*9.0*
5	**Heroin**	**3,020**	**7.9**	**Fentanyl**	**4,200**	**8.9**
6	**Morphine**	**2,941**	**7.7**	**Morphine**	**4,022**	**8.5**
7	**Hydrocodone**	**2,844**	**7.4**	*Methamphetamine*	*3,728*	*7.9*
8	**Fentanyl**	**1,645**	**4.3**	**Methadone**	**3,495**	**7.4**
9	*Diazepam*	*1,448*	*3.8*	**Hydrocodone**	**3,274**	**7.0**
10	*Methamphetamine*	*1,388*	*3.6*	*Diazepam*	*1,729*	*3.7*

Source: Warner, M., Trinidad, J. P., Bastian, B. A., Minino, A. M., & Hedegaard, H. (2016, December 20). Drugs Most Frequently Involved in Drug Overdose Deaths: United States, 2010–2014. *National Vital Statistics Reports,* 65(10), 1–14. Retrieved from https://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65_10.pdf
Note: Drugs in bold are opioids.

Clinical and Societal Costs Associated with Opioid Misuse

The rise in rates of opioid misuse and overdose deaths have resulted in a significant clinical and economic burden for the U.S. health system, especially for public health programs like the Medicaid program. From an economic perspective, the costs associated with misuse of prescription opioids include the loss of workforce productivity, increased healthcare spending, rise in recidivism and increased use of the criminal justice system, and workplace costs (e.g., absenteeism).[2,3,5] A narrow subset of these economic costs are the expenditures resulting from utilization of medical services by opioid users, including emergency department use, outpatient and inpatient treatment, medication assisted treatment (MAT), neonatal abstinence syndrome (NAS), associated neonatal intensive care unit (NICU) costs, and more.

Several studies spanning the past two decades have examined the nonmedical use of opioids, each identifying the relationship between opioid misuse and increased societal and healthcare costs:

- **2001:** It was estimated that costs associated with misuse of prescription opioids were $8.6 billion. Of these total societal costs, $2.6 billion stemmed from healthcare costs, $1.4 billion from criminal justice costs, and $4.6 billion from workplace costs.[2]

- **2007:** A comparison of opioid users enrolled in private insurance and Medicaid in Florida from 2003 to 2007 found that the average annual healthcare costs for opioid users with private insurance were $20,546 more than non-users.[3] For opioid users enrolled in Medicaid, average annual healthcare costs were $5,874 to $15,183 higher than non-users.[3] A second study estimated societal costs of prescription opioid misuse to be $55.7 billion.[4] The societal costs resulted from approximately $25.6 billion in lost workplace productivity, $25.0 billion in healthcare costs, and $5.1 in billion justice costs.[4]
- **2009:** Roughly $20.4 billion of indirect costs and $2.2 billion of direct medical costs were associated with opioid misuse.[5] Direct medical costs consisted of $800 million in emergency department use and $1.3 billion for inpatient hospitalizations.[5] Absenteeism in the workplace contributed $335 million and lost future earnings as a result of overdose death contributed $18.2 billion to indirect costs.[5]
- **2009:** There were an estimated 13,600 cases of infants born with NAS with an estimated cost of stay in the NICU of $53,000 per case, or almost $721 million in healthcare costs.[6]
- **2012:** A study that examined inpatient hospitalization of opioid users with and without serious infection from 2002 to 2012 found that the costs associated with opioid-related hospitalizations reached $15 billion and those with associated infection reached $700 million.[7] Over the study's time period, the costs associated with these hospitalizations nearly quadrupled.[7]

Opioid Misuse in the Medicaid Population: Trends and Costs

Trends in Opioid Misuse in the Medicaid Population

Demographically, there is a distinct overlap in the characteristics of Medicaid enrollees and those who misuse illicit and prescription opioids. An analysis of data from NSDUH and the National Vital Statistics System from 2002 to 2013 identified the characteristics of heroin users and found that they are likely to be non-Hispanic White males between the ages of 18 to 25 years, residing in urban locations, earning less than $20,000 in annual household income, either uninsured or enrolled in Medicaid, and likely to be misusing prescription opioids.[21] It is important to note that the combination of gender, age, household income, and race/ethnicity demographics are very closely aligned with newly eligible Medicaid enrollees who gained coverage through the Affordable Care Act (ACA)–related Medicaid expansion.[22,23]

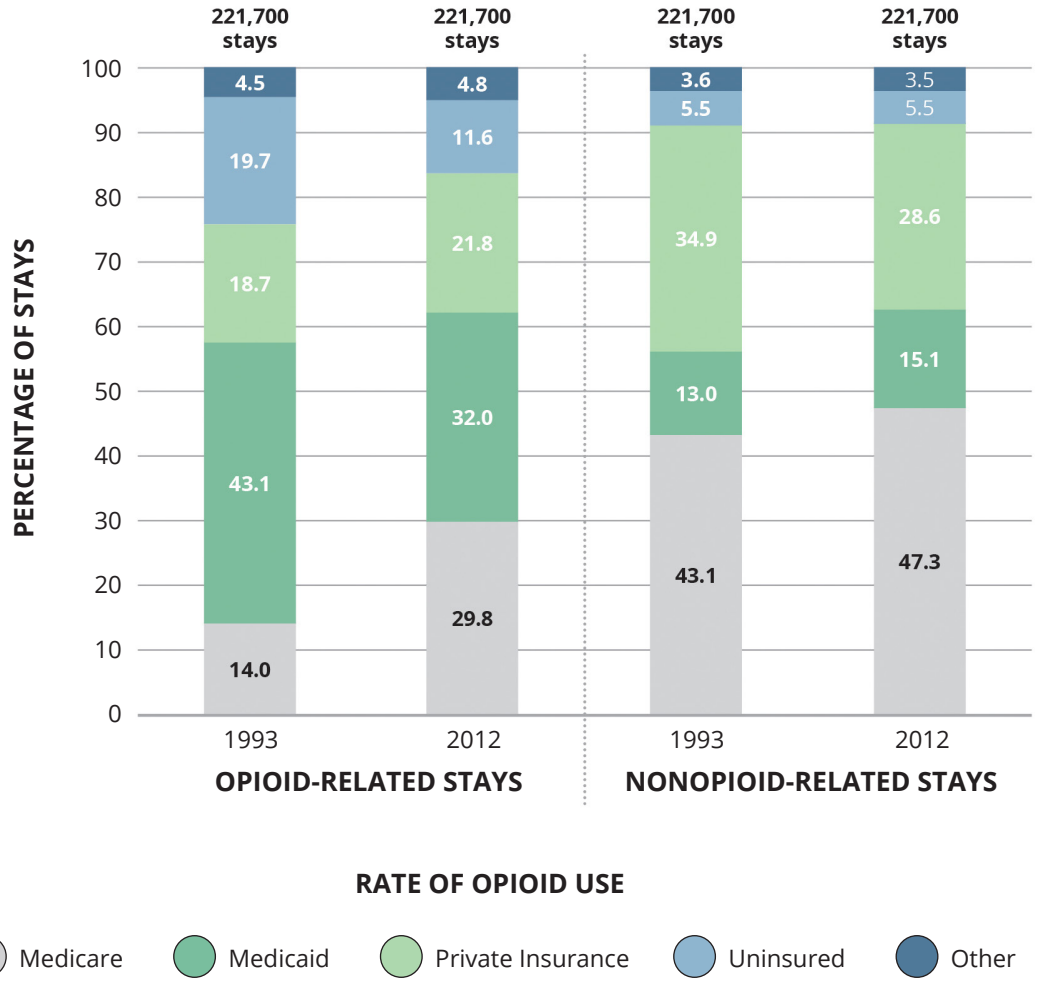
Within the Medicaid population, an analysis of 2010–2012 Medical Statistical Information System (MSIS) data conducted by the Medicaid and CHIP Payment and Access Commission (MACPAC) found the following characteristics of opioid prescription users enrolled in Medicaid:[24]

- Approximately 15 percent of Medicaid enrollees filled at least one opioid prescription in 2012.
- Women were more likely to have an opioid prescription compared to men (19 percent and 11 percent, respectively).
- Older Medicaid enrollees are likely to have a larger number of opioid prescriptions.

Among Medicaid enrollees, prescription opioid supply and prescribing practices contributes to increasing health care costs and hospitalizations. From 1993 to 2012, the Medicaid program covered the majority of opioid-related

hospital inpatient stays, although the percentage of stays declined from 43.1 percent to 32.0 percent during this time period (Figure 3).[14]

Figure 3. Distribution of Opioid-Related* and Nonopioid-Related Hospital Inpatient Stays among Adults by Payer, 1993 and 2012



Source: Owens, P. L., Barrett, M. L., Weiss, A. J., Washington, R. E., & Kronick, R. (2014). Hospital Inpatient *Utilization Related to Opioid Overuse Among Adults,* 1993–2012. HCUP Statistical Brief #177, Agency for Healthcare Research and Quality, Rockville, MD.
* Authors noted: "Opioid overuse was identified using all-listed diagnoses. The total number of stays in this figure is slightly below the count of all adult stays, because some discharge records are missing payer information."

- In 2006 and 2007, the Government Accountability Organization (GAO) found that 65,000 Medicaid enrollees in California, Illinois, New York, North Carolina, and Texas went to six or more clinicians to obtain prescriptions for opioids.[25] The GAO also found that approximately 400 enrollees visited 112 clinicians and 46 pharmacies to obtain and fill prescriptions.[25]
- An analysis of 2010 Truven Health's MarketScan® Multi-State Medicaid database found the following:[26]
    - Roughly three-quarters of Medicaid enrollees with at least one prescription for opioids were female.
    - On average, males received more prescriptions than females.

- Approximately 53 percent of enrollees had three or more prescriptions for opioids. Five percent had 20 or more prescriptions.
- Based on indicators for potential misuse (i.e., overlapping prescriptions with benzodiazepines, high daily opioid dose), 25 percent of enrollees had at least one indicator for misuse and approximately 16 percent had two or more indicators. By comparison, 19.2 percent of individuals enrolled in private insurance had one indicator for misuse and 5.8 percent had two or more indicators.

- According to MACPAC, seven in ten Medicaid enrollees had a prescription for opioids for a supply of one to two months in 2012.[24] Additionally, one-third of Medicaid enrollees with prescriptions for opioids were for a one-month supply. Five percent had a prescription for 32 or more days.

An analysis conducted by Express Scripts, a pharmacy benefit manager, examined utilization patterns among 3.1 million Medicaid managed care enrollees in 14 states in 2014 and found the following trends among Medicaid enrollees:[27]

- Women enrolled in Medicaid managed care organizations (MMCOs) filled more opioid prescriptions than men (63 percent vs. 37 percent), although men tend to have more prescriptions for opioids (4.1 vs. 3.9).
- Overall, age groups most likely to be opioid users were individuals aged 20–44 years (26.0 percent) and 45–64 years (31.1 percent).
- Among Medicaid managed care enrollees, the most common prescription opioid in 2015 was hydrocodone-acetaminophen (34 percent) (Table 4).
- On average, Medicaid managed care enrollees received prescriptions from 1.8 clinicians, although 8.9 percent of enrollees filled prescription for opioids from four or more clinicians. One enrollee filled prescriptions from 34 clinicians.
- In 2014, 17,741 Medicaid managed care enrollees filled six or more opioid prescriptions. Among this group, approximately 28 percent received prescriptions from three or more clinicians. Of the enrollees who filled six or more prescription opioids from three or more clinicians, roughly 72 percent filled their prescriptions at two or more pharmacies.

Table 4. Top 10 Opioid Medications Prescribed to Medicaid Members, 2015

Rank	Drug	Rx Count	Percent of Opioid Rxs
1	Hydrocodone-Acetaminophen	626,174	34
2	Oxycodone-Acetaminophen	266,333	15
3	Tramadol HCL	219,886	12
4	Oxycodone HCL	193,913	11
5	Suboxone®	143,043	8
6	Acetaminophen-Codeine	95,968	5
7	Buprenorphine-Naloxone	57,813	3

Rank	Drug	Rx Count	Percent of Opioid Rxs
8	Morphine Sulfate ER	47,056	3
9	Fentanyl	26,493	1
10	Buprenorphine HCL	26,493	1

Source: Express Scripts. (2016). *A nation in pain: Focus on Medicaid.*

Federal and State Policies to Address Opioid Misuse

U.S. Department of Health and Human Services' Opioid Initiative

In 2015, the U.S. Department of Health and Human Services (HHS) announced its targeted effort, Opioid Initiative, to address the worsening opioid epidemic and reduce opioid-related overdoses and deaths.[1] HHS identified the need to implement evidence-based approaches in three main priority areas:[1]

1. Opioid prescribing practices to reduce opioid use disorders and overdoses.
2. Expanded use of naloxone, used to treat opioid overdoses.
3. Expanded use of MAT to reduce opioid use disorders and overdoses.

Furthermore, HHS identified smaller actions with the greatest likelihood of impact on clinical outcomes in the near- and long-term. As such, the agency emphasized the need to rely on the "best available evidence" to direct policy changes to high-risk populations that are likely to deliver "a measurable impact within two years."[1] HHS identified policies that could address the three main priorities, noting that continued evaluation and translational research was need to contribute to the current evidence base and inform future policymaking, including prescription drug monitoring programs (PDMPs), prescribing guidelines, and MAT.

Prescription Drug Monitoring Programs

Prescription drug monitoring programs (PDMPs) are state-run electronic databases that catalogue prescriptions for controlled substances, such as opioids, to identify individuals who are potentially misusing. Evidence suggests that PDMPs may be effective in identifying high-risk patients by tracking patterns of clinicians and pharmacies, providing clinical decision support tools, and leading to faster adoption of evidence-based practices amongst clinicians and pharmacists.[28–33] Since PDMPs are managed by states, there is wide variation in how states create their databases, how prescription information is reported, and in the frequency of reporting.[1] Due to these variations and limitations with state infrastructure and capacity to maintain and upgrade PDMPs, limits a state Medicaid program's ability to leverage this robust tool is limited.[1,28] Currently, information is not shared across states, which is particulary limiting for individuals residing in bordering communities.

As of November 2016, 49 states and DC have created PDMPs.[34] In order to better identify trends in utilization and identify individuals with a high risk for opioid misuse, several states authorize the transfer of solicited and unsolicited reports to Fraud and Abuse and Drug Utilization departments within state Medicaid agencies (Table 5).[34] For detailed, state-level information, please see Appendix B.

- The majority of PDMPs are statutorily authorized to send solicited reports to state Medicaid agencies. Only four states and DC are authorized to send unsolicited reports to Fraud and Abuse departments and only DC is authorized to send unsolicited reports to the Drug Utilization department.
- As well, the majority of authorized states were actively engaged in sending solicited reports to Fraud and Abuse (28 states) and Drug Utilization (16 states). With the exception of DC, all four states authorized to send unsolicited reports to Fraud and Abuse were engaged in the activity.

Table 5. Summary of Prescription Drug Management Programs Authorized and Engaged in Sending Reports to Medicaid Agencies

Prescription Drug Management Programs Authorized and Engaged in Sending Reports to State Medicaid Agencies				
State Medicaid Agency Departments	Authorized		Engaged	
	Solicited	Unsolicited	Solicited	Unsolicited
Fraud and Abuse	32 states + DC	4 states + DC	28 states	4 states
Drug Utilization	23 states + DC	DC	16 states	0 states

Source: Source: Prescription Drug Monitoring Program Training and Technical Assistance Center. (2016, November 25). "PDMPs Authorized and Engaged in Sending Solicited and Unsolicited Reports to Public and Private Insurance Entities." Retrieved from http://www.pdmpassist.org/pdf/Regulatory_Entity_Table_1.pdf
Note: Refer to Appendix B for a list of states in each category.

Prescribing Guidelines

Rates of opioid prescribing increased fourfold from 1999 to 2010, paralleling the increase in opioid overdose death rates during the same time period.[16,35] In response, HHS identified a need for the development of opioid prescribing guidelines that "encourage the use of opioids when benefits outweigh risks and that promote safe use when opioids are needed."[1] HHS noted that it is important that these guidelines be evaluated to assess the impact and capability of integration into clinical decision support platforms.

Medication-Assisted Treatment

Medications such as the single entity buprenorphine product and methadone have been found to be effective methods in curbing opioid misuse and have been recommended for use during pregnancy.[36–41] In the Medicaid program, substance use disorder benefits (e.g., detox services, psychotherapy, peer support, and MAT) vary by state.[24,42] Every state provides coverage through the Medicaid program for the prescription medications used to treat opioid use disorder: buprenorphine, buprenorphine-naloxone combination, and naltrexone. Although

methadone is another prescription medication used to treat opioid use disorder, not every state Medicaid program provides coverage. Federal and state funding is, however, available to each state in order to provide the medication. It is also important to note that naltrexone is not recommended for use during pregnancy. For state level information on coverage of these opioid use disorder treatments and medication limitations, see Appendices C and D.

The Drug Addiction Treatment Act of 2000 (DATA 2000) expanded access to MAT drugs by allowing qualified physicians to prescribe approved medications in settings outside of opioid treatment programs (OTPs). In order to prescribe and/or dispense buprenorphine, physicians must have completed a waiver application and training in order to become DATA-waived. It is important to note that at the time, DATA 2000 only authorized physicians to become qualified—advanced practice nurses and physician's assistants were not eligible. Despite these efforts, there continued to be significant gaps in clinician capacity across the United States, making it difficult for certain populations such as pregnant women misusing opioids, to access the care they need.[43]

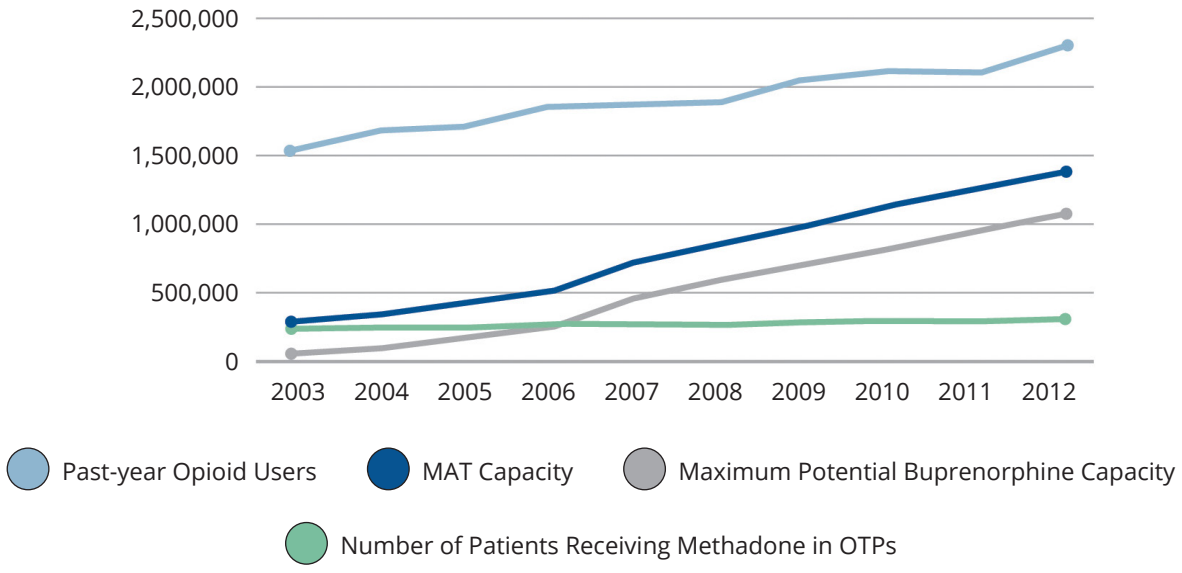
- In 2012, roughly 891.8 per 100,000 people ages 12 years or older were diagnosed with opioid misuse.[44] The maximum potential capacity for MAT clinicians to offer buprenorphine treatment and outpatient methadone treatment were 420.3 and 119.9 per 100,000, respectively (Table 6).[44]
- From 2003 to 2012, the number of DATA-waived physicians with 30 and 100-patient limits grew significantly (Table 6).[44] Despite this growth, there continued to be a shortage of physicians available to offer treatment that met the needs of the individuals misusing opioids, both nationally and across the states (Figure 4) (Appendix E).[44]
    - In 2012, 31 states were below capacity to provide MAT for opioid users, making it difficult for these states to meet the demand of those who needed treatment (Figure 5).
    - The maximum number of patients that could be potentially treated with buprenorphine reflected 47 percent of the total number of past-year opioid users.
    - Additionally, a total of 1,167 opioid treatment programs (OTP) were available to treat 311,718 users (13 percent of total past-year opioid users) with methadone in 2012.

Table 6. Rates of Past-Year Opioid Users and Opioid Agonist Medication-Assisted Treatment Capacity, by Year 2003–2012

Year	Past-Year Opioid Users		Number of DATA-Waived Physicians		Maximum Number of Potential Buprenorphine Patients	Number of OTPs	Number of Patients Receiving Methadone in OTPs
	Estimate	Rate (Per 100,000)	With 30-Patient Limit	With 100-Patient Limit			
2003	1,507,130	634.1	1,800	0	54,000	1,067	227,003
2004	1,661,297	690.7	3,219	0	96,570	1,070	240,961
2005	1,690,219	694.9	5,419	0	162,570	1,069	235,836
2006	1,842,275	748.8	7.887	0	236,610	1,203	258,752
2007	1,854,894	748.4	8,566	1,937	450,680	1,108	262,684
2008	1,887,196	755.4	11,029	2,509	581,770	1,132	268,071
2009	2,053,570	815.5	12,228	3,380	704,840	1,239	285,686
2010	2,105,757	830.3	13,344	4,441	844,420	1,166	299,643
2011	2,097,321	814.2	14,656	5,230	962,680	1,189	307,780
2012	2,319,213	891.8	16,095	6,103	1,093,150	1,167	311,718

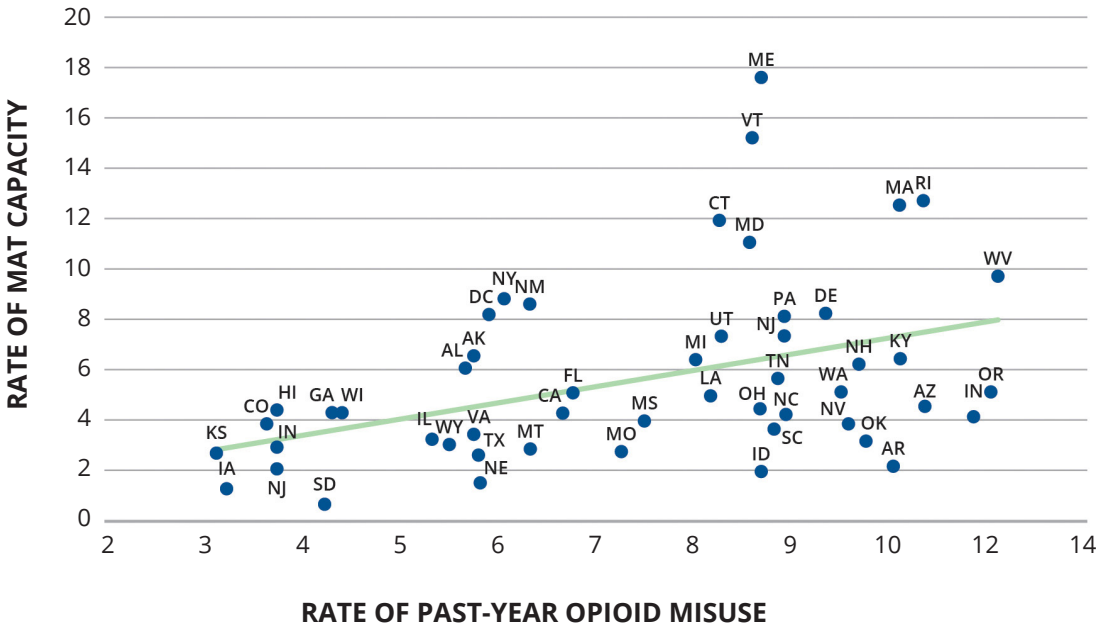
Source: Jones, C. M., Campopiano, M., Baldwin, G., & McCance-Katz, E. (2015). National and State Treatment Need and Capacity for Opioid Agonist Medication-Assisted Treatment. *American Journal of Public Health,* 105(8), e55–e63.

Figure 4. Trends in Past-Year Opioid Users and Opioid Agonist Medication-Assisted Treatment Capacity, by Year 2003–2012.



Source: Jones, C. M., Campopiano, M., Baldwin, G., & McCance-Katz, E. (2015). National and State Treatment Need and Capacity for Opioid Agonist Medication-Assisted Treatment. *American Journal of Public Health,* 105(8), e55–e63.

Figure 5. Comparison of State Rates of Past-Year Opioid Users and Capacity to Provide Medication-Assisted Treatment, 2012



Source: Jones, C. M., Campopiano, M., Baldwin, G., & McCance-Katz, E. (2015). National and State Treatment Need and Capacity for Opioid Agonist Medication-Assisted Treatment. *American Journal of Public Health,* 105(8), e55–e63.

The clinician gap is disproportionately large in rural areas, where higher rates of opioid misuse in the Medicaid population exist.[45] In these areas, behavioral health providers and treatment programs are limited and spread out geographically, making it difficult for Medicaid enrollees to travel to access care. Family physicians and other primary care clinicians commonly provide care for enrollees misusing opioids.[45] While these clinicians refer their patients for opioid use disorder treatment, there may not be specialized clinicians available to provide care to these patients. In order to address this, integration of behavioral health services within a medical home model has been recommended, enabling primary care clinicians to offer needed services.[45] Similarly, it has also been recommended that states expand the scope of practice regulations to enable emergency responders and pharmacists to dispense and utilize naloxone in emergency overdose circumstances.[45]

Furthermore, the clinician gap is exacerbated as more newly eligible Medicaid enrollees are referred for MAT treatment. Low-income childless adults who were previously ineligible for Medicaid gained coverage as a result of states' implementation of the Medicaid expansion in 2014 under the ACA. In 2014, expansion states experienced a 70 percent increase in utilization of buprenorphine prescriptions and 50 percent increase in buprenorphine spending, suggesting that this population had unmet behavioral and opioid misuse needs.[46]

Additional barriers exist for pregnant Medicaid-enrolled women when accessing MAT and opioid use disorder treatment. Some treatment programs require enrollees to have routine prenatal medical care.[38] Health disparities disproportionately affect Medicaid enrollees, making it difficult for them to access routine primary care and prenatal care because of transportation and childcare barriers.[47] Requiring routine prenatal care may prevent pregnant women who are misusing opioids from receiving the care they need.

2016: Rulemaking to Expand Access to Medication-Assisted Treatment and Clinician Prescribing

In 2016, two major policymaking activities led to the expansion of access to MAT across the country by expanding the number of patients who could receive buprenorphine treatment from a single DATA-waived clinician and by expanding the types of clinicians who could prescribe buprenorphine.

- HHS promulgated a final rule, "Medication Assisted Treatment for Opioid Use Disorders," on July 6, 2016, that allowed DATA-waived clinicians who prescribe buprenorphine treatments for up to 100 patients per year to obtain a waiver to treat up to 275 patients.[48]
    - In order to obtain the waiver, physicians must complete additional credentialing in addiction medicine or psychiatry from a specialty medical board or professional society or they must practice in a qualified treatment location.[48]
    - As of November 2016, 2,477 physicians have obtained a waiver to provide buprenorphine treatment to more patients each year.[49]

- On July 22, 2016, President Obama signed Section 303 of the Comprehensive Addiction and Recovery Act (CARA) into law.[50]
    - In order to implement this law, HHS announced on November 17, 2016, that if nurse practitioners and physician's assistants complete 24 hours of training, they can prescribe buprenorphine treatment for opioid users.[51]
    - Once nurse practitioners and physician's assistants complete training, they are allowed to prescribe buprenorphine for up to 30 patients in one year, beginning in 2017.[51]
    - HHS also indicated interest in exploring potential rulemaking that would allow nurse practitioners and physician assistants who have prescribed treatment for 30 patients to apply for a waiver to prescribe buprenorphine for up to 100 patients per year.[51]

Looking Ahead: Improving Access to Appropriate, Evidence-Based Opioid Use Disorder Treatment

Prescription opioid supply and prescribing practices have led to overprescribing of opioid analgesics and increasing rates of opioid misuse and overdose.[14] In response to the "opioid epidemic," health care costs, societal costs, poor health outcomes, and rates of NAS and overdose death have increased significantly.[1] The Medicaid population is disproportionately impacted by opioid misuse and access to MAT clinicians is limited, making it

difficult for Medicaid-eligible individuals to receive much needed treatment.[21,44] It is important that evidence-based alternatives to prescription opioids (e.g., non-pharmacologic treatments) are used when appropriate, especially for individuals with chronic, non-cancer pain.[52]

Current clinical, federal, and state policymaking efforts are focused on addressing the opioid epidemic in the U.S. through prevention and treatment. In order to curb opioid misuse, it is important that state and federal policies are developed to support the development of treatment programs that also include behavioral health services, social services, and case management services, as well as decriminalizing opioid misuse to incentivize individuals to access MAT. Policymaking efforts should also be directed towards encouraging workforce development to expand the number of opioid treatment programs and clinicians credentialed to prescribe MAT, thereby alleviating the shortage of clinicians needed to meet the demand for MAT. Ultimately, key clinical, research, and policy priorities should be considered to slow the rate of growth for opioid misuse and overdose deaths and encourage the adoption of appropriate, evidence-based treatments for chronic pain and opioid use disorder.

Clinical Priorities

Opioid use disorder and substance use disorders are a chronic medical condition.

Substance use disorders have historically been viewed in a negative light, stemming largely from the social stigma around drug use. Rather than being viewed as an illicit or immoral activity, substance use disorders should be treated as chronic medical conditions (whether resulting from chronic pain or misuse) and should involve the integration of behavioral and physical services to provide holistic treatment that also address comorbidities. In the case of pregnant women, it should also involve the integration of prenatal care services with medication-assisted treatment (MAT) to improve health outcomes for both mother and child. It requires the involvement and coordination of clinicians, clinician use of motivational interviewing and reflective listening techniques, the provision of supportive services, and engagement of patients in their own care. Additionally, a holistic treatment plan should include the use of non-pharmacological pain relieving treatments (e.g., physical therapy, behavioral therapy, yoga, acupuncture), especially for individuals suffering from chronic non-cancer pain. Reduction of this stigma will likely result in better care from clinicians and increased engagement from patients.

Clinician education of guidelines and evidence-based treatments across clinical specialties.

The adoption and implementation of clinical guidelines for pain management and the appropriate prescribing of opioids is critical to addressing the epidemic. Clinician education, in medical and nursing school as well in continuing education, is needed to ensure that all clinicians—not just behavioral health clinicians and those engaged in pain management—receive training in and understand evidence-based approaches. Additionally, clinicians should receive education on evidence-based approaches to weaning individuals from high dose opioids. Clinicians that initiate opioid treatments should receive information on screening with validated tools to identify individuals with a high potential for misuse. Not only will this improve care and potentially reduce stigma, it may also result in the training of more clinicians who are able to provide effective pain management (both pharmacologic and non-pharmacologic) and opioid treatment, including MAT.

Standardized uptake and implementation of national clinical guidelines.

Considering the limited number of opioid treatment programs targeted to pregnant and postpartum women and the variation in hospital treatment protocols for infants born with neonatal abstinence syndrome (NAS), it is important to facilitate standardized uptake and implementation of national clinical guidelines and protocols. Widespread adoption of these guidelines will likely lead to more effective and accessible treatment in opioid treatment programs (OTPs). In addition, the development of written hospital weaning protocols and scoring tools to assess NAS is critical to improving the care provided to infants with NAS. It will also help to ensure that diagnosis of their condition is made before discharge.

Research Priorities

Medical research to evaluate causes for opioid misuse, use disorder, and the pharmacological mechanism of opioid addiction.

In order to diminish the stigma harbored by society and clinicians, further research is needed to understand the causes of opioid misuse and use disorder. Further research is also needed to understand the pharmacological mechanism of opioid addiction and how this may differ among various

populations. By expanding research efforts to include an understanding of causes from the perspective of clinicians, individuals, and families, the knowledge gleaned will enhance overall efforts to address this epidemic.

Policy-based interventions designed to address opioid misuse.

As more state and federal efforts are launched to address the opioid epidemic, it is critical that interventions and programs be evaluated for their efficacy in expanding access to and improving quality of treatment, as well as other factors. The findings from the evaluation of the interventions should be disseminated widely, including in peer-reviewed journals to continue to build the growing evidence base on this topic.

Policy and Advocacy Priorities

Opioid treatment programs should be considered as a replacement for criminal penalties, prosecution, and incarceration.

Current criminal penalties and state laws can pose a barrier for pregnant and postpartum women misusing opioids, preventing them from receiving the care and treatment needed. Viewing substance use disorders as chronic medical conditions would enable those who are suffering from opioid addiction to receive behavioral therapy and MAT, specific to pregnancy and postpartum conditions, in a timely manner to prevent overdose deaths, decrease the likelihood of future relapse, lessen the impact on neonates, and reduce societal and healthcare costs associated with opioid misuse.

Streamlined and efficient enrollment processes for pregnant women and ensure continuity of care for women with opioid use disorder postpartum.

Ideally, eligible pregnant women should be enrolled in Medicaid and a Medicaid managed care organization as quickly as possible to facilitate expedited access to routine prenatal care. In doing so, pregnant women misusing opioid prescriptions and illicit opioids may gain access to MAT services earlier in pregnancy, hopefully reducing the risk for NAS for the child and improving the health outcomes and quality of life for both mother and child. Policies and protocols are needed to ensure that postpartum women with opioid use disorders do not lose access to coverage and care, including to medication assisted treatment and behavioral therapy.

Include non-pharmacologic pain management as a covered benefit, reimbursable under Medicaid.

There are effective, evidence-based non-opioid pain management techniques (e.g., yoga, physical therapy, behavioral therapy) that are viable alternatives to prescribing opioids for pain relief. These methods are often not covered by Medicaid. In order to address high rates of prescribing high doses of opioids among the Medicaid-eligible population, Medicaid should reimburse for non-pharmacologic pain management.

Multi-stakeholder engagement to address opioid misuse in a concerted effort.

It is important that efforts to address the opioid epidemic work across stakeholders, including clinicians, criminal justice advocates, health plans, community organizations, and state and federal policymakers. The standardized update and implementation of evidence-based guidelines and treatment protocols needs to be communicated with law enforcement departments, incorporated within state and federal laws, and recognized in state and federal policies. This engagement is critical to supporting and

strengthening the existing prescription drug management program (PDMP) across the states and the development of a national PDMP.

Development of a national prescription drug monitoring program.

PDMPs may be effective in identifying high-risk patients by tracking patterns of clinicians and pharmacies and providing clinical decision support tools, which may lead to the faster adoption of evidence-based practices among clinicians and pharmacists. However, variation in the structure of PDMPs, methods and frequency of reporting, and integration with electronic medical records makes it difficult to maximize the value of PDMPs. As well, OTPs do not report to PDMPs, limiting the accuracy of the information about prescription histories for individuals utilizing prescription opioids. Such variation could be avoided by creating a national PDMP. However, in the absence of a national system, the existing state PDMPs should be standardized and efforts should be made to link programs with health information technology and electronic medical records. In addition, federal policy is needed to allow cross-state access to the PDMPs of bordering states for physicians located close to state borders.

Workforce development to expand the number of DATA-waived clinicians.

The current demand for opioid treatment vastly outweighs the number of available clinicians, even with the 2016 efforts to both extend limits on the number of patients who can be seen by Drug Addiction Treatment Act (DATA) waived clinicians and expand the types of clinicians who can prescribe and/or provide MAT. In addition to clinician education and more intensive training in medical and nursing school, it may be necessary to create policies offering professional development, clinician mentoring opportunities, and even enhanced reimbursement to incentivize the development of this expertise.

Appendix A. Age-Adjusted Rates of Drug Overdose Deaths—United States, 2014

State	Number of Overdose Deaths	Age-Adjusted Rate (Deaths Per 100,000)	Percent Change from 2013 to 2014
Alabama	723	15.2	19.7
Alaska	124	16.8	16.7
Arizona	1,211	18.2	-2.7
Arkansas	356	12.6	13.5
California	4,521	11.1	0.0
Colorado	899	16.3	5.2
Connecticut	623	17.6	10.0
Delaware	189	20.9	11.8
District of Columbia	96	14.2	-5.3
Florida	2,634	13.2	4.8
Georgia	1,206	11.9	10.2
Hawaii	157	10.9	-0.9
Idaho	212	13.7	2.2
Illinois	1,705	13.1	8.3
Indiana	1,172	18.2	9.6
Iowa	264	8.8	-5.4
Kansas	332	11.7	-2.5
Kentucky	1,077	24.7	4.2
Louisiana	777	16.9	-5.1
Maine	216	16.8	27.3
Maryland	1,070	17.4	19.2
Massachusetts	1,289	19.0	18.8
Michigan	1,762	18.0	13.2
Minnesota	517	9.6	0.0
Mississippi	336	11.6	7.4
Missouri	1,067	18.2	4.0
Montana	125	12.4	-14.5
Nebraska	125	7.2	10.8
Nevada	545	18.4	-12.8
New Hampshire	334	26.2	73.5
New Jersey	1,253	14.0	-3.4
New Mexico	547	27.3	20.8
New York	2,300	11.3	0.0
North Carolina	1,358	13.8	7.0
North Dakota	43	6.3	125.0
Ohio	2,744	24.6	18.3
Oklahoma	777	20.3	-1.5
Oregon	522	12.8	13.3
Pennsylvania	2,732	21.9	12.9
Rhode Island	247	23.4	4.5
South Carolina	701	14.4	10.8
South Dakota	63	7.8	13.0
Tennessee	1,269	19.5	7.7

State	Number of Overdose Deaths	Age-Adjusted Rate (Deaths Per 100,000)	Percent Change from 2013 to 2014
Texas	2,601	9.7	4.3
Utah	603	22.4	1.4
Vermont	83	13.9	-7.9
Virginia	980	11.7	14.7
Washington	979	13.3	-0.7
West Virginia	627	35.5	10.2
Wisconsin	853	15.1	0.7
Wyoming	109	19.4	12.8

Source: Rudd, R. A., Aleshire, N., Zibbell, J. E., & Gladden, M. (2016). Increases in Drug and Opioid Overdose Deaths—United States, 2000–2014. *Morbidity and Mortality Weekly Report, 64*(50), 1378–82.

Appendix B. Prescription Drug Monitoring Programs Authorized and Engaged in Sending Solicited and Unsolicited Reports to Medicaid Stakeholders

PDMPs Authorized and Engaged in Sending Solicited and Unsolicited Reports to Medicaid Stakeholders								
State	Reports to Medicaid Fraud and Abuse				Reports to Medicaid Drug Utilization			
	Authorized		Engaged		Authorized		Engaged	
	Solicited	Unsolicited	Solicited	Unsolicited	Solicited	Unsolicited	Solicited	Unsolicited
Alabama	✓		✓		✓		✓	
Alaska	✓		✓		✓		✓	
Arizona	✓	✓	✓	✓				
Arkansas								
California								
Colorado								
Connecticut								
Delaware	✓	✓	✓	✓	✓		✓	
District of Columbia	✓	✓			✓	✓		
Florida	✓		✓					
Georgia	✓				✓			
Hawaii								
Idaho	✓		✓		✓		✓	
Illinois	✓		✓					
Indiana	✓		✓					
Iowa	✓		✓					
Kansas	✓		✓		✓			
Kentucky	✓		✓		✓		✓	
Louisiana	✓		✓		✓		✓	
Maine	✓		✓		✓		✓	
Maryland	✓				✓			
Massachusetts	✓		✓		✓		✓	
Michigan	✓		✓		✓		✓	
Minnesota								
Mississippi	✓		✓		✓		✓	
Missouri								
Montana	✓		✓		✓		✓	
Nebraska								

PDMPs Authorized and Engaged in Sending Solicited and Unsolicited Reports to Medicaid Stakeholders								
State	Reports to Medicaid Fraud and Abuse				Reports to Medicaid Drug Utilization			
	Authorized		Engaged		Authorized		Engaged	
	Solicited	Unsolicited	Solicited	Unsolicited	Solicited	Unsolicited	Solicited	Unsolicited
Nevada								
New Hampshire								
New Jersey	✓	✓	✓	✓				
New Mexico	✓		✓					
New York	✓		✓					
North Carolina								
North Dakota	✓				✓			
Ohio	✓	✓	✓	✓	✓		✓	
Oklahoma	✓		✓		✓		✓	
Oregon								
Pennsylvania					✓			
Rhode Island								
South Carolina	✓		✓		✓			
South Dakota	✓		✓		✓		✓	
tennessee	✓		✓		✓		✓	
Texas								
Utah	✓				✓			
Vermont								
Virginia	✓		✓					
Washington	✓		✓					
West Virginia								
Wisconsin	✓		✓		✓		✓	
Wyoming								
Total	32 states + DC	4 states + DC	28 states	4 states	23 states + DC	DC	16 states	0 states

Source: Prescription Drug Monitoring Program Training and Technical Assistance Center. (2016, November 25). "PDMPs Authorized and Engaged in Sending Solicited and Unsolicited Reports to Public and Private Insurance Entities." Retrieved from http://www.pdmpassist.org/pdf/Regulatory_Entity_Table_1.pdf
† Missouri does not currently have prescription drug monitoring program legislation.
Note: "Authorized" is defined as the state's prescription drug monitoring program (PDMP) having authority to send solicited or unsolicited reports to various entities. This does not mean that the state actively does so. Engaged is defined as the state's PDMP actively "Engaging" in the sending of reports, solicited or unsolicited, to various entities.

Appendix C. Access to Medication-Assisted Treatment in the Medicaid Program by State, 2013–2014

Access to Medication-Assisted Treatment in the Medicaid Program by State, 2013–2014													
State	Is Managed Care Present? (Y/N)	Opioid Dependence Medications with Placement on Medicaid Preferred Drug Lists (C = Covered/Placement Unknown, P = Preferred, NP = Non-Preferred, NC = Not Covered)						Medical or Pharmacy Benefit (M = Medical, Rx = Pharmacy, M/Rx = Medical and Pharmacy Benefit)					
		Methadone		Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)		Injectable Naltrexone		Methadone		Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)		Injectable Naltrexone	
		FFS	MCO	FFS	MCO	FFS	MCO	FFS	MCO	FFS	MCO	FFS	MCO
Alabama	Y*	P	-	NP NP NP NP	-	NP	-	Rx	-	Rx	-	Rx	-
Alaska	N	NP†	-	P NP - P	-	NP	-	Rx	-	Rx	-	Rx	-
Arizona	Y	C	C	P P P P	P P P P	P	P	-	-	Rx	Rx	-	-
Arkansas	Y*	NC	-	NP NP P NP	NP NP P NP	NP	-	-	-	Rx	-	-	-
California	Y	C	NC	NP NP P NP	NP NP P NP	NP	-	M	-	Rx	-	M	-
Colorado	Y	C	C	P P P P	-	P	-	M/Rx	M	Rx	-	M/Rx	-
Connecticut	N	C	-	P NP P NP	-	NP	-	M	-	Rx	-	Rx	-
Delaware	Y	C	-	P NP P P	-	NP	-	-	-	Rx	-	M	-

Access to Medication-Assisted Treatment in the Medicaid Program by State, 2013–2014

State	Is Managed Care Present? (Y/N)	Opioid Dependence Medications with Placement on Medicaid Preferred Drug Lists (C = Covered/Placement Unknown, P = Preferred, NP = Non-Preferred, NC = Not Covered)						Medical or Pharmacy Benefit (M = Medical, Rx = Pharmacy, M/Rx = Medical and Pharmacy Benefit)					
		Methadone		Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)		Injectable Naltrexone		Methadone		Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)		Injectable Naltrexone	
		FFS	MCO	FFS	MCO	FFS	MCO	FFS	MCO	FFS	MCO	FFS	MCO
District of Columbia	Y	C	-	NP NP P NP	-	-	-	-	-	Rx	-	-	-
Florida	Y	NP	-	NP NP P NP	-	P	-	M	-	Rx	-	M	-
Georgia	Y	C	-	NP NP P NP	-	P	-	Rx	-	Rx	-	Rx	-
Hawaii	Y	C	-	P P P P	-	NP	-	Rx	-	Rx	-	-	-
Idaho	N	NC	-	P NP NP NP	-	NP	-	-	-	Rx	-	M/Rx	-
Illinois	Y	NC	NC	NP NP P NP	-	NP	-	-	-	Rx	-	Rx	-
Indiana	Y	NC	C	P NP NP P	P NP NP P	NP	NP	-	-	Rx	Rx	M/Rx	M/Rx
Iowa	Y*	NC	-	NP NP NP NP	-	NP	-	-	-	Rx	-	M/Rx	-
Kansas	Y	NC	-	NP NP P NP	C C C C	-	-	-	-	Rx	-	-	-

Access to Medication-Assisted Treatment in the Medicaid Program by State, 2013–2014

State	Is Managed Care Present? (Y/N)	Opioid Dependence Medications with Placement on Medicaid Preferred Drug Lists (C = Covered/Placement Unknown, P = Preferred, NP = Non-Preferred, NC = Not Covered)						Medical or Pharmacy Benefit (M = Medical, Rx = Pharmacy, M/Rx = Medical and Pharmacy Benefit)					
		Methadone		Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)		Injectable Naltrexone		Methadone		Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)		Injectable Naltrexone	
		FFS	MCO	FFS	MCO	FFS	MCO	FFS	MCO	FFS	MCO	FFS	MCO
Kentucky	Y	NC	-	NP NP NP NP	P P P P	P	C	-	-	Rx	-	Rx	-
Louisiana	Y	NC	-	P NP P NP	-	NP	C	-	-	Rx	-	Rx	-
Maine	N	C	-	P P NP P	-	NP	-	M	-	Rx	-	-	-
Maryland	Y	C	C	C C P C	C C C C	C	C	M	M	Rx	Rx	M/Rx	M
Massachusetts	Y	-	C	P P P P	P P P P	P	P	-	M	Rx	Rx	M/Rx	M/Rx
Michigan	Y	C	C	NP NP P NP	C C C C	NP	C	-	-	Rx	Rx	M/Rx	M/Rx
Minnesota	Y	C	C	C C NP C	C C C C	C	C	-	M	M Rx Rx Rx	-	M	-
Mississippi	Y	NC	NC	P P NP NP	NP P P P	C	P	-	-	-	-	-	-
Missouri	Y	C	-	C C P C	-	C	-	-	-	Rx	-	Rx	-

Access to Medication-Assisted Treatment in the Medicaid Program by State, 2013–2014

State	Is Managed Care Present? (Y/N)	Opioid Dependence Medications with Placement on Medicaid Preferred Drug Lists (C = Covered/Placement Unknown, P = Preferred, NP = Non-Preferred, NC = Not Covered)						Medical or Pharmacy Benefit (M = Medical, Rx = Pharmacy, M/Rx = Medical and Pharmacy Benefit)					
		Methadone		Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)		Injectable Naltrexone		Methadone		Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)		Injectable Naltrexone	
		FFS	MCO	FFS	MCO	FFS	MCO	FFS	MCO	FFS	MCO	FFS	MCO
Montana	N	NC	-	NP NP P NP	-	NP	-	-	-	Rx	-	M	-
Nebraska	Y	NC	-	NP NP P NP	-	NP	C	-	-	Rx	-	M	M
Nevada	Y	C	-	NP NP NP NP	-	NP	-	Rx	-	Rx	-	Rx	-
New Hampshire	Y	C	C	NP NP NP NP	-	NP	-	M	-	Rx	-	M/Rx	-
New Jersey	Y	C	-	C C C C	C C C C	NC	NC	-	-	-	-	-	-
New Mexico	Y	P	P	P P NP P	P P NP P	P	C	M/Rx	M/Rx	M/Rx	M/Rx	M/Rx	M/Rx
New York	Y	NP	P	NP NP P NP	P P P P	NP	P	Rx	Rx	Rx	Rx	M	M
North Carolina	Y	NC	C	P NP NP NP	C C C C	C	C	-	M	Rx	M	M/Rx	M
North Dakota	Y*	C	-	C C - C	-	C	-	M	-	Rx	-	M	-

Access to Medication-Assisted Treatment in the Medicaid Program by State, 2013–2014

State	Is Managed Care Present? (Y/N)	Opioid Dependence Medications with Placement on Medicaid Preferred Drug Lists (C = Covered/Placement Unknown, P = Preferred, NP = Non-Preferred, NC = Not Covered)						Medical or Pharmacy Benefit (M = Medical, Rx = Pharmacy, M/Rx = Medical and Pharmacy Benefit)					
		Methadone		Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)		Injectable Naltrexone		Methadone		Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)		Injectable Naltrexone	
		FFS	MCO	FFS	MCO	FFS	MCO	FFS	MCO	FFS	MCO	FFS	MCO
Ohio	Y	C	C	P NP P NP	C C C C	P	C	-	-	Rx	Rx	M/Rx	-
Oklahoma	N	NC	-	P P NP P	-	P	-	-	-	Rx	-	M/Rx	-
Oregon	Y	P	C	NP NP P NP	C C C C	NP	C	M/Rx	M/Rx	M/Rx	M/Rx	M/Rx	M/Rx
Pennsylvania	Y	NC	C	P P NP P	C C C C	P	C	-	M	Rx	Rx	Rx	Rx
Rhode Island	Y	C	-	NP NP NP NP	-	NP	-	-	-	-	-	-	-
South Carolina	Y	NC	NC	P P P P	P P P P	NP	NP	-	-	Rx	Rx	M	-
South Dakota	N	NC	-	P P NP P	-	NP	-	-	-	Rx	-	M	-
Tennessee	Y	NC	NC	NP NP P NP	C C C C	NP	C	-	-	Rx	-	Rx	Rx
Texas	Y	P	P	NP NP P P	P P P P	NP	NP	M/Rx	M/Rx	M/Rx	M/Rx	M	M

Access to Medication-Assisted Treatment in the Medicaid Program by State, 2013–2014

State	Is Managed Care Present? (Y/N)	Opioid Dependence Medications with Placement on Medicaid Preferred Drug Lists (C = Covered/Placement Unknown, P = Preferred, NP = Non-Preferred, NC = Not Covered)						Medical or Pharmacy Benefit (M = Medical, Rx = Pharmacy, M/Rx = Medical and Pharmacy Benefit)					
		Methadone		Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)		Injectable Naltrexone		Methadone		Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)		Injectable Naltrexone	
		FFS	MCO	FFS	MCO	FFS	MCO	FFS	MCO	FFS	MCO	FFS	MCO
Utah	Y	P	P	P NP NP P	P P P NP	P	P	M	M	Rx	Rx	Rx	Rx
Vermont	N	NP	C	P P P P	-	P	-	M	-	M/Rx Rx Rx M/Rx	-	Rx	-
Virginia	Y	P	P	P NP P P	NP P P P	NP	NP	Rx	Rx	Rx	Rx	M	Rx
Washington	Y	NP	NP	NP NP NP NP	NP NP NP NP	NP	NP	-	-	Rx	Rx	Rx	-
West Virginia	Y	NC	NC	P NP - NP	C C C C	C	NC	-	-	Rx	Rx	Rx	-
Wisconsin	Y	P	P	P NP - NP	C C C C	P	C	Rx	-	Rx	-	Rx	Rx
Wyoming	N	NC	-	P NP P NP	-	NP	-	-	-	Rx	-	Rx	-

Source: American Society of Addiction Medicine. (2013). "Medicaid Coverage of Medications for the Treatment of Opioid Use Disorder: State Fact Sheets."
Note: Information collected by ASAM may predate changes to mental health parity provisions, changes in implementation of Medicaid managed care, and integration of behavioral health services within Medicaid managed care contracts.
FFS = Fee-for-Service
MCO = Managed Care Organization
* = Denotes Medicaid managed care implemented after information collected in 2013.
- = Denotes data was unavailable or information contained within cell was not applicable, depending on the presence of Medicaid managed care.
† = Information was adjusted to match details provided on state fact sheet.

Appendix D. Medication Limitations for Opioid Dependence Medications in the Medicaid Program by State, 2013–2014.

Medication Limitations for Opioid Dependence Medications in the Medicaid Program by State, 2013–2014			
State	Medication Limitations for Opioid Dependence Medications		
	Methadone	Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)	Injectable Naltrexone
Alabama	• Patients must be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in specialty outpatient treatment programs and outpatient narcotic treatment programs.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Requires proof of failed ST. • Requires PA. • Under FFS, covered if provided in specialty outpatient treatment programs and outpatient narcotic treatment programs.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Requires proof of failed ST. • Under FFS, covered if provided in specialty outpatient treatment programs and outpatient narcotic treatment programs.
Alaska	• Patients must be enrolled in or have documented proof of SUD counseling. • Dosage capped at 80 mg/day. • Under FFS, not covered if provided in outpatient treatment.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Must be 16 years or older. • Daily dosage capped 3 doses/day. • Requires PA. • Under FFS, not covered if provided in outpatient narcotic treatment programs or physician's offices.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in physician's offices.
Arizona	• Patients must be enrolled in or have documented proof of SUD counseling.	• Patients must be enrolled in or have documented proof of SUD counseling. • Requires PA. • Under FFS and managed care, covered if provided in physician's offices.	• Patients must be enrolled in or have documented proof of SUD counseling. • Requires PA. • Under FFS and managed care, not covered if provided in outpatient narcotic treatment programs. • Under FFS and managed care, covered if provided in physician's offices.

Medication Limitations for Opioid Dependence Medications in the Medicaid Program by State, 2013–2014			
State	Medication Limitations for Opioid Dependence Medications		
	Methadone	Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)	Injectable Naltrexone
Arkansas		• Patients must be enrolled in or have documented proof of SUD counseling. • Approved for use during pregnancy. • Duration limit of 24 months. • Daily dosage capped at 24 mg/day. • Requires PA. • Under FFS, covered if provided in outpatient narcotic treatment programs and in physician's offices.	• Under FFS, not covered if provided in outpatient narcotic treatment programs. • Under FFS, covered if provided in physician's offices.
California	• Patients must be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in outpatient narcotic treatment programs and in physician's offices.	• Patients must be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in physician's offices.	• Patients must be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in physician's offices.
Colorado	• Patients must be enrolled in or have documented proof of SUD counseling. • Under FFS and managed care, covered if provided in outpatient narcotic treatment programs.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Approved for use during pregnancy. • Dosage capped. • Requires PA. • Under FFS, covered if provided in specialty outpatient treatment programs, outpatient narcotic treatment programs, and in physician's offices.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in specialty outpatient treatment programs, outpatient narcotic treatment programs, and in physician's offices.
Connecticut	• Patients must be enrolled in or have documented proof of SUD counseling.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in physician's offices.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in physician's offices.

Medication Limitations for Opioid Dependence Medications in the Medicaid Program by State, 2013–2014			
State	Medication Limitations for Opioid Dependence Medications		
	Methadone	Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)	Injectable Naltrexone
Delaware	• Patients must be enrolled in or have documented proof of SUD counseling.	• Patients must be enrolled in or have documented proof of SUD counseling. • Lifetime limit of 24 months for buprenorphine tablets. • Daily dosage of buprenorphine tablets capped at 16 mg/day after six months. • Requires PA. • Under FFS, covered if provided in physician's offices.	• Patients must be enrolled in or have documented proof of SUD counseling. • Requires PA. • Under FFS, covered if provided in physician's offices.
District of Columbia	• Patients must be enrolled in or have documented proof of SUD counseling.	• Patients must be enrolled in or have documented proof of SUD counseling. • Requires PA.	
Florida	• Patients must be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in outpatient narcotic treatment programs.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Must be 16 years or older. • Requires coordinated care when used by pregnant women. • Daily dosage of Buprenorphine-Naloxone film and tablets capped at 32 mg/day. • Requires PA. • Buprenorphine tablets available for induction only among non-pregnant women. • Under FFS, covered if provided in specialty outpatient treatment programs, outpatient narcotic treatment programs, and in physician's offices.	• Patients must be enrolled in or have documented proof of SUD counseling. • Must be 16 years or older. • Under FFS, covered if provided in specialty outpatient treatment programs, outpatient narcotic treatment programs, and in physician's offices.
Georgia	• Patients must be enrolled in or have documented proof of SUD counseling.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Daily dosage capped at 16 mg/day after six months of therapy. • Requires PA.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Requires PA.

Medication Limitations for Opioid Dependence Medications in the Medicaid Program by State, 2013–2014			
State	Medication Limitations for Opioid Dependence Medications		
	Methadone	Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)	Injectable Naltrexone
Hawaii	• Patients must be enrolled in or have documented proof of SUD counseling.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in physician's offices.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in physician's offices.
Idaho		• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Must be 18 years or older. • Approved for use during pregnancy. • Daily dosage capped at 24 mg/day. • Under FFS, not covered if provided in specialty outpatient treatment programs, outpatient narcotic treatment programs, or in physician's offices.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Must be 18 years or older. • Approved for use during pregnancy. • Dosage capped at 380 mg/month. • Under FFS, covered if provided in physician's offices.
Illinois	• Medicaid does not cover methadone. It is only covered with state funds from Department of Alcohol and Substance Abuse. • Patients must be enrolled in or have documented proof of SUD counseling.	• Patients must be enrolled in or have documented proof of SUD counseling. • Lifetime limit of 12 months for Buprenorphine-Naloxone film and tablets. • Buprenorphine tablets approved initially for two months. Must be pregnant or allergic to Naloxone. • Daily dosage of buprenorphine tablets capped at 16 mg/day after six months of therapy. • Requires PA. • Under FFS, not covered if provided in specialty outpatient treatment programs, outpatient narcotic treatment programs, or in physician's offices.	• Patients must be enrolled in or have documented proof of SUD counseling. • Requires PA. • Under FFS, covered if provided in physician's offices.

Medication Limitations for Opioid Dependence Medications in the Medicaid Program by State, 2013–2014			
State	Medication Limitations for Opioid Dependence Medications		
	Methadone	Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)	Injectable Naltrexone
Indiana	• Patients must be enrolled in or have documented proof of SUD counseling.	• Patients must be enrolled in or have documented proof of SUD counseling. • Must be 16 years or older. • Approved for use during pregnancy. • Buprenorphine tablets have duration limit of 34 days. • Buprenorphine-Naloxone tablets subject to ST. Must fail film first. • Under FFS and managed care, covered if provided in specialty outpatient treatment programs, outpatient narcotic treatment programs, and in physician's offices.	• Patients must be enrolled in or have documented proof of SUD counseling. • Requires PA. • Under FFS and managed care, covered if provided in specialty outpatient treatment programs, outpatient narcotic treatment programs, and in physician's offices.
Iowa		• Patients must be enrolled in or have documented proof of SUD counseling. • Daily dosage capped at 16 mg/day after three months. • Prescription renewal requires documentation from clinician demonstrating attempts to taper. • Requires PA. • Under FFS, covered if provided in specialty outpatient treatment programs.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Requires PA. • Under FFS, covered if provided in specialty outpatient treatment programs and physician's offices.
Kansas		• Patients must be enrolled in or have documented proof of SUD counseling. • Requires PA.	
Kentucky		• Patients must be enrolled in or have documented proof of SUD counseling. • Daily dose capped at 24 mg/day after six months of treatment. • Patients must be tapered to minimum dose after eight months of initial treatment. • Requires PA. • Under FFS, covered if provided in physician's offices.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in physician's offices.

Medication Limitations for Opioid Dependence Medications in the Medicaid Program by State, 2013–2014			
State	Medication Limitations for Opioid Dependence Medications		
	Methadone	Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)	Injectable Naltrexone
Louisiana		• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Daily dosage capped at 16 mg/day after three-month period. • Requires PA.	• Requires PA.
Maine	• Patients must be enrolled in or have documented proof of SUD counseling. • Approved for use during pregnancy. • Lifetime limit of two years. • Under FFS, covered if provided in outpatient narcotic treatment programs.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Approved for use during pregnancy. • Lifetime limit of two years. • Requires PA. • Under FFS, covered if provided in specialty outpatient treatment programs, outpatient narcotic treatment programs, and in physician's offices.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in physician's offices.
Maryland	• Patients must be enrolled in or have documented proof of SUD counseling. • Approved for use during pregnancy. • Provided by methadone program. • Under FFS and managed care, covered if provided in outpatient narcotic treatment programs.	• If enrolled in managed care, patients must be enrolled in or have documented proof of SUD counseling. • Approved for use during pregnancy. • Under FFS and managed care, covered if provided in specialty outpatient treatment programs, outpatient narcotic treatment programs, and in physician's offices.	• If enrolled in managed care, patients must be enrolled in or have documented proof of SUD counseling. • Requires proof of failed ST. Must fail on Buprenorphine-Naloxone film and tablets. • Under FFS and managed care, covered if provided in specialty outpatient treatment programs, outpatient narcotic treatment programs, and in physician's offices.

Medication Limitations for Opioid Dependence Medications in the Medicaid Program by State, 2013–2014			
State	Medication Limitations for Opioid Dependence Medications		
	Methadone	Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)	Injectable Naltrexone
Massachusetts	• Patients must be enrolled in or have documented proof of SUD counseling. • If enrolled in managed care, covered if provided in outpatient narcotic treatment programs.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Buprenorphine tablets approved for use during pregnancy. PA required for prescribing buprenorphine tablets over buprenorphine-naloxone tablets. • Daily dosage of Buprenorphine-Naloxone film and tablets capped from 16-32 mg/day for 180 days. • Buprenorphine-Naloxone film subject to ST. • Buprenorphine-Naloxone film and tablets require PA after 180 days. • Dosages of buprenorphine-naloxone tablets over 32 mg/day require PA. • Under FFS and managed care, covered if provided in physician's offices.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS and managed care, covered if provided in physician's offices.
Michigan	• Patients must be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in outpatient narcotic treatment programs.	• Patients must be enrolled in or have documented proof of SUD counseling. • Duration limit of 12 months. • Daily dosage capped at 24 mg/day after six months of treatment • Requires PA. • Under FFS, covered if provided in specialty outpatient treatment programs, outpatient narcotic treatment programs, and in physician's offices. • If enrolled in managed care, covered if provided in physician's offices.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in specialty outpatient treatment programs, outpatient narcotic treatment programs, and in physician's offices. • If enrolled in managed care, covered if provided in physician's offices.

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State	Medication Limitations for Opioid Dependence Medications		
	Methadone	Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)	Injectable Naltrexone
Minnesota	• Patients must be enrolled in or have documented proof of SUD counseling. • Under FFS and managed care, covered if provided in outpatient narcotic treatment programs.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Daily dosage capped at 32 mg/day after six months. • Requires PA. • Under FFS, covered if provided in outpatient narcotic treatment programs and in physician's offices. • If enrolled in managed care, covered if provided in outpatient narcotic treatment programs.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in outpatient narcotic treatment programs or in physician's offices. • If enrolled in managed care, covered if provided in outpatient narcotic treatment programs.
Mississippi		• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Duration limit of two years. • Daily dosage capped at 8 mg/day after six months. • Requires PA. • Under FFS, covered if provided in specialty outpatient treatment programs and outpatient narcotic treatment programs	• Patients must be enrolled in or have documented proof of SUD counseling. • Requires PA. • Under FFS, covered if provided in specialty outpatient treatment programs.
Missouri	• Patients must be enrolled in or have documented proof of SUD counseling. • Only available through CSTAR enrollment.	• Patients must be enrolled in or have documented proof of SUD counseling. • Daily dosage capped for buprenorphine-naloxone film and tablets. First 180 days, capped at 8 mg/day. After 180 days, capped at 4 mg/day. • Under FFS, covered if provided in outpatient narcotic treatment programs, specialty outpatient treatment programs, and physician's offices.	• Patients must be enrolled in or have documented proof of SUD counseling. • Requires proof of failed ST. • Does not require PA. • Under FFS, covered if provided in outpatient narcotic treatment programs, specialty outpatient treatment programs, and physician's offices.

Medication Limitations for Opioid Dependence Medications in the Medicaid Program by State, 2013–2014			
State	Medication Limitations for Opioid Dependence Medications		
	Methadone	Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)	Injectable Naltrexone
Montana		• Patients must be enrolled in or have documented proof of SUD counseling. • Duration limit of two years. • Daily dosage of buprenorphine-naloxone film of 17.1 mg/day during first six months. Capped at 11/4 mg/day after six months. • Daily dosage of buprenorphine-naloxone and buprenorphine tablets is 24 mg/day for first six months. Capped at 16 mg/day after six months. • Requires PA. • Under FFS, covered if provided in specialty outpatient treatment programs and physician's offices.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in specialty outpatient treatment programs and physician's offices.
Nebraska		• Patients must be enrolled in or have documented proof of SUD counseling. • Must be 18 years or older. • Approved for use during pregnancy. • Duration limit of six months. • Requires PA.	• Patients must be enrolled in or have documented proof of SUD counseling. • Requires PA.
Nevada	• Patients must be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in outpatient narcotic treatment programs.	• Patients must be enrolled in or have documented proof of SUD counseling. • Daily dosage of buprenorphine capped at 16 mg/day after six months. • Requires PA. • Under FFS, covered if provided in outpatient narcotic treatment programs, specialty outpatient treatment programs, and physician's offices.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in outpatient narcotic treatment programs, specialty outpatient treatment programs, and physician's offices.

Medication Limitations for Opioid Dependence Medications in the Medicaid Program by State, 2013–2014			
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	Methadone	Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)	Injectable Naltrexone
New Hampshire	• Patients must be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in outpatient narcotic treatment programs.	• Patients must be enrolled in or have documented proof of SUD counseling. • Daily dosage is capped at 24 mg/day after six months. • Requires PA. • Under FFS, covered if provided in specialty outpatient treatment programs and physician's offices.	• Patients must be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in specialty outpatient treatment programs and physician's offices.
New Jersey	• Patients must be enrolled in or have documented proof of SUD counseling.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Daily dosage of buprenorphine tablets capped at 32 mg/day after six months.	
New Mexico	• Patients must be enrolled in or have documented proof of SUD counseling. • Under FFS and managed care, covered if provided in outpatient narcotic treatment programs.	• Patients must be enrolled in or have documented proof of SUD counseling. • Daily dosage is capped at 24 mg/day after first six months. • Under FFS and managed care, covered if provided in specialty outpatient treatment programs and physician's offices.	• Patients must be enrolled in or have documented proof of SUD counseling. • Under FFS and managed care, covered if provided in specialty outpatient treatment programs and physician's offices.
New York	• Patients must be enrolled in or have documented proof of SUD counseling. • Daily dose is capped at 12 mg/day. • Under FFS and managed care, covered if provided in outpatient narcotic treatment programs.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Buprenorphine tablets have duration limit of two days, unless pregnant. • Daily dosage capped at 24 mg/day and only three doses/day. • Requires PA. • Under FFS and managed care, covered if provided in outpatient narcotic treatment programs.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS and managed care, covered if provided in outpatient narcotic treatment programs.

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State	Medication Limitations for Opioid Dependence Medications		
	Methadone	Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)	Injectable Naltrexone
North Carolina	• Patients must be enrolled in or have documented proof of SUD counseling. • If enrolled in managed care, covered if provided in outpatient narcotic treatment programs.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Approved for use during pregnancy with PA. • Buprenorphine-Naloxone film duration limit of 12 months. It can be renewed with treatment plan. • Daily dosage capped at 24 mg/day after first six months. • Requires PA. • If enrolled in managed care, covered if provided in outpatient narcotic treatment programs.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in specialty outpatient treatment programs and physician's offices. • If enrolled in managed care, covered if provided in outpatient narcotic treatment programs.
North Dakota	• Patients must be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in outpatient narcotic treatment programs.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Daily dosage capped at 24 mg/day after six months. • Buprenorphine-Naloxone film requires proof of failed ST. • Requires PA.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in physician's offices.
Ohio	• Patients must be enrolled in or have documented proof of SUD counseling. • Under FFS and managed care, covered if provided in outpatient narcotic treatment programs.	• Patients must be enrolled in or have documented proof of SUD counseling. • Duration limit of six months. Can be renewed. • Requires PA. • Under FFS and managed care, covered if provided in outpatient narcotic treatment programs and specialty outpatient treatment programs.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS and managed care, covered if provided in outpatient narcotic treatment programs, specialty outpatient treatment programs, and physician's offices.

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	Methadone	Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)	Injectable Naltrexone
Oklahoma		• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Treatment plans must be reviewed and renewed every 90 days. • Daily dosage of buprenorphine tablets capped at 24 mg/day after six months. • Under FFS, covered if provided in physician's offices.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in physician's offices.
Oregon	• Patients must be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in outpatient narcotic treatment programs.	• Patients must be enrolled in or have documented proof of SUD counseling. • Buprenorphine-Naloxone film duration limit of six months. • Daily dose of buprenorphine tablets capped at 24 mg/day after six months. • Requires PA. • Under FFS, covered if provided in outpatient narcotic treatment programs, specialty outpatient treatment programs, and physician's offices.	• Patients must be enrolled in or have documented proof of SUD counseling. • Requires proof of failed ST. • Requires PA. • Under FFS, covered if provided in specialty outpatient treatment programs and physician's offices.
Pennsylvania	• Patients must be enrolled in or have documented proof of SUD counseling.	• Patients must be enrolled in or have documented proof of SUD counseling. • Buprenorphine tablets approved for use during pregnancy. • Daily dosage capped at 16 mg/day. • Requires PA every three months. • Under FFS and managed care, covered if provided in outpatient narcotic treatment programs, specialty outpatient treatment programs, and physician's offices.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Requires PA. • Under FFS and managed care, covered if provided in outpatient narcotic treatment programs, specialty outpatient treatment programs, and physician's offices.
Rhode Island	• Patients must be enrolled in or have documented proof of SUD counseling.	• If receiving buprenorphine-naloxone film, patients must be enrolled in or have documented proof of SUD counseling. • Daily dosage of buprenorphine tablets capped at 24 mg/day after six months.	

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South Carolina		• Patients must be enrolled in or have documented proof of SUD counseling. • Duration limit of six months. • Daily dosage capped at 16 mg/day. • Requires PA. • Under FFS, covered if provided in specialty outpatient treatment programs and physician's offices. • If enrolled in managed care, covered if provided in physician's offices.	• Patients must be enrolled in or have documented proof of SUD counseling. • Requires PA. • Covered only if prescribed by an alcohol and drug abuse clinician. • Under FFS, covered if provided in specialty outpatient treatment programs. • If enrolled in managed care, covered if provided in physician's offices.
South Dakota		• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Requires PA. • Under FFS, covered if provided in physician's offices.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in physician's offices.
Tennessee		• Patients must be enrolled in or have documented proof of SUD counseling. • Buprenorphine tablets approved for use during pregnancy. • Daily dosage of Buprenorphine-Naloxone film and tablets capped at 16 mg/day for first six months and 8 mg/day after. • Requires PA. • Under FFS, covered if provided in outpatient narcotic treatment programs. • If enrolled in managed care, covered if provided in physician's offices.	• Patients must be enrolled in or have documented proof of SUD counseling. • Requires PA. • Under FFS, covered if provided in specialty outpatient treatment programs. • If enrolled in managed care, covered if provided in physician's offices.

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	Methadone	Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)	Injectable Naltrexone
Texas	• Patients must be enrolled in or have documented proof of SUD counseling. • Approved for use during pregnancy. • Under FFS and managed care, covered if provided in outpatient narcotic treatment programs.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Must be 16 years or older. • Approved for use during pregnancy. • Under FFS and managed care, covered if provided in outpatient narcotic treatment program, specialty outpatient treatment programs, and physician's offices.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS and managed care, covered if provided in physician's offices.
Utah	• Patients must be enrolled in or have documented proof of SUD counseling. • Under FFS and managed care, covered if provided in outpatient narcotic treatment programs.	• Patients must be enrolled in or have documented proof of SUD counseling. • Duration limit of three years. • Daily dosage capped at 24 mg/day after six months. • Requires PA. • Under FFS and managed care, covered if provided in outpatient narcotic treatment programs, specialty outpatient treatment programs, and physician's offices.	• Patients must be enrolled in or have documented proof of SUD counseling. • Requires PA. • Required to provide progress notes for renewal. • Under FFS and managed care, covered if provided in outpatient narcotic treatment programs, specialty outpatient treatment programs, and physician's offices.
Vermont	• Patients must be enrolled in or have documented proof of SUD counseling. • Must be 18 years or older. • Approved for use during pregnancy. • Under FFS, covered if provide in specialty outpatient treatment programs.	• Patients must be enrolled in or have documented proof of SUD counseling. • Must be 18 years or older. • Buprenorphine tablets approved for use during pregnancy. • Supply limited to 14 days, dispensed in physician's offices. • Requires PA for dosages higher than 16 mg. • Under FFS, covered if provided in specialty outpatient treatment programs and physician's offices.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Must be 18 years or older. • Duration limit of six months. • Dosage limited to 380 mg/30 days. • Requires proof of failed ST. Must fail on Buprenorphine-Naloxone film. • Requires PA. • Under FFS, covered if provided in specialty outpatient treatment programs and physician's offices.

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	Methadone	Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)	Injectable Naltrexone
Virginia	• Patients must be enrolled in or have documented proof of SUD counseling. • Approved for use during pregnancy. • Under FFS and managed care, covered if provided in outpatient narcotic treatment programs.	• Patients must be enrolled in or have documented proof of SUD counseling. • Must be 16 years or older. • Approved for use during pregnancy. • Duration limit of 24 months. • Daily dosage capped at 16 mg/day. • Requires PA. • Under FFS, covered if provided in outpatient narcotic treatment programs and physician's offices. • If enrolled in managed care, covered if provided in outpatient narcotic treatment programs.	• Patients must be enrolled in or have documented proof of SUD counseling. • Under FFS and managed care, covered if provided in outpatient narcotic treatment programs and physician's offices.
Washington	• Patients must be enrolled in or have documented proof of SUD counseling. • Under FFS and managed care, covered if provided in outpatient narcotic treatment programs.	• Patients must be enrolled in or have documented proof of SUD counseling. • Buprenorphine tablets approved for use during pregnancy. • Duration limit of six months. Can be renewed for six months. • Daily dosage capped at 24 mg/day after six months. • Requires PA. • Under FFS and managed care, covered if provided in outpatient narcotic treatment programs.	• Patients must be enrolled in or have documented proof of SUD counseling. • Requires PA. • Under FFS and managed care, covered if provided in outpatient narcotic treatment programs.
West Virginia		• Patients must be enrolled in or have documented proof of SUD counseling. • Daily dosage capped 16 mg/day after six months. • Requires PA. • Under FFS, covered if provided in physician's offices.	• Patients must be enrolled in or have documented proof of SUD counseling. • Requires PA. • Under FFS, covered if provided in physician's offices.

Medication Limitations for Opioid Dependence Medications in the Medicaid Program by State, 2013–2014			
State	Medication Limitations for Opioid Dependence Medications		
	Methadone	Buprenorphine-Naloxone (Buprenorphine-Naloxone Film, Generic Buprenorphine-Naloxone Tablets, Brand Buprenorphine-Naloxone Tablets, Buprenorphine Tablets)	Injectable Naltrexone
Wisconsin	• Patients must be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in outpatient narcotic treatment programs.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Duration limit of six months. • Requires PA. • Under FFS, covered if provided in specialty outpatient treatment programs and physician's offices.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in specialty outpatient treatment programs and physician's offices.
Wyoming		• Patients must be enrolled in or have documented proof of SUD counseling. • Buprenorphine tablets approved for use during pregnancy. • Duration limit of two years for Buprenorphine-Naloxone film and tablets. Can restart medications after three-month period. • Daily dosage capped at 24 mg/day. • Requires PA. • Under FFS, covered if provided in specialty outpatient treatment programs and physician's offices.	• Patients are not required to be enrolled in or have documented proof of SUD counseling. • Under FFS, covered if provided in specialty outpatient treatment programs and physician's offices.

Source: American Society of Addiction Medicine. (2013). "Medicaid Coverage of Medications for the Treatment of Opioid Use Disorder: State Fact Sheets."
Note: Information collected by ASAM may predate changes to mental health parity provisions, changes in implementation of Medicaid managed care, and integration of behavioral health services within Medicaid managed care contracts.
FFS = Fee-for-Service
MCO = Managed Care Organization
SUD = Substance Use Disorder
ST = Step Therapy
PA = Prior Authorization

Appendix E. Rates of Past-Year Opioid Users and Opioid Agonist Medication-Assisted Treatment Capacity by State, 2012.

Rates of Past-Year Opioid Users and Opioid Agonist Medication-Assisted Treatment Capacity, by State: United States, 2012					
State	Past-Year Opioid Use, Rate (per 100,000)	Maximum Potential Buprenorphine Treatment Capacity, Rate (per 100,000)	Percentage of DATA-Waived Physicians		Percentage of Opioid Treatment Programs (OTPs) at ≥80% Capacity
			100-Patient Limit for Buprenorphine	Listed on Buprenorphine Treatment Locator	
United States	8.3	4.1	27.5	55.4	82.3
Alabama	6.4	4.0	41.8	72.2	75.0
Alaska	6.5	6.2	18.2	51.1	100
Arizona	12.0	3.4	21.1	48.3	69.2
Arkansas	11.6	1.7	39.4	62.0	100
California	7.6	3.4	19.4	52.9	70.8
Colorado	4.0	3.2	26.4	45.8	78.6
Connecticut	9.5	7.4	29.4	53.4	96.8
Delaware	10.8	5.1	33.3	62.7	100
District of Columbia	6.7	5.8	17.1	61.8	100
Florida	7.7	4.2	28.5	72.0	75.0
Georgia	4.8	3.2	26.2	66.5	81.3
Hawaii	4.1	3.8	21.0	54.0	100
Idaho	10.0	2.0	32.0	58.0	0.0
Illinois	6.0	2.2	24.2	60.1	76.9
Indiana	12.6	2.8	34.3	62.9	83.3
Iowa	3.5	1.0	21.8	47.3	50.0
Kansas	3.4	1.7	18.6	62.9	100
Kentucky	11.7	5.8	42.0	63.8	63.6
Louisiana	9.4	4.1	36.4	65.7	75.0
Maine	10.0	13.3	33.8	32.1	70.0
Maryland	9.9	7.9	27.7	51.7	86.3
Massachusetts	11.7	9.9	31.0	39.7	90.0
Michigan	9.2	5.3	30.3	50.4	73.3
Minnesota	4.1	2.0	22.6	40.0	92.9
Mississippi	8.6	3.8	44.8	71.4	100
Missouri	8.3	2.2	30.6	51.9	80.0
Montana	7.2	2.6	32.6	51.2	100
Nebraska	6.6	1.2	18.2	54.6	100
Nevada	11.1	3.5	28.4	56.2	50.0

Rates of Past-Year Opioid Users and Opioid Agonist Medication-Assisted Treatment Capacity, by State: United States, 2012					
State	Past-Year Opioid Use, Rate (per 100,000)	Maximum Potential Buprenorphine Treatment Capacity, Rate (per 100,000)	Percentage of DATA-Waived Physicians		Percentage of Opioid Treatment Programs (OTPs) at ≥80% Capacity
			100-Patient Limit for Buprenorphine	Listed on Buprenorphine Treatment Locator	
United States	8.3	4.1	27.5	55.4	82.3
New Hampshire	11.2	4.2	34.4	46.7	75.0
New Jersey	10.3	5.8	28.8	62.4	91.4
New Mexico	7.2	7.1	17.9	52.4	77.8
New York	6.9	6.7	22.0	59.7	87.0
North Carolina	10.3	2.9	30.8	60.3	90.2
North Dakota	4.1	2.0	24.0	48.0	No OTPs
Ohio	10.0	4.0	34.7	59.8	100
Oklahoma	11.3	2.2	26.5	59.9	84.6
Oregon	12.8	3.7	19.8	36.8	75.0
Pennsylvania	10.3	6.5	30.6	48.1	87.3
Rhode Island	12.0	10.0	35.3	46.1	83.3
South Carolina	10.2	2.8	29.2	61.6	72.7
South Dakota	4.7	0.7	0.0	37.5	0.0
Tennessee	10.2	5.6	41.0	67.7	83.3
Texas	6.6	2.2	26.8	62.3	87.9
Utah	9.5	6.3	31.0	47.1	45.5
Vermont	9.9	13.8	22.3	19.9	100
Virginia	6.6	2.2	26.8	62.3	87.9
Washington	11.0	4.1	21.3	39.0	84.2
West Virginia	12.9	7.0	41.4	57.1	100
Wisconsin	4.9	3.3	27.6	48.3	100
Wyoming	6.2	3.0	17.6	64.7	No OTPs

Source: Jones, C. M., Campopiano, M., Baldwin, G., & McCance-Katz, E. (2015). National and State Treatment Need and Capacity for Opioid Agonist Medication-Assisted Treatment. *American Journal of Public Health,* 105(8), e55–e63.

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Reviewers

Prior to publication of the final issue brief, the Institute for Medicaid Innovation sought input from independent clinical, scientific, and policy experts as peer reviewers who do not have any financial conflicts of interest.

However, the conclusions and synthesis of information presented in this issue brief do not necessarily represent the views of individual peer reviewers or their organizational affiliation(s).

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