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Addressing the Opioid Epidemic in Medicaid Managed Care for Women and Newborns

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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.

Rates of opioid misuse have increased significantly.[1,2] The Medicaid program is disproportionately impacted by this phenomenon with alarming rates of misuse among pregnant women and infants born with neonatal abstinence syndrome (NAS).[3-5] Given that Medicaid covers roughly half of all births (approximately 48 percent) and that the majority of Medicaid beneficiaries are enrolled in Medicaid managed care organizations (MMCOs), it is important to understand the clinical and policy barriers as well as solutions that have been implemented by these organizations.[6]

Rise in Opioid Misuse[i] Among Pregnant Women and Infants Born with Neonatal Abstinence Syndrome

As opioid misuse has steadily increased since the 1950s, opioid misuse among pregnant women has also become increasingly prevalent. From 2000 to 2009, rates increased from 1.19 to 5.63 for every 1,000 hospital births per year.[7] While illicit drug use may contribute to this phenomenon, use of prescription opioids in the postpartum period may also be a trigger for persistent opioid use. A recent study found that one in 300 women become persistent users of opioids from first use after caesarian sections.[8] In addition to risk of developing opioid use disorder, if these women are not engaging in pregnancy spacing and family planning with their reproductive health clinician, they may become pregnant while misusing opioids.

Maternal use of prescription (e.g., oxycodone) and illicit (e.g., heroin) opioids can result in neonatal abstinence syndrome (NAS), a postnatal withdrawal syndrome in newborns.[7] It is important to note that there are instances in which women are prescribed opioids during pregnancy for medical reasons. Symptoms of NAS include central nervous system excitability (e.g., irritability, tremors, seizures, high-pitched crying) and gastrointestinal dysfunction (e.g., feeding difficulty, vomiting,

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

poor weight gain, temperature instability).[9] Infants born with NAS or presenting with withdrawal symptoms are commonly admitted into the neonatal intensive care unit (NICU). From 2004 to 2013, NICU admissions have nearly tripled and the average length of stay has increased from 13 to 19 days.[10]

Disparities, Trends, and Costs

Disparities Between Men and Women in the Medicaid Population

Demographically, there is a distinct overlap in characteristics between Medicaid enrollees and those who misuse prescription and illicit opioids. An analysis of the National Survey on Drug Use and Health (NSDUH) and the National Vital Statistics System from 2002 to 2013 found that heroin users 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 household income, either uninsured or enrolled in Medicaid, and likely to be misusing prescription opioids.[11] Although men represent the majority of those using illicit opioids, the growth rate of women using heroin outpaces that of men over the same time period.[11] It is important to note that the combination of sex, age, household income, and race/ethnicity demographics are closely aligned with newly eligible Medicaid enrollees who gained coverage through the Affordable Care Act's (ACA) Medicaid expansion.[12,13]

Within the Medicaid population, women aged 15 to 44 years enrolled in Medicaid are more likely to fill a prescription for opioid analgesics compared to those who are privately insured (39 percent vs. 28 percent, respectively).[14] An analysis of the 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:[15]

- 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.

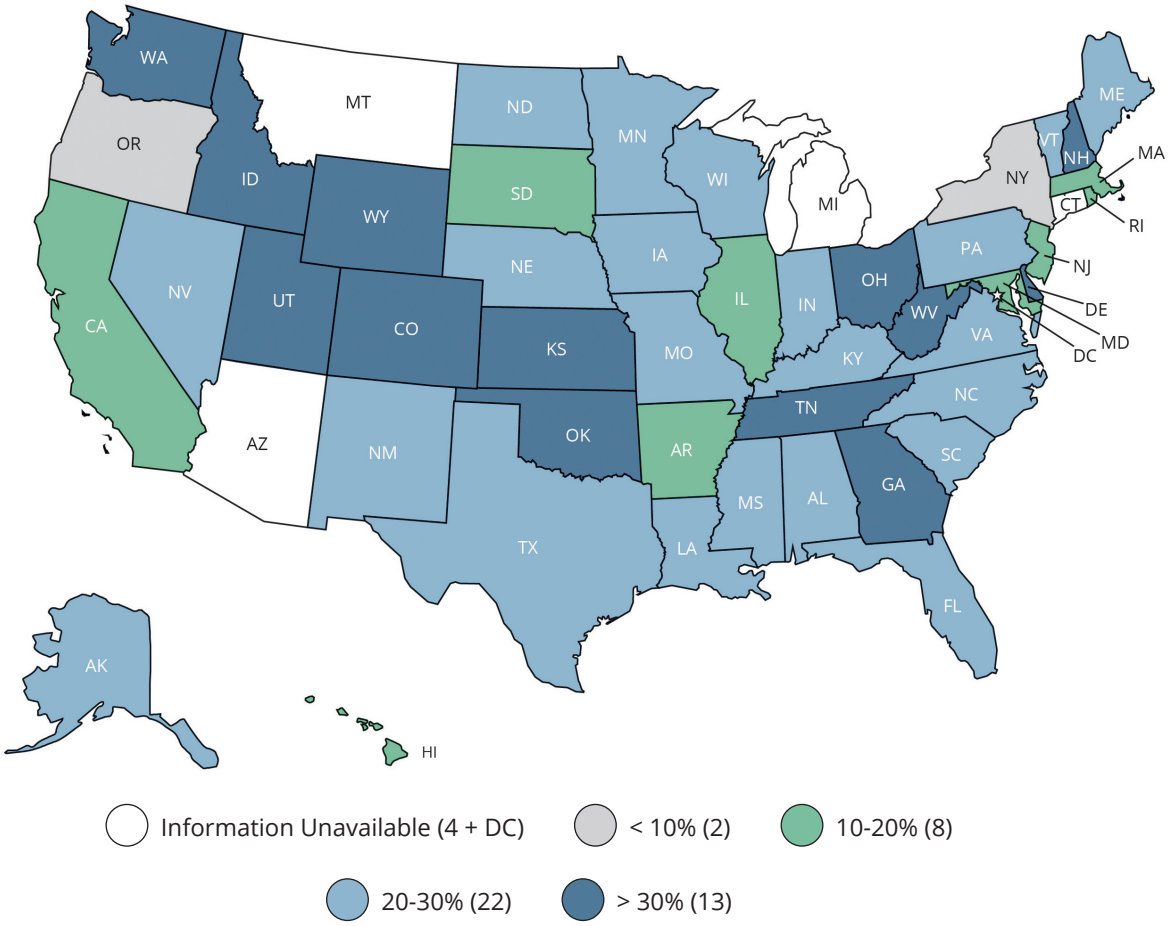
An analysis conducted by Express Scripts, a pharmacy benefit manager, examined utilization patterns among 3.1 million Medicaid managed care enrollees in 14 states in 2014 and found that individuals aged 45–64 years had an average of 5.4 opioid prescriptions per year.[16]

Trends in Opioid Misuse Among Pregnant Women Enrolled in Medicaid

Opioid misuse amongst pregnant Medicaid-eligible women, or those living at or below the federal poverty level (FPL), is increasing.

- According to an analysis of data from the 2000–2007 Medicaid Analytic eXtract, a fifth of pregnant women enrolled in Medicaid in 2007 filled a prescription for an opioid pain reliever.[4] In 2000, 18.5 percent of pregnant women enrolled in Medicaid filled an opioid prescription, with rates ranging from 9.5 to 41.6 percent across states (Figure 1).[4]
- A recent analysis of the 2007–2012 NSDUH data found that opioid misuse is more common among Medicaid-eligible pregnant women than those living above the FPL, 2.5 percent vs 0.7 percent, respectively.[5]
- An analysis of data from the 2000–2009 Kids' Inpatient Database (KID) and the Nationwide Inpatient Sample (NIS) found that infants born with NAS were more likely be covered by Medicaid (78.1 percent) and to reside in communities within the lowest income quartile (36.3 percent).[7] As well, approximately 60 percent of mothers misusing opioids during pregnancy were covered by Medicaid.[7]
- Additionally, Medicaid is more likely to be the primary payer of opioid misuse-related maternal hospital stays (75 percent compared to 13.7 percent in private insurance).[17]
- Not only are Medicaid-enrolled pregnant women more likely to use prescription opioids during pregnancy, they are also more likely to be offered and fill prescription opioid pain relievers to address postpartum pain. More than ten percent of Medicaid-enrolled women who deliver vaginally fill a prescription opioid pain reliever after delivery.[18]

Figure 1. Rates of Prescription Opioid Dispensing During Pregnancy for Women Enrolled in Medicaid by State, 2000–2007

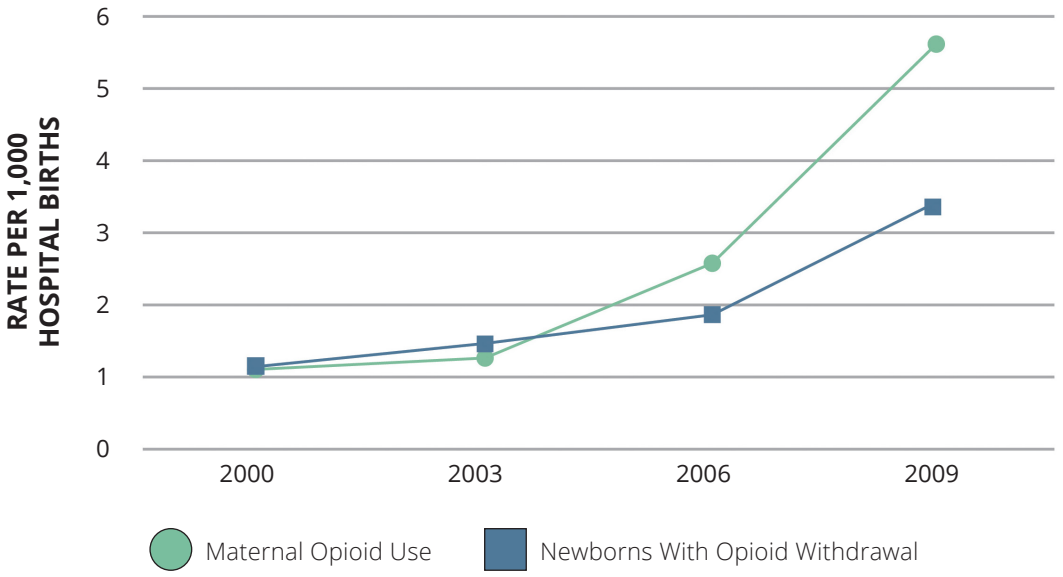


Source: Desai, R. J., Hernandez-Diaz, S., Bateman, B. T., & Huybrechts, K. F. (2014). Increase in prescription opioid use during pregnancy among Medicaid-enrolled women. *Obstetrics and Gynecology*, *123*(5), 997–1002. doi:10.1097/AOG.0000000000000208

Trends in Neonatal Abstinence Syndrome

Coinciding with the rise of opioid misuse, the national incidence of opioid-related NAS among newborns has increased from 1.2 to 3.39 for every 1,000 hospital births between 2000 to 2009 and from 3.4 to 5.8 for every 1,000 hospital births between 2009 to 2012 (Figure 2).[7,19] Rates of newborns born with NAS has increased disproportionately across the U.S. — from 1999 through 2013, the incidence of NAS has tripled in 28 states.[20]

Figure 2. Weighted National Estimates of Rates of NAS and Maternal Opioid Use per 1,000 Hospital Births by Year



Source: Patrick, S. W., Schumacher, R. E., Benneyworth, B. D., Krans, E. E., McAllister, J. M., & Davis, M. M. (2012). Neonatal absinence syndrome and associated health care expenditures: United States, 2000–2009. *Journal of the American Medical Association, 307*(18), 1934–1940.

Costs Associated with Opioid Misuse by Pregnant Women Enrolled in the Medicaid Program

The rise in rates of opioid misuse and overdose deaths have resulted in significant clinical and economic burden for the U.S. health system, especially for public health programs like the Medicaid program. Several studies have examined the nonmedical use of opioids, identifying the positive relationship between opioid misuse amongst pregnant women and increased costs for the Medicaid program to treat infants born with NAS:

- **2000–2009:** An analysis of KID and NIS data during this time period found that the average hospital charges associated with stays for infants with NAS increased from $39,400 to $53,400.[7] Medicaid was identified as the primary payer, covering 68.7 percent in 2000 to 77.6 percent of all discharges with a primary diagnosis of NAS in 2009.[7]
- **2012:** An examination of discharge data from 2009–2012 KID and NIS found that the average length of stay for infants born with NAS in 2012 was 16.9 days, costing approximately $1.5 billion.[19] Approximately 80 percent of these expenditures were paid by Medicaid, compared to 11.8 percent of costs paid by private insurers.[17, 19]

Screening and Diagnosis of Opioid Misuse in Pregnant Women and Neonatal Abstinence Syndrome

It is recommended that pregnant women be screened for substance use disorders using validated tools (e.g., the 4P's and CRAFFT) during routine prenatal care and in partnership with the patient. This is evidence-based practice known as Screening, Brief Intervention, and Referral to Treatment (SBIRT) (Table 3).[21–22] The SBIRT model was developed by the former Institute of Medicine, now known as the National Academies of Sciences, Engineering, and Medicine, to screen individuals for high risk behaviors and substance use, including opioid misuse.[2,3] These quick, simple questions have been tested and validated and are found to be effective in identifying at-risk patients, offering clinicians the opportunity to engage and intervene.

Table 3. Validated Clinical Screening Tools for Prenatal Opioid Misuse

The 4 P's Screening Tool[α]	The CRAFFT Screening Tool[β]
Have you ever used drugs or alcohol during **P**regnancy?	**C**: Have you ever ridden in a CAR driven by someone (including yourself) who was high or had been using alcohol or drugs?
Have you had a problem with drugs or alcohol in the **P**ast?	**R**: Do you ever use alcohol or drugs to RELAX, feel better about yourself, or fit in?
Does your **P**artner have a problem with drugs or alcohol?	**A**: Do you ever use alcohol/drugs while you are by yourself, ALONE?
	F: Do you ever FORGET things you did while using alcohol or drugs?
Do you consider one of your **P**arents to be an addict or alcoholic?	**F**: Do your family or FRIENDS ever tell you that you should cut down on your drinking or drug use?
	T: Have you gotten into TROUBLE while you were using alcohol or drugs?

α Source: Terplan, M., Saia, K., & Krans, E. (2016, September 22). Opioid Use Disorder in Pregnancy: Care and Context of Mother and Newborn. Retrieved from http://www.medicaidconference.com/_images/content/Opioid_Use(resized).pdf
β Source: Medicaid-in-2017-Changes-in-Eligibility-Enrollment-and-the-Uninsured.pdf
Center for Adolescent Substance Abuse Research. (2009). The *CRAFFT* Screening Interview. Children's Hospital Boston. Retrieved from http://www.integration.samhsa.gov/clinical-practice/sbirt/CRAFFT_Screening_interview.pdf

Given concerns for stigma and criminalization of pregnant women misusing opioids, it is recommended that clinicians use a non-judgmental approach that emphasizes patient confidentiality.[22,24] Additionally, it is recommended that clinicians include information collected from a patient's history (e.g., medical and substance use histories) during opioid use screening.[21] It is important to note that for the Medicaid-eligible population, women may not be aware of pregnancy-related eligibility and may only be enrolled in Medicaid after the first trimester. In federal fiscal year 2014, 81 percent of pregnant women had a prenatal care visit in the first trimester or within 42 days of enrolling in Medicaid/CHIP.[25] A prenatal visit within 42 days of enrolling in Medicaid/CHIP could mean that women are receiving their first prenatal care after the first trimester. The delay in receiving initial prenatal treatment may lead to delayed opioid use screening and diagnosis of opioid use disorder until well into their pregnancy, increasing the risk for NAS.

It is recommended that all infants born to mothers with opioid use during pregnancy are screened for NAS with an evidence-based, standard scoring tool such as the Finnegan Neonatal Abstinence Scoring Tool. The screening tool is used to estimate severity, identify need for MAT, and to develop an appropriate care plan for monitoring.[21] Furthermore, it is recommended that infants be evaluated using the scoring system every four hours until control is achieved.[21]

Treatment Options for Pregnant Women and Newborns

Efforts to address opioid misuse amongst pregnant women to reduce rates of NAS include substance use counseling and medication assistance treatment, behavioral health evaluation and treatment, and where appropriate, compassionate tapering of opioid therapy. However, the limited number of treatment facilities with programs specific to pregnant and postpartum women is a common problem faced by women seeking assistance.

- An analysis of the 2012 National Survey of Substance Abuse Treatment Services (N-SSATS) found that only 13 percent of outpatient-only substance use treatment and 13 percent of residential treatment facilities offered programs tailored for pregnant and postpartum women.[5]
    - Furthermore, only seven percent of inpatient treatment facilities offer programs tailored for pregnant and postpartum women.
    - In 2012, only 48.5 percent of women aged 15 to 44 years using heroin and 36.9 percent of women aged 15 to 44 years using non-heroin opioids received MAT.

- As of March 2017, 27 states have created targeted programs that provide drug treatment for pregnant women.[26] In 23 states and the District of Columbia, pregnant women are given priority access to general programs supported by federal funds.[26]

Medication-Assisted Treatment for Opioid Misuse

Medication-assisted treatment (MAT) is defined as "the use of medications, in combination with counseling and behavioral therapies, to provide a "whole-patient" approach to the treatment of substance use disorders."[27] While MAT represents one approach to treating opioid use disorder, a holistic treatment plan may also include the use of non-pharmacological pain relieving treatments (e.g., physical therapy, behavioral therapy, yoga), especially for individuals suffering from chronic non-cancer pain.[28] The standard of care[ii] to treat opioid use disorder in pregnant women is a referral for MAT with methadone, although growing evidence suggests single entity buprenorphine products (e.g., Subutex) may be used as an alternative to methadone treatment under certain circumstances.[7, 21–22, 29–30]

[ii] Since 1998, the National Institute of Health recognized methadone maintenance as the standard of care for pregnant women misusing opioids (Center for Substance Abuse Treatment, 2014).

Although single entity buprenorphine products are considered a Category C drug (i.e., not enough research has been done to determine if these drugs are safe) an increasing number of studies suggest that the use of methadone or single entity buprenorphine product is safe during pregnancy and breastfeeding.[21] While use of either methadone or a single entity buprenorphine product can result in NAS, both treatments are recommended by the American Society of Addiction Medicine (ASAM) and American College of Obstetricians and Gynecologists (ACOG) in treating opioid use disorder.[21–22, 29] It is important that MAT is provided as a component of comprehensive care that includes routine "prenatal care, chemical dependency counseling family therapy, nutritional educations, and other medical and psychosocial services."[22]

Buprenorphine Treatment

In 2016, the U.S. Food and Drug Administration (FDA) announced changes to the labeling of MAT-only methadone and buprenorphine products to acknowledge potential risk of NAS associated with use of these products during pregnancy.[32] Although single entity buprenorphine products are Category C drugs recent studies like the Maternal Opioid Treatment: Human Experimental Research (MOTHER) have found that it is safe for use during pregnancy, though it must be carefully monitored due to its higher potential for abuse compared to methadone.[22,33] Advantages of using a single entity buprenorphine product over methadone include smaller risk of overdose and fewer drug interactions.[34] However, disadvantages include diminished liver function, lessened satisfaction with the effects of the drug leading to adherence issues, and difficulty with induction.[34]

If a pregnant woman has started methadone MAT, it is recommended that she continue with methadone throughout her pregnancy. However, if a pregnant woman has not begun MAT, single entity buprenorphine products may be a viable course of treatment, especially if she does not tolerate methadone.[21–22] Additionally, unlike methadone which requires daily visits to inpatient or outpatient clinics, buprenorphine is also the only product approved for MAT in an office-based setting, and can be prescribed for one week or more at a time. This may make it easier for pregnant women enrolled in Medicaid to access treatment, as they are less likely to be impacted by transportation and childcare barriers.[22]

The use of methadone or a single entity buprenorphine product in MAT during pregnancy introduces risk of NAS in infants, but is considered a more manageable risk than uncontrolled use of opiates in pregnancy. With exposure to methadone, infants are likely to exhibit symptoms of withdrawal during the first 72 hours of life, although symptoms could manifest up to two weeks after birth.[21–22] Exposure to buprenorphine may lead to symptoms of withdrawal within 12 to 48 hours after birth, peaking at 72 to 96 hours, and resolving within seven days.[21,34] Other conditions may similarly present as NAS. In order to rule out those conditions, it is recommended that infants suspected of NAS undergo a "complete blood cell count with differential, electrolyte and calcium levels, comprehensive neurological consultation, and head ultrasound if indicated."[21]

Methadone Treatment

It is recommended that perinatal addiction treatment specialists determine the appropriate methadone dosage and make adjustments based on each individual patient's needs to avoid withdrawal symptoms (e.g. drug cravings, irritability, anxiety).[22]

If a pregnant woman begins methadone treatment during pregnancy, it is recommended that dosing is titrated until the patient is asymptomatic (i.e. induction).[22] It is also recommended that women receive treatment in an outpatient setting or in a hospital inpatient setting for three or more days.[21] During this time, pregnant women should receive prenatal exams and begin collection of behavioral health information for patient history.[21] It is important to note that in outpatient settings, accepted protocol provides for initial dosing of methadone from 10 to 20 mg per day, with patients returning for a follow up evaluation at the end of the day until stabilized.[21] Due to the potential burden of treatment, pregnant women enrolled in Medicaid may face transportation and childcare barriers that may make it difficult to maintain multiple appointments in a single day.[35]

Several products for MAT in infants have been found to be effective, including methadone and morphine. According to a retrospective cohort analysis of 981 infants that received MAT using methadone or morphine from January 2012 to August 2014, the adoption of a standard weaning protocol with explicit weaning guidelines results in a shorter duration of treatment (23 vs. 34 days) and shorter length of stay (23.7 vs. 31.6 days).[36]

Alternative Treatment Methods for Neonatal Abstinence Syndrome

Although commonly treated in the neonatal intensive care unit, infants born with NAS do not need to be treated in this setting for every case.[37–39] In fact, growing evidence suggests that maternal-dyad care[iii] is beneficial for mother and infant. This approach provides an opportunity for mothers to receive education and support for breastfeeding while also improving outcomes and reducing the length of stay for the infant.[30, 38–39] Additionally, it has been found that pharmacologic treatment is not always warranted, especially for those cases with milder withdrawal severity.[37–39] In recent years, emerging evidence supports breastfeeding as an effective treatment method. Several studies have found that infants with NAS who are breastfed require less MAT, have less severe symptoms, and have a shorter length of stay.[38–41]

Criminalization Hinders Access to Treatment for Pregnant and Postpartum Women

Some states have adopted laws that criminalize drug use during pregnancy. These policies disincentivize women from accessing the treatment that they need, places their neonates at increased risk, and further contributes to the stigma surrounding opioid misuse. See Appendix A for an overview of state laws.

[iii] Maternal-dyad care is the practice of keeping newborn and mother together immediately postpartum to promote and encourage early maternal-infant relationship.[43] This practice includes rooming infants with their mothers after birth, allowing opportunities for skin-to-skin contact and breastfeeding.[43] Separation of infant from mother is reserved for instances of complications during delivery, preterm births, or other complications around the health of the infant.[43]

- While only three states consider substance use during pregnancy as a crime, 44 states will prosecute women for prenatal illicit drug use.[42]
- Several states consider prenatal drug use as child abuse or neglect (24 states and DC) and grounds for civil commitment (four states).[26]
- Many states collect federal child abuse prevention funds. A requirement of this funding is for clinicians to report maternal drug use to child protective services.[26] If clinicians suspect a pregnant woman is using drugs, 23 states and the District of Columbia require clinicians to report women and seven states require clinicians to drug test women, which can be used during child-welfare court proceedings.[26] These policies may disincentivize women from accessing much needed treatment to address opioid misuse.

The American Academy of Pediatrics (AAP), American College of Obstetricians and Gynecologists (ACOG), and American Academy of Family Physicians (AAFP), in addition to other clinician organizations, have published statements against the stigmatization and criminalization of pregnant and postpartum women misusing opioids.[44–46]

Programs and Policies to Address Opioid Misuse

Prescription Drug Monitoring Programs

Perscription drug monitoring programs (PDMPs) are state-run electronic databases that catalogue prescriptions for controlled substances, like opioids, to identify individuals who are potentially misusing. As of November 2016, 49 states and DC have created PDMPs.[47] 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.

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] The variations and limitations of state infrastructure and the varying capacity to maintain and upgrade PDMPs limits a state Medicaid program's ability to leverage this robust tool.[1,48]

Medication-Assisted Treatment

In the Medicaid program, substance use disorder benefits (e.g. detox services, psychotherapy, peer support, and drug treatment) vary by state.[15,49] Every state provides coverage through the Medicaid program for the prescription medications used to treat opioid use disorder, including single entity buprenorphine product. Although methadone is a prescription medication used to treat opioid use disorder, not every state Medicaid program provides coverage. However, federal and state funding is available to each state to provide the medication.

To prescribe and/or dispense single entity buprenorphine products, physicians must complete a waiver application and training in order to become Drug Addiction Treatment Act (DATA)-waived physicians. 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 MAT from a single, DATA-waived clinician and by expanding the types of clinicians, nurse practitioners and physician assistants, who could prescribe buprenorphine. Despite these efforts, there remain significant gaps in the number of clinicians available to meet the needs of individuals across the U.S., making it difficult for pregnant women to access the care they need.[5]

Furthermore, the clinician gap is exacerbated as more newly eligible Medicaid enrollees are referred for MAT treatment. As states began to implement Medicaid expansion under the Affordable Care Act in 2014, low-income childless adults who were previously ineligible for Medicaid gained coverage. An analysis of the 2012 N-SSATS found that 13 percent of outpatient-only substance use treatment facilities and 13 percent of residential treatment facilities offered programs tailored for pregnant and postpartum women.[5] The analysis also found that seven percent of hospital inpatient treatment facilities offer programs tailored for pregnant and postpartum women.[5] In 2012, 48.5 percent of women aged 15 to 44 years using heroin and 36.9 percent of women aged 15 to 44 years using non-heroin opioids received MAT.[5]

The Role of Medicaid Managed Care

As Medicaid managed care provides coverage for most of the Medicaid population, both traditional (e.g. pregnant women, children, aged, blind, and disabled) and newly eligible (e.g. childless adults under 138 percent FPL), it is likely that pregnant women who misuse illicit and prescription opioids will increasingly be enrolled in Medicaid managed care organizations (MMCOs). In response to existing barriers and limitations within the Medicaid program, MMCOs may design and implement programs that best meet their member's needs.

Case Studies in Addressing Opioid Misuse in Pregnant Women and Newborns in Medicaid Managed Care

The following snapshots represent programs developed by MMCOs to identify, target, and treat members misusing opioids. While some of these programs may not directly target pregnant women or infants born with NAS, lessons learned from their programs could be adapted and tailored to meet the needs of these two groups.

Neonatal Abstinence Syndrome (NAS) Program

Aetna Better Health of West Virginia

In 2014, Aetna Better Health of West Virginia implemented a pilot neonatal abstinence syndrome (NAS) program. This program engaged pregnant women who were identified as having significant opioid use or opioid use disorder while participating in Aetna Medicaid's prenatal care management or after delivery in the hospital. Through this program, Aetna Better Health case managers established and maintained a consistent relationship with the mother, including face-to-face meetings during her pregnancy along with continued care management for the mother and baby during the first year of life. With the mother's permission, case managers worked to provide rapid access to substance abuse treatment. They also facilitated access to prenatal care with providers who understood the special care needed for women with substance use disorders during pregnancy and delivery. Since 2014, program enrollment has grown, although quarterly enrollment varies. Additionally, the overall trend of the number of NICU admissions per delivery of mothers enrolled in the NAS program has decreased over time. This pilot program demonstrated that identifying at-risk mothers early in their pregnancy allowed for optimal care management. As a result of the success, the program has been expanded to other states.

Community Support

BlueCare Tennessee

BlueCross BlueShield of Tennessee Health Foundation, in partnership with the University of Tennessee's Law Enforcement Innovation Center (LEIC), funded a $250,000 grant to provide the overdose antidote drug, Naloxone, to law enforcement agencies. The grant also supported training for officers on how to administer Naloxone to individuals suspected of overdose. The Naloxone training and supply program is part of a larger effort by BlueCross to combat the widespread problem of opioid misuse in Tennessee. That effort includes a $1.3 million grant to expand the Coffee County Anti-Drug Coalition's Count It! Lock It! Drop It!™ program in counties with high rates of opioid deaths. The program includes education and outreach on safely storing or disposing of unused or expired prescription pain medication as well as a public awareness campaign. Currently, there are drop boxes in 95 counties for safe disposal of medication. Drug take-back and community training events are also part of this outreach.

Pain Management Interventions

BlueCare Tennessee

BlueCare partnered with a local analytics company for the identification of potential high-risk prescribing patterns by network clinician. Aberrant Prescribing Patterns (APP Scores) are determined based on an analysis of the BlueCare Tennessee medical and carve-out pharmacy prescription claims. The APP Score translates, on a scale of 0–100, into the percentage of patients receiving opioids prescribed by a clinician, thus capturing potential risk to patients due to higher than normal rates of opioid prescriptions. The review of the highest risk APP Scores occurs quarterly with a comprehensive review team that results in remediation or potential termination of clinicians. In addition, BlueCare deployed a comprehensive member transition process to support members whose clinicians were terminated. Concurrently, on a monthly basis, practitioner-level reporting is generated for reports of opioid prescribing and practice patterns as benchmarked against 15 evidence-based quality standards and an in-network peer group. These reports educate clinicians on their practice patterns, opportunities for improvement and standards of care.

Pregnancy Recovery Center

Gateway Health Plan

In collaboration with the Department of Human Services, Gateway Health Plan established a medical home model, the Pregnancy Recovery Center, to provide medication-assisted treatment (MAT) as a part of prenatal treatment program for women in Southwestern Pennsylvania. This medical home model was created in 2014 and is the result of a partnership with regional MMCOs, including behavioral health plans, addiction treatment professionals, and the Magee Women's Hospital. This model provides pregnant women enrolled in the health plan an opportunity to receive routine obstetrical care, opioid use disorder counseling, and targeted pregnancy MAT in one location. The facility also provides social services. The Pregnancy Recovery Center has reduced the overall cost of care for this population and resulted in fewer infants requiring treatment for NAS. Based on the success of the program, similar centers have been developed across the state.

Neonatal Abstinence Syndrome Clinical Management Resources

Gateway Health Plan

Beginning in 2004, Gateway Health Plan partnered with a group of clinicians and key stakeholders to optimize the care of women misusing alcohol and other drugs during pregnancy. The group consisted of the State of Pennsylvania, Thomas Jefferson Medical College, the Allegheny Health Network, Magee Women's Hospital and Children's Hospital of UPMC, Lancaster General Women and Babies Hospital, St. Christopher's Hospital for Children, and the Pittsburg Mercy Health System. Led by Gateway Health Plan, the group developed and implemented evidence-based clinical practices targeted at treating women misusing opioids during pregnancy and infants born with NAS. Over the course of this collaboration, several resources have been developed to assist clinicians in improving treatment, including: an instructional DVD that guides assessment of infants with a validated scoring tool to identify NAS, as well as a NAS clinical management document that guides clinicians in the treatment of infants born with NAS and provides for consistency in the implementation of best practices to optimize outcomes for infants. The Client Management Resources were disseminated in several regional conferences.

Partnering with Federally Qualified Health Centers

Health Plan of San Joaquin

Health Plan of San Joaquin (HPSJ) is a non-profit MMCO that serves more than 345,000 Medicaid members in San Joaquin and Stanislaus counties in California. In 2015, HPSJ and two large Federally Qualified Health Centers (FQHC), Community Medical Centers (CMC) and San Joaquin General Hospital (SJGH) received a planning grant from California Health Care Foundation (CHCF) to design opioid policies and care management models for patients who are frequent Emergency Department (ED) utilizers and receive chronic high-dose opioids and/or are on concomitant benzodiazepines. Through these pain clinics, integrated care teams provide case management, social services, behavioral health services, complementary services (e.g., chiropractic care, acupuncture), and medication-assisted treatment. The goal of this joint effort is to reduce ED utilization related to chronic pain issues, promote appropriate use of opioids, and improve the overall patient care experience. HPSJ and its FQHC partners received a stage-two implementation grant for the period of October 2016 through April 2018 to continue efforts to pilot and improve their opioid policies, chronic pain care clinics, and other opioid-related efforts.

Healthy Mom and Baby Report

Home State Health Plan (Centene)

Before 2013, notification of pregnancy and clinician referrals was the only method of identifying pregnant members. These methods do not account for alternative means of identification for expectant women with unmet health care needs. In order to decrease health risks, unnecessary trips to the emergency department, and the use of the NICU, Home State Health created an automated and systematic method of using all available data to identify and track members through their pregnancy called the Healthy Mom and Baby Report. Using this report, Home State Health performs data mining to identify women who may have high-risk health issues, such as opioid misuse, which is not otherwise identified. It uses claims data to sort members into queues based on their diagnosis. Armed with critical data, case managers can create a customized care plan for each member and recommend that a member enter into case management, with interventions such as regular phone calls, targeted education, and referrals to services like opioid use disorder treatment.

Opportunities for Medicaid Managed Care Organizations to Address Opioid Misuse

Through funding from the California Health Care Foundation (CHCF), Health Management Associates (HMA) examined the role of California health plans in curbing opioid misuse. Utilizing data gathered from interviews with health plan clinical leaders, case studies, and a survey of over 30 California-based health plans, CHCF identified four key components that are needed to support health plan efforts to address opioid misuse and overprescribing:[50]

1. Supporting judicious prescribing practices
2. Focusing on improved member outcomes
3. Identifying overuse, misuse, and fraud
4. Supporting safe communities

Building off of these four core components and integrating knowledge gained from the case studies, a checklist was developed that identifies policies, programs, and approaches to manage clinician networks, medical benefits, pharmacy benefits, and member services that may assist health plans in addressing opioid misuse.[50] The following figure provides an abbreviated version of the checklist that may be considered by MMCOs for adoption (Figure 3). The complete checklist can be found in Appendix B.

Figure 3: Selected Elements from the Checklist for Medicaid Managed Care Organizations (MMCOs) to Address Opioid Misuse

Provider Network
Offer or support provider education on pain management based on prescribing guidelines.
Offer or support provider education on buprenorphine prescribing.
Offer financial incentives or alternative payment models to encourage primary care providers to treat addiction with buprenorphine.
Evaluate network adequacy for opioid use disorder treatment with buprenorphine or methadone and develop action plan to meet demand.
Medical Benefit
Add non-opioid pain treatment services to available benefits for members.
Add health education and wellness programs as benefits to encourage long-term lifestyle changes.
Train case managers on common issues in chronic pain.
Increase access to behavioral health services for patients with chronic pain.
Pharmacy Benefit
Implement quantity limits for first time opioid using members.
Remove authorization requirements from addiction treatment providers who have demonstrated compliance with standards.
Work with pharmacy network to support stocking and furnishing of naloxone.
Member Services
Provide member education on opioid risks.
Provide member education on naloxone.
Members at high risk of addiction or opiooid misuse receive outreach from peer, recovery support, or case manager

Source: Laverdiere, D., Silva, J., & Tatar, M. (2016). Changing Course: *The Role of Health Plans in Curbing the Opioid Epidemic.* California Health Care Foundation. Retrieved from http://www.chcf.org/~/media/MEDIA%20LIBRARY%20Files/PDF/PDF%20C/PDF%20ChangingHealthPlansOpioid.pdf
Note: This figure represents an abbreviated version of the full checklist.

Looking Ahead: Implications for the Future

While current policymaking efforts are focused on addressing the opioid epidemic in the U.S. through prevention and treatment, additional efforts are needed to slow the rate of opioid misuse and overdose deaths in pregnant and postpartum women enrolled in the Medicaid program. Additionally, issues regarding churn in this population need to be addressed. Churn is defined as fluctuations in sources of eligibility (between Medicaid and private insurance) as individuals experience income-related changes. Churn leads to disruptions in care, making it difficult for Medicaid managed care plans to provide care coordination and case management when they are unable to retain Medicaid enrollees for extended periods of time.[51] This problem is especially true for Medicaid-eligible pregnant women misusing opioids who become eligible as a result of two different eligibility pathways: pregnancy (i.e., single episode of care) and income.

Commonly, pregnant women are enrolled in Medicaid well into their pregnancy and without prior obstetric care which may result in untreated opioid misuse and lack of prenatal care.[52] Furthermore, after their episode of care ends (shortly after delivery), women find themselves without coverage and treatment. As key stakeholders and policymakers work to develop and implement evidence-based programs, as well as identify other policy solutions for pregnant women and infants born with NAS in the Medicaid program, it is important that efforts are made to evaluate the efficacy of these solutions and that the findings from evaluation are disseminated. Furthermore, several clinical, research, and policy priorities should be considered to encourage the treatment of opioid use disorder as a chronic condition that requires holistic, evidence-based treatment targeted to pregnant and postpartum women.

Clinical Priorities

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

Historically, substance use disorders have been viewed negatively, stemming largely from 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, 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. The reduction of stigma will likely result in better care from clinicians and increased engagement from patients.

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

The adoption and implementation of clinical guidelines for pain management (including non-pharmacological treatments) tailored for pregnant and postpartum women and the appropriate prescribing of opioid drugs is critical to addressing the opioid epidemic in the Medicaid program. Clinician education, in medical and nursing school as well as in continuing education, is needed to ensure that all clinicians—not just behavioral health clinicians and those clinicians engaged in pain management—receive training in and understand evidence-based approaches. 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 opioid treatment, including MAT.

Development of standardized national clinical guidelines.

Considering the limited number of opioid treatment programs targeted to pregnant and postpartum women and variation in hospital treatment protocols for infants born with neonatal abstinence syndrome (NAS), it is important for standardized national clinical guidelines and protocols be developed. Widespread adoption of these guidelines will likely lead to more effective treatment in opioid treatment programs, especially for pregnant and postpartum women enrolled in Medicaid. Additionally, the development of written hospital weaning protocols and scoring tools to assess NAS is critical to improving the care provided to infants with NAS and ensuring diagnosis of their condition is made before discharge.

Research Priorities

Medical research to evaluate causes for opioid misuse targeted to pregnant and postpartum women.

In order to diminish the stigma harbored by society and clinicians, further research is needed to understand the causes of opioid misuse. Expanding research efforts to include an understanding of causes from the perspective of clinicians, individuals, and families will enhance overall efforts to address this epidemic. Furthermore, targeted treatments and standardize protocol are necessary to effectively treat pregnant and postpartum women and infants born with NAS.

Evidence-based interventions designed to address opioid misuse among pregnant and postpartum women.

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 treatment and improving quality of treatment, among 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.

Expansion of evidence base for non-opioid pain treatment services.

State Medicaid agencies face constrained budgets and a growing number of responsibilities for the individuals enrolled in their program. As such, they are less likely to invest financial resources into benefits that do not have enough evidence to demonstrate efficacy and cost-effectiveness. Research is needed to expand the knowledge base in prevention and treatment while also exploring the effectiveness of alternative pain treatments that are non-pharmacological. These treatments could be particularly helpful for pregnant and postpartum women.

Policy and Advocacy Priorities

Opioid treatment programs should be considered as replacements for criminal penalties, prosecution, and incarceration of pregnant and postpartum women.

Current criminal penalties and state laws can pose a barrier for pregnant and postpartum women misusing opioids to receive the care and treatment needed. Viewing substance use disorders as chronic medical conditions enables 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 and reduce societal and healthcare costs associated with opioid misuse.

Streamlined and efficient enrollment processes for pregnant women.

Ideally, eligible pregnant women should be enrolled in Medicaid and a Medicaid managed care organization (MMCO) 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.

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

It is important that efforts to address the opioid epidemic include key stakeholders including clinicians, criminal justice advocates, state and federal policymakers, and, most importantly, women and families who have personal experience with opioid misuse. The development of evidence-based guidelines and treatment protocols for pregnant and postpartum women need 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 pregnant and postpartum women at a high risk for opioid misuse by tracking prescribing patterns of clinicians and pharmacies, thus providing clinical decision support tools. The utilization of PDMPs may lead to 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. Additionally, opioid treatment programs (OTPs) do not report to PDMPs, limiting the accuracy of the information about prescription histories for individuals utilizing prescription opioids. By creating a national PDMP, such variation could be avoided. 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.

Expansion of workforce development to increase the number of clinicians trained to prescribe and/or provide MAT. Currently, the demand for opioid treatment vastly outweighs the number of available clinicians, even with the 2016 efforts to expand access by revising limits on the number of patients who can be seen by Drug Addiction Treatment Act (DATA)-waived clinicians and expanding the types of clinicians who can prescribe and/or provide MAT. The gap of available clinicians makes it difficult for priority groups, like pregnant and postpartum women, to receive the treatment they need to stop misusing opioids. 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. State Policies on Substance Use During Pregnancy

State	Legal Consequences for Substance Use During Pregnancy[α]		Substance Use During Pregnancy Considered:[β]		When Drug Use Suspected, State Requires:[β]		Drug Treatment for Pregnant Women[β]		
	Substance Use During Pregnancy is a Crime	Substance Use During Pregnancy Results in Prosecution	Child Abuse	Grounds for Civil Commitment	Reporting	Testing	Targeted Program Created	Pregnant Women Given Priority Access in General Programs	Pregnant Women Protected from Discrimination in Publicly Funded Programs
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		✓	✓	✓	✓	✓	✓		

State	Legal Consequences for Substance Use During Pregnancy[α]		Substance Use During Pregnancy Considered:[β]		When Drug Use Suspected, State Requires:[β]		Drug Treatment for Pregnant Women[β]		
	Substance Use During Pregnancy is a Crime	Substance Use During Pregnancy Results in Prosecution	Child Abuse	Grounds for Civil Commitment	Reporting	Testing	Targeted Program Created	Pregnant Women Given Priority Access in General Programs	Pregnant Women Protected from Discrimination in Publicly Funded Programs
Mississippi		✓					✓[†]	✓[†]	
Missouri		✓	✓				✓	✓	✓
Montana		✓			✓				
Nebraska		✓					✓[†]	✓[†]	
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		✓	✓[a]	✓[a]				✓[†]	

State	Legal Consequences for Substance Use During Pregnancy[α]		Substance Use During Pregnancy Considered:[β]		When Drug Use Suspected, State Requires:[β]		Drug Treatment for Pregnant Women[β]		
	Substance Use During Pregnancy is a Crime	Substance Use During Pregnancy Results in Prosecution	Child Abuse	Grounds for Civil Commitment	Reporting	Testing	Targeted Program Created	Pregnant Women Given Priority Access in General Programs	Pregnant Women Protected from Discrimination in Publicly Funded Programs
Wyoming		✓	✓	✓	✓		✓	✓	
Total	3 states	44 states	24 states + DC	4 states	23 states + DC	7 states	27 states	23 states + DC	9 states

α: Source: Miranda, L., Dixon, V., & Reyes, C. (2015, September 30). "How States Handle Drug Use During Pregnancy." ProPublica. Retrieved from https://projects.propublica.org/graphics/maternity-drug-policies-by-state.
β: Source: Guttmacher Institute. (2017, March 1). "Substance Use During Pregnancy." Retrieved from https://www.guttmacher.org/print/state-policy/explore/substance-abuse-during-pregnancy.
†: Information collected from state Medicaid agency and state department of health or public health websites.
Note: One exception to sourcing information exists for the state of Wisconsin. As noted, information for "Substance Misuse During Pregnancy Considered:" was taken from α.

Appendix B. Curbing the Opioid Epidemic: Checklist for Health Plans and Purchasers

Provider Network	In Place	In Planning	Not A Priority
Offer or support provider education on pain management based on prescribing guidelines (CDC or Medical Board of CA).			
Offer or support provider education on buprenorphine prescribing (e.g., waiver training).			
Offer or support provider education on co-prescribing naloxone for patients on daily opioids.			
Offer or support specific programs that help providers develop taper plans for patients on high opioid doses or combinations (opioids and benzos).			
Offer financial incentives or alternative payment models to encourage primary care providers to treat addiction with buprenorphine.			
Analyze data to identify outlier prescribers for education, coaching, and/or fraud investigation.			
Evaluate network adequacy for opioid addiction treatment with buprenorphine and develop action plan to meet demand.			
Evaluate network adequacy for opioid addiction treatment with methadone and develop action plan to meet demand.			
Identify members losing prescribers (e.g., due to retirement or loss of license) and coordinate referrals to pain management or addiction treatment where needed.			
Ensure access to in-network pain specialists aligned with CDC guidelines for peer consultation or secondary case review.			
Participate in local opioid safety coalitions.			
Medical Benefit	**In Place**	**In Planning**	**Not A Priority**
Notify outpatient prescriber(s) about hospital admission for near-fatal overdose events.			
Remove prior authorization requirement for first course of physical therapy for back pain.			
Add chiropractic services as a benefit.			
Add acupuncture services as a benefit.			
Add as benefits health education and wellness programs, including those to reduce stress and make long-lasting lifestyle and behavior changes.			
Train case managers on addiction treatment and referral options.			

Train case managers on common issues in chronic pain.			
Increase access to behavioral health services for patients with chronic pain.			
Pharmacy Benefit (all interventions should have an exception for palliative care)	**In Place**	**In Planning**	**Not A Priority**
Implement formulary dose limits (total morphine milligram equivalents (MME), with prompt authorization review to manage exceptions).			
Implement formulary controls to limit new starts (e.g., authorization requirements for ongoing treatment after first fill).			
Implement quantity limits for new starts.			
Remove high-dose formulations from formulary (e.g., 80 mg OxyContin, 100 mcg fentanyl).			
Remove methadone from formulary for pain treatment.			
Remove Soma (carisoprodol) from formulary.			
Limit concurrent prescriptions for opioids and benzodiazepines.			
Implement pharmacy lock program for patients using multiple prescribers.			
Implement prescriber lock program for patients using multiple prescribers.			
Ensure co-prescribing of naloxone for members at risk of opioid overdose (e.g., daily opioid use).			
Remove prior authorization requirements for common nonopioid pain medications (e.g., antidepressants, neuroleptics with indications for pain).			
Remove authorization requirements and lower copays for initiation and maintenance of buprenorphine for addiction (including eliminating requirements for detox in lieu of maintenance).			
Remove authorization requirements for initiating and maintaining buprenorphine for pain.			
Remove authorization requirements from addiction treatment providers who have demonstrated compliance with standards.			
Remove authorization requirements and lower copays for naloxone.			
Work with pharmacy network to support stocking and furnishing naloxone.			

Member Services	In Place	In Planning	Not A Priority
Provide member education on opioid risks.			
Provide member education on naloxone.			
Members at high risk of addiction or opioid overuse receive outreach from peer, recovery support, or case manager.			

Source: Smart Care California. (February 2017). "Curbing the Opioid Epidemic: Checklist for Health Plans and Purchasers." Retrieved from http://www.chcf.org/~/media/MEDIA%20LIBRARY%20Files/PDF/PDF%20H/PDF%20HealthPlansOpioidChecklist.pdf
Note: This checklist was created from the findings identified in "Changing Course: The Role of Health Plans in Curbing the Opioid Epidemic," a project funded by the California Health Care Foundation (CHCF) and completed by Health Management Associates (HMA).

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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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