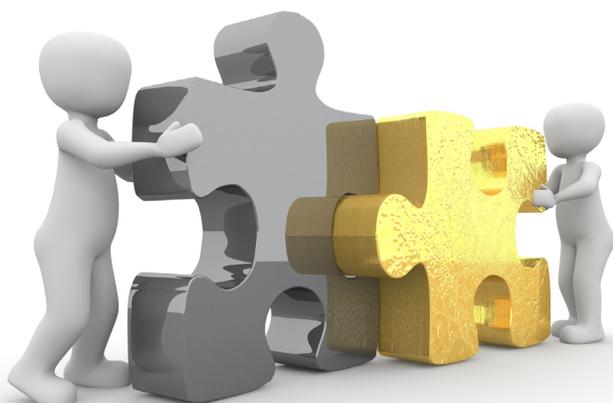




Integrating Substance Use Disorder Treatment and Primary Care

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Introduction

Even before accounting for their share of Medicaid expenditures, states are the largest payer of substance use disorder treatment services in the United States.¹ As such, state policymakers have a significant incentive to ensure their residents have access to a health care system that efficiently and effectively identifies and addresses individuals' substance use treatment needs. This brief explores how states can—and have—strengthened their primary care systems to better care for individuals with alcohol and opioid use disorders and discusses key policy considerations for implementation.

Research indicates that substance use treatment services are cost-effective. For example, a 2005 study found that medical costs for individuals receiving outpatient treatment services fell by an average of 30 percent for Medicaid managed care and commercial cohorts after three years.² When accounting for both medical and societal benefits (e.g., reduced costs associated with incarcerations), the total return on investment for substance use disorder treatment may exceed 12:1.³

Building on the core tenets of the medical home (e.g., patient-centered, comprehensive care),⁴ the primary care system is an important partner in ensuring that individuals' substance use treatment needs are met. A complementary set of principles published in 2014 specifically call for greater integration of behavioral health in medical homes; these principles have been endorsed by the American Academy of Family Physicians, the American Board of Family Medicine, the American Academy of Pediatrics, and the American Psychological Association, among other provider organizations.⁵ Evidence supports implementation of coordinated and integrated care models that support the role of primary care in substance use treatment services, but best practices can vary based on the substance involved.

Primary Care's Role in Identifying, Managing, and Treating Substance Use Disorders

National survey data show that most individuals with an alcohol or opioid use disorder are not receiving treatment. Fewer than 10 percent of individuals with an alcohol use disorder and only about 20 percent of individuals with an opioid use disorder receive specialty treatment.^{6, 7} In part, this is likely due to the fact that most individuals with a substance use disorder do not perceive a need for treatment.⁸ As the health care system's front line, primary care providers are well positioned to identify and engage individuals who require—or are at risk of requiring—treatment.

It is worth noting that many states already look to primary care providers to ensure that individuals with complex behavioral health needs appropriately utilize services across the healthcare continuum. Forty-six Medicaid programs operate Patient Review and Restriction (PRR) programs that are designed to prevent high-risk individuals from obtaining inappropriate amounts of prescription drugs, including opioids.⁹ PRR programs are also known as “lock-in” programs, because individuals in these programs are only allowed to receive services from specific providers and/or pharmacies.¹⁰ While there is variation among specific program requirements, many PRR programs, including those in Kentucky, Missouri, and Rhode Island, rely on an individuals' primary care provider to refer restricted individuals for any medically-necessary services.^{11, 12, 13} These programs illustrate the importance of ensuring that primary care providers are adequately equipped to identify and meet individuals' substance use disorder treatment needs.

Screening, Brief Intervention, and Referral to Treatment (SBIRT)

The United States Preventive Services Task Force (USPSTF) recommends that primary care clinicians routinely screen adults aged 18 and older for alcohol misuse and provide brief behavioral counseling to individuals engaged in risky or hazardous drinking.¹⁴ Evidence has not been strong enough for the USPSTF to recommend universal alcohol screening for adolescents or illicit drug use screening for adults or adolescents.^{15, 16} The USPSTF is currently re-examining evidence on screening for drug use.¹⁷

For individuals who screen positive for risky or problematic substance use, primary care providers can provide brief interventions, which may range from 5-30 minutes. These interventions are not meant to fully treat individuals with a substance use disorder, but rather encourage them to seek specialty treatment, as well as prevent an individual's progression from a mild or moderate use disorder to that of severe use disorder. Brief interventions commonly leverage cognitive behavioral therapy or motivational interviewing techniques.¹⁸

Based on the USPSTF's recommendation, the Centers for Medicare & Medicaid Services (CMS) covers annual alcohol screening and up to four brief, face-to-face behavioral counseling interventions per year for Medicare beneficiaries.¹⁹ State Medicaid agencies are not required to cover Screening, Brief Intervention, and Referral to Treatment (SBIRT) services for adults,²⁰ but CMS has released guidance supporting SBIRT in both primary care and specialty settings as a part of evidence-based benefit design.²¹ A review conducted by the Missouri Institute of Mental Health (MIMH) in late 2012 found that a total of 34 states and the District of Columbia reimbursed for at least one of the applicable SBIRT or Health Behavior Assessment and Intervention (HBAI) codes.²² (See **Table 1** for common billing codes.)

Table 1 – Codes Commonly Used By Medicaid Agencies to Reimburse For SBIRT Services

Code Set	SBIRT Codes and Description	HBAI Codes and Descriptions
Common Procedure and Terminology (CPT)	<p>99408 - Alcohol and/or substance abuse structured screening and brief intervention services (15-30 minutes)</p> <p>99409 - Alcohol and/or substance abuse structured screening and brief intervention services (30+ minutes)</p>	<p>96150 – Initial Health and Behavior Assessment (per 15 minutes, face-to-face)</p> <p>96151 – Health and Behavior Reassessment (per 15 minutes, face-to-face)</p> <p>96152 – Individual Health and Behavior Intervention (per 15 minutes, face-to-face)</p> <p>96153 – Group Health and Behavior Intervention (per 15 minutes, face-to-face)</p> <p>96154 – Family Health and Behavior Intervention (per 15 minutes, face-to-face)</p>
Healthcare Common Procedure Coding System (HCPCS)	<p>H0049 – Alcohol and/or drug screening</p> <p>H0050 – Alcohol and/or drug service, brief intervention, per 15 minutes</p>	<p>96155 – Family Health and Behavior Intervention without the patient present (per 15 minutes, face-to-face)</p>

Sources: *Reimbursement for SBIRT* (Rockville, MD: Substance Abuse and Mental Health Services Administration); Rita E. Adkins, et al., *Missouri Screening, Brief Intervention, Referral and Treatment: An Analysis of National Funding Trends for SBI Services*

A range of providers can deliver SBIRT services in the primary care setting. For example, the California Department of Health Care Services (CDHCS), which administers the state’s Medicaid program, reimburses for SBIRT services provided by both licensed and non-licensed providers. Some state Medicaid programs, including California’s, require providers to receive additional training to be reimbursed for SBIRT. CDHCS’s training requirements vary based on whether an individual is licensed. Licensed physicians, physician assistants, nurse practitioners, and psychologists must receive at least four hours of training. Non-licensed professionals, including health educators, certified addiction counselors, health coaches, and medical/behavioral assistants, must work under the supervision of a licensed provider and meet additional experience and training requirements (e.g., 30 documented hours of face-to-face client contact).²³

Increasing the role of primary care providers in substance use disorder treatment is not intended to supplant the specialty substance use disorder treatment system. The Substance Abuse and Mental Health Services Administration-Health Resources and Services Administration Center for Integrated Health

Solutions describes referral to treatment as, “a critical yet often overlooked component of SBIRT.”²⁴ Even with a referral, individuals requiring a higher level of treatment may resist visiting a specialist or may have difficulty navigating the historically siloed systems to complete the referral. Access barriers, including specialty provider shortages and limited transportation, may be particularly challenging in rural areas.²⁵ Integrated and co-located models of care may reduce fragmentation across the continuum of care, facilitating warm hand-offs and the development on shared care plans.²⁶

Evidence from states has shown that SBIRT services can reduce risky substance use. For example, the Iowa Department of Public Health is piloting SBIRT services at four federally-qualified health centers as well as the Iowa National Guard Headquarters.²⁷ In the third year evaluation (the most recent data available), follow-up interviews with a sample of individuals who had received SBIRT services found that the number of individuals who reported using alcohol in the last month fell by about 15 percent, the number reporting binge drinking decreased by approximately 35 percent, and the number reporting use of illegal drugs fell by almost 43 percent.²⁸

Medication-Assisted Treatment for Alcohol and Opioid Use Disorders

In addition to screening and conducting brief interventions, primary care providers can provide direct treatment for alcohol and opioid use disorders. The U.S. Food and Drug Administration (FDA) has approved four different medications to treat alcohol and opioid use disorders that can be used in primary care settings. Disulfiram and acamprosate are approved only for alcohol use disorders, buprenorphine is approved only for opioid use disorders, and naltrexone is approved for both (see **Table 2**). Federal law requires providers to receive additional training and a waiver from the U.S. Drug Enforcement Administration to prescribe and dispense buprenorphine. Methadone is also commonly used to treat opioid use disorders, but federal law restricts methadone treatment for opioid use disorder only to certified opioid treatment programs.²⁹

Table 2 - Overview of FDA-Approved Medication to Treat Substance Use Disorder That Can Be Used in Primary Care Settings

Generic Name	Used to Treat		Common Brand Name(s)	Delivery		
	Alcohol	Opioids		Oral	Injection	Implant
Disulfiram	✓		Antabuse	✓		
Acamprosate	✓		Campral	✓		
Naltrexone	✓	✓	Depade Revia Vivitrol	✓	✓	
Buprenorphine/ Naloxone (Combination)		✓	Bunavail Probuphine Suboxone Zubsolv	✓		✓

Note: Buprenorphine is commonly combined with naloxone to reduce the risk of diversion and abuse. A generic version of buprenorphine without naloxone is also available. However, unless pregnant, the American Society of Addiction Medicine recommends the combination product for withdrawal management and opioid use disorder treatment ([ASAM National Practice Guideline, 2015](#)).

Evidence supports the use of medication-assisted treatment for both alcohol and opioid use disorders. Systematic reviews have found that acamprosate and naltrexone are moderately effective in treating an alcohol use disorder,^{30, 31} and a large cost study conducted in 2011 found that total health care costs for individuals using medication to treat an alcohol use disorder were 30 percent lower compared to individuals who did not use medication.³²

Similarly, a systematic review found that buprenorphine is effective for treating opioid use disorders.³³ Although buprenorphine is associated with a greater rate of relapse when compared to methadone treatment, Massachusetts found that average annual spending for Medicaid enrollees receiving buprenorphine was \$1,330 less than individuals receiving methadone, even after accounting for relapse-related services.³⁴ Oral naltrexone has been found to be less successful in retaining individuals in treatment for opioid use disorders compared to buprenorphine,³⁵ but studies have suggested that long-acting injectable naltrexone may increase retention and improve outcomes.^{36, 37} Despite lower effectiveness for the general population, naltrexone may be particularly effective for highly-motivated individuals who have not had success using methadone or buprenorphine, as well as individuals who are not interested in using those medications as part of their treatment.³⁸

A February 2015 study of individuals receiving buprenorphine in a network of federally qualified health centers (FQHCs) suggests that receiving medication-assisted treatment in primary care may also serve as an entry point to address other health care needs. The study found that composite screening rates for nine primary care quality health indicators rose when individuals maintained treatment for at least three months, and the screening scores were higher for individuals receiving buprenorphine from a primary care provider rather than a psychiatrist.³⁹

Access to specialty behavioral health professionals is also important for individuals receiving medication-assisted treatment from their primary care providers. Systematic reviews found that the effects of acamprosate were stronger when paired with contemporaneous psychosocial supports.⁴⁰ The positive effects may be bi-directional, as naltrexone has been found to increase the effectiveness of psychosocial programs in preventing relapse for individuals with alcohol use disorders.⁴¹ Evidence also supports pairing medication-assisted treatment with psychosocial treatments during opioid detoxification.⁴² Counterintuitively, the evidence was not as strong for pairing structured psychosocial programs with medication-assisted treatment during the maintenance phase of treatment, although counseling was commonly provided in the control studies.⁴³ An earlier study of the aforementioned FQHC network also found that contemporaneous substance use disorder counseling improved retention of medication-assisted treatment.⁴⁴

Provider capacity is a critical issue for states, particularly for treating opioid use disorders. A study using data from 2012 found that at least three-quarters of opioid treatment programs were operating at or above 80 percent capacity in 37 states and the District of Columbia.⁴⁵ Similarly, rates of opioid use disorder were higher than buprenorphine treatment capacity in 48 states and the District of Columbia (all but Vermont and Maine).⁴⁶ Increasing the number of primary care providers who are trained to prescribe buprenorphine can significantly increase access to medication-assisted treatment, and two federal actions taken in 2016 are expected to do just that. Prior to this, only physicians could obtain the waiver, and those providers were only able to treat up to 30 individuals in the first year and up to 100 individuals thereafter. Effective August 8, 2016, SAMHSA raised the cap on individuals that could be treated in the

second year and beyond from 100 to 275.⁴⁷ Additionally, the Comprehensive Addiction and Recovery Act of 2016 expanded the waiver authority to physician assistants and nurse practitioners pursuant to state law.⁴⁸

While these federal policy changes will certainly increase the number of individuals who can receive treatment, it is important to note that states may need to work with their provider communities to identify and overcome other systemic barriers to treatment. For example, interviews conducted with 78 providers who received the waiver as part of a pilot in Washington found that fewer than 30 percent of the providers actually prescribed the medication. Nearly 80 percent of those who did not prescribe cited a lack of psychosocial supports as a barrier, and half reported a lack of confidence in their ability to manage opioid addiction.⁴⁹

State Payment and Delivery System Reforms

As detailed in the previous sections, primary care providers have an important role in identifying, managing, and treating individuals' substance use disorders. States across the country are implementing payment and delivery system reforms that build primary care providers' capacity to identify and treat substance use disorders while also strengthening their primary care systems' connection with specialty substance use disorder treatment providers across the continuum of care. On July 27, 2015, CMS released guidance encouraging states to leverage section 1115 of the Social Security Act to test innovative state policy and delivery system reforms designed to ensure a continuum of care for individuals with substance use disorders, including integration with primary care through integrated care models, accountable care organizations, and primary care medical homes.⁵⁰ Although Section 1115 demonstration waivers are not the only authority that states can use to incentivize integration, 1115 demonstration waivers offer states a great deal of flexibility and federal financial participation for costs that CMS may not be otherwise match .

California's Drug Medi-Cal Organized Delivery System (DMC-ODS) was the first waiver authorized under the 2015 CMS guidance.⁵¹ Building on the continuum of care developed by the American Society of Addiction Medicine,⁵² California's DMC-ODS program increases coordination between physical and mental health systems, provides more intensive services for the criminal justice population, and requires utilization controls to improve care and efficient use of resources.^{53, 54} Counties that opt-in to the DMC-ODS demonstration will be required to provide a set of services with strong ties to primary care providers including early intervention services through the managed care system and provider consultations.⁵⁵

New Hampshire's Delivery System Reform Incentive Payment (DSRIP) program, under the authority of a section 1115 demonstration waiver, focuses specifically on continuity of care for individuals with mental health disorders and substance use disorders. New Hampshire's waiver, which was approved by CMS on January 5, 2016, creates regional integrated delivery networks (IDNs) that are required to partner with a substantial percentage of primary care and substance use disorder providers in their region; IDNs must also partner with peer-based supports, community health workers, and community-based organizations that provide social and support services.⁵⁶ Each IDN will work to increase mental health and substance use disorder treatment capacity, promote the integration of physical and behavioral health, and improve care transitions. Primary care providers will play a key role in this initiative, as each IDN will be required to implement a Core Competency Project that requires practices to adopt SBIRT and incentivizes adoption of medication-assisted treatment.⁵⁷

Additionally, Maryland, Rhode Island, and Vermont have leveraged the Medicaid Health Home State Plan Option (Section 1945 of the Social Security Act) to provide enhanced services for individuals with opioid use disorders.⁵⁸ Through this authority, states can draw eight quarters of enhanced federal participation (90 percent) for the associated health home services (e.g., comprehensive care management, care coordination, referral to community and social support services). See the Vermont case study below for additional information on how they leveraged the model to strengthen connections between their primary care and specialty addiction systems.

Case Study: Vermont's Hub-and-Spoke Model Connects Medical Homes and Specialty Addiction Service Providers

Vermont's Blueprint for Health is a statewide program that connects National Committee for Quality Assurance (NCQA)-recognized patient-centered medical homes with regional multidisciplinary community health teams that provide care coordination and other wrap-around services.⁵⁹ Expanding on this foundation, Vermont established the Care Alliance for Opioid Addiction, which built a comprehensive regional system of treatment designed to provide more accessible and better coordinated care for individuals with an opioid use disorder.

The Care Alliance is a *hub-and-spoke* model. Accredited Opioid Treatment Programs (OTPs), which offer methadone treatment, serve as hubs. The spokes are buprenorphine-waivered providers offering office-based opioid treatment (OBOT). This program significantly augmented services for individuals served by both the hubs and the spokes.

Prior to the Care Alliance, OTPs only provided methadone treatment. In addition to expanding buprenorphine treatment, the Care Alliance connected individuals receiving care at the OTPs with primary care and built relationships between OTPs and OBOT providers. For example, stabilized individuals who no longer require the intensive services provided by the hubs can be connected with spoke providers for continued maintenance treatment and other health care services. Similarly, OBOTs can consult with their hub if they have questions or concerns about an individual's treatment needs. Additionally, leveraging the community health team infrastructure, Vermont also embedded registered nurses and masters-level clinicians, such as a licensed clinical social workers, in primary care practices to provide clinical and care management supports for individuals receiving buprenorphine.⁶⁰

Vermont Medicaid geographically phased-in the health home services using two state plan amendments (SPAs).⁶¹ Although Medicaid provides a majority of the funding for this model, it should be noted that some commercial payers have begun paying OTPs for their services.⁶²

Strategies to Promote Collaborative and Team-Based Care for Substance Use Disorder Treatment

States have other avenues to promote collaborative and team-based care beyond large-scale Medicaid reforms. For example, strengthening partnerships between federally qualified health centers (FQHCs) and community mental health centers (CMHCs) has been a key strategy for states in promoting team-based care for individuals with behavioral health needs. Missouri, for example, implemented a pilot that solicited FQHC-CMHC partnerships in which behavioral health professionals employed by the CMHC were embedded in FQHCs, and CMHCs established on-site primary care clinics staffed by FQHC providers.⁶³ The National Council for Behavioral Health developed a checklist designed to help FQHCs and CMHCs develop referral, colocation, and purchase of services arrangements compliant with federal requirements.⁶⁴ Sample contracts and memorandums of understanding are available online.^{65, 66}

States have also turned to telemedicine and teleconsultation programs to overcome geographic barriers and workforce shortages to connect primary care and specialty behavioral health providers.⁶⁷ For example, the University of New Mexico's Integrated Addictions and Psychiatry (IAP) TeleECHO Clinic remotely connects primary care providers across the state with teams of specialty behavioral health providers in weekly sessions that consist of didactic presentations and review of anonymous cases submitted by participating primary care providers. Over time, participating primary care providers become more confident in their ability to meet the behavioral health needs of their patients. Program leadership also used the IAP TeleECHO to increase the number of buprenorphine-waivered physicians in the state. As a result, the number of waived physicians in New Mexico increased approximately 10-fold since 2006, and in July 2014, the state's per capita rate of waived physicians in underserved areas was roughly 2.5 times the national average.⁶⁸

The Connecticut-based Weitzman Institute has adopted the ECHO model and has launched teleECHO clinics for pain management and buprenorphine.⁶⁹ Using a mix of public and private funding, the Weitzman Institute has expanded these initiatives into Colorado, Delaware, Maine, and New Jersey.⁷⁰

State Policy Considerations

Provider Education and Training

In a recent study assessing the attitudes of New York primary care providers toward SBIRT, roughly one-third of those surveyed felt as though they were effective in changing their patients' alcohol consumption or illicit drug use.⁷¹ Physician assistants and nurse practitioners were reportedly less likely to conduct brief interventions and referral to treatment compared to physicians, but fewer than 60 percent of physicians felt confident in using a standardized screening tool to identify substance use disorders. This study highlights the need for targeted education and training and the role it could play in increasing provider comfort and confidence utilizing evidence-based tools to addressing individuals' substance use disorder treatment needs.

Most state medical boards require physicians to participate in continuing medical education (CME) activities to renew their license.⁷² Physician assistants and nurse practitioners have similar continuing education requirements. States may wish to consider leveraging these requirements as an opportunity to improve substance use disorder treatment, improve prescribing practices, and reduce stigma. Some states have gone so far as to require a certain amount of hours dedicated to substance use training. In 2012, Kentucky passed legislation requiring 4.5 hours of CME every three years related to the use of the state's drug monitoring program, pain management, or addiction disorders for all physicians who prescribe or dispense controlled substances.⁷³ Similar requirements have recently been passed by legislatures in Maine,⁷⁴ Massachusetts,⁷⁵ and New York.⁷⁶

CME programs are becoming increasingly available for primary care providers and other members of the care team to gain clinically relevant training experiences and interact with patients who have benefitted from similar treatment.⁷⁷ State agencies can be important sources of these provider trainings. For example, the Vermont General Assembly authorized \$350,000 in funding for the Division of Alcohol & Drug Abuse Program (ADAP) to provide technical assistance and trainings for providers seeking the waiver to prescribe buprenorphine.⁷⁸ ADAP also worked with the Department of Vermont Health Access (which administers the state's Medicaid program) to develop curriculum for a Medication-Assisted Treatment Learning Collaborative. Ninety percent of participating providers reported the

learning collaborative produced significant practice change, and data collected indicated substantial improvements in adherence to practice guidelines, such as prescribing only to patients who meet diagnostic criteria and adhering to the recommended dosage range.⁷⁹

State agencies may wish to supplement formal education and training programs by identifying and collating educational tools and resources available online. For example, the Michigan Department of Health & Human Services maintained a webpage on integrating mental health, substance use, and physical health care that includes resources from integration initiatives underway in the state and across the country.⁸⁰

Graduate Medical Education (GME) may offer another lever for states to enhance provider education and training. The state of Ohio took this approach to spread implementation of medical homes, creating a pilot project that engaged the state's nursing and medical schools and encouraged the development of new curricula that aligns with the principles of team-based care.⁸¹ State efforts could align with other GME activity already underway. In connection with the Obama administration's efforts to address the nation's opioid crisis and the release of the Centers for Disease Control and Prevention (CDC) Guideline for Prescribing Opioids for Chronic Pain,⁸² more than 60 medical schools across the country announced that they would incorporate new curricula that align with the CDC Guideline starting in the Fall 2016 semester.⁸³

State Levers to Support Primary Care Providers' Ability to Prevent Opioid Misuse and Overdose

Since 1999, opioid overdose deaths have risen in tandem with increases in opioid sales.⁸⁴ Although opioids typically account for a small proportion of individual primary care providers' prescriptions, primary care providers, including nurse practitioners and physician assistants, collectively write a significant percentage—about half—of all opioid prescriptions in the United States.⁸⁵ As such, primary care providers are well-positioned to ensure that individuals use opioids appropriately, and state programs, including prescription drug monitoring programs, can help primary care providers prevent abuse and diversion. Primary care providers are also well-positioned to increase access to naloxone, an FDA-approved drug that can reverse the effects of an opioid overdose.

Prescription Drug Monitoring Programs

Forty-nine states, all but Missouri, and the District of Columbia operate a prescription drug monitoring program (PDMP).⁸⁶ PDMPs are electronic databases that track the prescribing and dispensing of opioids and other controlled substances and can be used by health care providers to identify individuals who may be abusing or diverting prescription drugs.⁸⁷ Recent studies found that PDMPs are associated with reductions in opioid prescribing and opioid-related death rates.^{88, 89} Results from a nationally-representative survey published in 2015 found that most primary care physicians surveyed (72 percent) were aware of their state's PDMP, and most of those physicians (87 percent) had used the program. However, nearly one-third of those physicians (31 percent) found the programs difficult to access, and more than half (58 percent) felt that it took too much time to retrieve patient information.⁹⁰

The Network for Excellence in Health Innovation (NEHI) hosted an expert forum on physicians' use of PDMPs in June 2015, during which the participants developed a number of recommendations that states may wish to explore to increase physicians' utilization of the programs. Specific recommendations included: streamlining and potentially mandating provider registration; reducing the complexity of

using the systems; enabling delegate access as appropriate; and pushing automated reports and alerts to providers.⁹¹ These recommendations align with best practices identified in a 2012 report prepared by the PDMP Center of Excellence.⁹²

While it is encouraging that 72 percent of primary care providers in the aforementioned survey were familiar with their state's PDMP, it means that approximately 1-in-4 were not, which illustrates the need for greater provider education and outreach. The NEHI panel also stressed the importance of provider training and education, not only to familiarize providers with the systems but also to ensure that providers understand their value.⁹³

Increasing Access to Naloxone in the Primary Care Setting

Naloxone is an FDA-approved medication that blocks opioids from binding with receptors in the brain and can reverse the effects of an overdose. Available in both injectable and intra-nasal formulations, naloxone has become a near-ubiquitous component of local, state, and federal strategies to reduce opioid overdose deaths.

Because individuals experiencing an overdose may not be able to self-administer naloxone, 47 states and the District of Columbia (all but Kansas, Montana, and Wyoming) have passed legislation expanding access to naloxone.⁹⁴ These laws have significantly increased the number of individuals in the community who are trained to carry and administer naloxone, including first responders, law enforcement, and school officials. Most of these laws have also made it easier for third parties, including an individual's friends and family, to obtain and administer naloxone. Contrary to some media reports, naloxone is not currently available over-the-counter.⁹⁵ However, 43 states have authorized prescribers to write third-party prescriptions (i.e., prescriptions intended to be administered to someone other than the individual receiving it), and 35 states have authorized standing orders for naloxone that allow the dispensing of naloxone to individuals without first visiting a provider.⁹⁶

States, particularly those without a standing order, may wish to encourage providers to simultaneously prescribe naloxone when prescribing opioids or prescribe naloxone to friends and family of individuals who are at a greater risk of opioid overdose.⁹⁷ This may be of particular importance when engaging primary care providers. Because primary care providers account for a significant percentage of total opioid prescriptions, they are well-positioned to ensure that individuals—particularly those at a higher risk of overdose—have access to naloxone in case of an emergency.

Early evidence suggests that co-prescribing naloxone may have positive outcomes. A 2016 study of six San Francisco safety-net primary care clinics found that individuals who were co-prescribed naloxone when receiving long-term opioids had 47 percent fewer opioid-related emergency visits after six months and 63 percent fewer opioid-related emergency visits after one year when compared to individuals who were not prescribed naloxone.⁹⁸ A companion study, based on interviews from a sample of individuals at each clinic, found that 82 percent of individuals who were co-prescribed naloxone filled the prescription; and although 22 percent reported a negative reaction to receiving the prescription, only one respondent indicated they would not want a future prescription.⁹⁹ It should be noted, however, that the first study may not be generalizable beyond safety-net clinics, and the interviewees may not have been representative of the entire study population.

Prior Authorization and Utilization Management Policies for Treatment Services

Utilization management policies, including prior authorization, are important tools for insurers (including Medicaid plans) to ensure appropriate utilization of health care services, control spending, and combat wasteful or fraudulent activity. Prior authorization is one of the recommended strategies to stem over-prescribing of long-term and high-dose opioids.^{100, 101} However, evidence suggests that these policies may result in underutilization of care, including lower medication adherence, particularly for vulnerable populations and individuals with behavioral health needs.^{102, 103, 104, 105, 106}

Over the past two years, some state legislatures have started to limit the ability of public and private insurers to require prior authorization for certain substance use disorder treatment services. In June 2016, New York Gov. Andrew Cuomo signed legislation that prohibited Medicaid managed care plans requiring prior authorization for preferred/formulary forms of buprenorphine or injectable naloxone when used for detoxification or maintenance treatment.¹⁰⁷ Gov. Cuomo also signed legislation that restricted commercial health plans from limiting medically-necessary inpatient treatment services; furthermore, these plans are no longer able to require prior authorization for inpatient treatment services and are not allowed to use other utilization management strategies, such as concurrent review, for the first 14 days of treatment.¹⁰⁸

The latter New York law is similar to legislation passed by the Massachusetts General Court. In 2014, Massachusetts legislators unanimously eliminated prior authorization requirements for a range of substance use disorder treatment services in Medicaid, the Group Insurance Commission (which covers state employees, retirees, and their dependents), and fully-insured commercial markets.¹⁰⁹ Although insurers are permitted to use other utilization management after seven days of inpatient treatment, the Massachusetts Association of Health Plans (MAHP) expressed concern that removing prior authorization and mandating coverage for at least 14 days of clinical stabilization services would promote overutilization of inpatient services rather than appropriate utilization of evidence-based outpatient therapies.^{110, 111} MAHP's concerns that the law promoted inpatient detoxification were echoed in legislative testimony provided by the then-president of the American Society of Addiction Medicine (ASAM), although the ASAM testimony explicitly supported removing "burdensome prior authorization barriers" for medication-assisted treatment.¹¹²

Historically, state Medicaid agencies have placed greater restrictions on buprenorphine compared to methadone or naltrexone. According to a 2014 SAMHSA report, nearly every Medicaid program in the country required prior authorization for buprenorphine while only about a quarter had similar requirements for oral naltrexone or methadone.¹¹³ States may have imposed greater restrictions on buprenorphine due to the fact that buprenorphine carries a greater risk of misuse or abuse compared to naltrexone; however, evidence suggests diverted buprenorphine is often used for treatment rather than illicit use and that stringent utilization management policies may actually increase diversion.^{114, 115}

In 2008, MassHealth, Massachusetts' Medicaid agency, implemented a dose-based prior authorization policy for buprenorphine that required more frequent authorizations for higher dosages. Specifically, no prior authorization was required for dosages of the FDA-recommended 16 mg/day or less. As the dosage increased, MassHealth required more frequent prior authorizations (30, 90, or 180 days). As a result of this policy change, the percentage of individuals who received dosages in excess of the FDA's recommended upper limit of 24 mg/day fell by more than 75 percent.¹¹⁶

Lastly, it is important to note that recent changes to federal regulations may significantly impact states' utilization management policies for behavioral health services. Effective May 31, 2016, CMS clarified that protections afforded by the Mental Health Parity and Addiction Equity Act of 2008 applied to individuals enrolled in Medicaid managed care, the Children's Health Insurance Program (CHIP), and Medicaid alternative benefit plans.¹¹⁷ These regulations forbid insurers from imposing greater restrictions on behavioral health benefits as compared to medical and surgical benefits, and states are required to comply with the final rule no later than October 2, 2017.

Conclusion

The majority of individuals with an alcohol or opioid use disorder do not receive treatment. Building on the core competencies of the patient-centered medical home, primary care providers can play an important role in strengthening states' capacity to meet the behavioral health needs of individuals. States have leveraged healthcare reform initiatives to invest in team-based models of care that promote SBIRT and medication-assisted treatment, but additional investments in provider education and training may be necessary to fully realize their potential. Furthermore, state policies that influence primary care providers' use of prescription drug monitoring programs and willingness to co-prescribe naloxone can help states combat the national opioid epidemic.

Endnotes

1. Susan K. Urahn, et al., *Substance Use Disorders and the Role of the States* (Washington, DC: The Pew Charitable Trusts; Chicago, IL: John D. and Catherine T. MacArthur Foundation, 2015), <http://www.pewtrusts.org/~media/assets/2015/03/substanceusedisordersandtheroleofthestates.pdf>.
2. Lawrence J. Walter, Lynn Ackerson, and Steven Allen, "Medicaid Chemical Dependency Patients in a Commercial Health Plan: Do High Medical Costs Come down over Time?" *The Journal of Behavioral Health Services & Research* 32, no. 3 (September 2005): 253–63.
3. National Institute on Drug Abuse, *Principles of Drug Addiction Treatment: A Research-Based Guide* (Rockville, MD: National Institutes of Health, 2012), <https://www.drugabuse.gov/publications/principles-drug-addiction-treatment-research-based-guide-third-edition/frequently-asked-questions/drug-addiction-treatment-worth-its-cost>.
4. "Defining the PCMH." Patient Centered Medical Home Resource Center, Accessed February 6, 2017, <https://pcmh.ahrq.gov/page/defining-pcmh>.
5. Working Party Group on Integrated Behavioral Healthcare, "Joint Principles: Integrating Behavioral Health Care into the Patient-Centered Medical Home," *Annals of Family Medicine* 12, no. 2 (April 2014): 183–85.
6. Substance Abuse and Mental Health Services Administration. Results from the 2013 National Survey on Drug Use and Health: Summary of National Findings (Washington, DC: U.S. Department of Health and Human Services, 2014), <http://www.samhsa.gov/data/sites/default/files/NSDUHresultsPDFWHTML2013/Web/NSDUHresults2013.pdf>.
7. Brendan Saloner and Shankar Karthikeyan, "Changes in Substance Abuse Treatment Use Among Individuals With Opioid Use Disorders in the United States, 2004-2013," *JAMA* 314, no. 14 (October 13, 2015): 1515–17.
8. Substance Abuse and Mental Health Services Administration. Behavioral Health Barometer: United States, 2014 (Washington, DC: U.S. Department of Health and Human Services, 2014), http://www.samhsa.gov/data/sites/default/files/National_BHBarometer_2014.pdf.
9. The Pew Charitable Trusts. Using Patient Review and Restriction Programs to Protect Patients at Risk of Opioid Misuse and Abuse (Washington, DC: The Pew Charitable Trusts, 2015), <http://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2015/07/using-patient-review-and-restriction-programs-to-protect-patients-at-risk-of-opioid-misuse-and-abuse>.
10. National Center for Injury Prevention and Control. Patient Review & Restriction Programs: Lessons learned from state Medicaid programs (Atlanta, GA: Centers for Disease Control and Prevention, 2012), https://www.cdc.gov/drugoverdose/pdf/pdo_patient_review_meeting-a.pdf.
11. CareSource. Health Partner Manual (Dayton, OH: CareSource, 2015), <https://www.caresource.com/documents/2015-ky-medicaid-provider-manual/>.
12. "Information for Lock-in Providers," Accessed February 6, 2017, <https://mmac.mo.gov/wp-content/uploads/sites/11/2011/11/Information-for-lock-for-website-2011.pdf>.
13. "Pharmacy Lock-In Program." Rhode Island Executive Office of Health & Human Services, 2017, <http://www.eohhs.ri.gov/ProvidersPartners/ProviderManualsGuidelines/MedicaidProviderManual/Pharmacy/PharmacyLock-InProgram.aspx>
14. Final Recommendation Statement: Alcohol Misuse: Screening and Behavioral Counseling Interventions in Primary Care. U.S. Preventive Services Task Force. May 2013. <https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/alcohol-misuse-screening-and-behavioral-counseling-interventions-in-primary-care>

15. Ibid.
16. “Final Update Summary: Drug Use, Illicit: Screening.” U.S. Preventive Services Task Force, July 2015, Accessed February 2, 2017, <https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/drug-use-illicit-screening?ds=1&s=substance%20abuse>.
17. “Final Research Plan: Drug Use in Adolescents and Adults, Including Pregnant Women: Screening.” U.S. Preventive Services Task Force. October 2016. Accessed February 2, 2017, <https://www.uspreventiveservicestaskforce.org/Page/Document/final-research-plan/drug-use-in-adolescents-and-adults-including-pregnant-women-screening>.
18. “Brief Interventions.” SAMHSA-HRSA Center for Integrated Health Solutions, Accessed February 6, 2017, <http://www.integration.samhsa.gov/clinical-practice/sbirt/brief-interventions>.
19. Centers for Medicare and Medicaid Services, decision memo: CAG-00425N, Screening and Behavioral Counseling Interventions in Primary Care to Reduce Alcohol Misuse, Oct. 14, 2011, <https://www.cms.gov/medicare-coverage-database/details/nca-decision-memo.aspx?NCAId=249>.
20. Age-appropriate behavioral health screenings are required under the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit; see <https://www.medicaid.gov/Federal-Policy-Guidance/Downloads/CIB-03-27-2013.pdf>.
21. Centers for Medicare & Medicaid Services, guidance letter: SMD #15-003, New Service Delivery Opportunities for Individuals with a Substance Use Disorder, July 27, 2015, <https://www.medicaid.gov/federal-policy-guidance/downloads/SMD15003.pdf>.
22. Rita E. Adkins, et al., Missouri Screening, Brief Intervention, Referral and Treatment: An Analysis of National Funding Trends for SBI Services (Berkeley, MO: Missouri Institute of Mental Health, 2014), https://www.mosbirt.org/Portals/0/Docs/FundingSBIRTCodes_2014_0318%20_FINAL.pdf.
23. California Department of Health Care Services, Implementation of a New Medi-Cal Benefit for Current and Expansion Populations: SBIRT-Alcohol Screening, Brief Intervention and Referral to Treatment (Sacramento, CA: 2014), <http://www.dhcs.ca.gov/provgovpart/Documents/DHCS%20SBIRT.pdf>.
24. “Referral to Treatment.” SAMHSA-HRSA Center for Integrated Health Solutions, Accessed February 6, 2017, <http://www.integration.samhsa.gov/clinical-practice/sbirt/referral-to-treatment>.
25. Chiara Corso and Charles Townley, Intervention, Treatment and Prevention Strategies to Address Opioid Use Disorders in Rural Areas: A Primer on Opportunities for Medicaid-Safety Net Collaboration (Washington DC: National Academy for State Health Policy, September 2016), <http://nashp.org/wp-content/uploads/2016/09/Rural-Opioid-Primer.pdf>.
26. Mike Nardone, Sherry Snyder, and Julia Paradise, Integrating Physical and Behavioral Health Care: Promising Medicaid Models (Washington, DC: The Henry J. Kaiser Family Foundation, 2014), <http://kff.org/report-section/integrating-physical-and-behavioral-health-care-promising-medicaid-models-issue-brief/>.
27. Iowa Department of Public Health. SBIRT IOWA Policy Manual (Des Moines, IA: Iowa Department of Public Health, 2012), <http://idph.iowa.gov/Portals/1/Files/SBIRT/SBIRT%20Policy%20Manual%2011-13%20FINAL.pdf>.
28. Kristin White et al., Screening, Brief Intervention and Referral to Treatment (SBIRT) Year Three Annual Evaluation Report (Iowa City, IA: Iowa Consortium for Substance Abuse Research and Evaluation, 2015), <http://idph.iowa.gov/Portals/1/userfiles/52/SBIRT%20IOWA%20Year%203%20Annual%20Evaluation%20Report%20Final%20Approved2015.pdf>.
29. 42 CFR 8.12
30. Susanne Rösner et al., “Acamprosate for Alcohol Dependence,” The Cochrane Database of Systematic Reviews, no. 9 (September 8, 2010): CD004332.
31. Susanne Rösner et al., “Opioid Antagonists for Alcohol Dependence,” The Cochrane Database of Systematic Reviews, no. 12 (December 8, 2010): CD001867.
32. Onur Baser et al., “Alcohol Dependence Treatments: Comprehensive Healthcare Costs, Utilization Outcomes, and Pharmacotherapy Persistence,” The American Journal of Managed Care 17 Suppl 8 (June 2011): S222–234.
33. Richard P. Mattick et al., “Buprenorphine Maintenance versus Placebo or Methadone Maintenance for Opioid Dependence,” The Cochrane Database of Systematic Reviews, no. 2 (February 6, 2014): CD002207.
34. Robin E. Clark et al., “The Evidence Doesn’t Justify Steps by State Medicaid Programs to Restrict Opioid Addiction Treatment with Buprenorphine,” Health Affairs 30, no. 8 (August 2011): 1425–1433.
35. Silvia Minozzi et al., “Oral Naltrexone Maintenance Treatment for Opioid Dependence,” The Cochrane Database of Systematic Reviews, no. 4 (April 13, 2011): CD001333.
36. Kimberly L. Kjome and F. Gerard Moeller, “Long-Acting Injectable Naltrexone for the Management of Patients with Opioid Dependence,” Substance Abuse: Research and Treatment 5 (February 6, 2011): 1–9.
37. Adam C. Brooks et al., “Long-Acting Injectable versus Oral Naltrexone Maintenance Therapy with Psychosocial Intervention for Heroin Dependence: A Quasi-Experiment,” The Journal of Clinical Psychiatry 71, no. 10 (October 2010): 1371–1378.
38. Substance Abuse and Mental Health Services Administration. Clinical Use of Extended-Release Injectable Naltrexone in the Treatment of Opioid Use Disorder: A Brief Guide (Rockville, MD: U.S. Department of Health and Human Services, 2015), <http://store.samhsa.gov/shin/content//SMA14-4892R/SMA14-4892R.pdf>.
39. Marwan S. Haddad, Alexei Zelenev, and Frederick L. Altice, “Buprenorphine Maintenance Treatment Retention Improves Nationally Recommended Preventive Primary Care Screenings When Integrated into Urban Federally Qualified Health Centers,” Journal of Urban Health: Bulletin of the New York Academy of Medicine 92, no. 1 (February 2015): 193–213.
40. Susanne Rösner et al., “Acamprosate for Alcohol Dependence.”
41. Susanne Rösner et al., “Opioid Antagonists for Alcohol Dependence.”
42. Laura Amato et al., “Psychosocial and Pharmacological Treatments versus Pharmacological Treatments for Opioid Detoxification,” The Cochrane Database of Systematic Reviews, no. 9 (September 7, 2011): CD005031.

43. Laura Amato et al., “Psychosocial Combined with Agonist Maintenance Treatments versus Agonist Maintenance Treatments Alone for Treatment of Opioid Dependence,” *The Cochrane Database of Systematic Reviews*, no. 10 (2011): CD004147.
44. Marwan S. Haddad, Alexei Zelenev, and Frederick L. Altice, “Integrating Buprenorphine Maintenance Therapy into Federally Qualified Health Centers: Real-World Substance Abuse Treatment Outcomes,” *Drug & Alcohol Dependence* 131, no. 1 (July 1, 2013): 127–135.
45. Christopher M. Jones et al., “National and State Treatment Need and Capacity for Opioid Agonist Medication-Assisted Treatment,” *American Journal of Public Health* 105, no. 8 (August 2015): e55–e63.
46. *Ibid.*
47. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Federal Register 81, no. 131 (July 8, 2016).
48. Comprehensive Addiction and Recovery Act of 2016. Public Law 114-198 (July 22, 2016).
49. Eliza Hutchinson et al., “Barriers to Primary Care Physicians Prescribing Buprenorphine,” *The Annals of Family Medicine* 12, no. 2 (March 1, 2014): 128–133.
50. Centers for Medicare & Medicaid Services, guidance letter: SMD #15-003, New Service Delivery Opportunities for Individuals with a Substance Use Disorder.
51. Centers for Medicare & Medicaid Services, amendment approval letter: Approval of California’s section 1115 demonstration project, August 13, 2015, http://www.dhcs.ca.gov/provgovpart/Documents/CA_SUD_Amendment_Approval%20Letter_08-13-15_Final.pdf.
52. “Quality and Practice.” American Society of Addiction Medicine, Accessed February 6, 2017, <http://www.asam.org/quality-practice/guidelines-and-consensus-documents/the-asam-criteria>.
53. “Drug Medi-Cal Organized Delivery System.” California Department of Health Care Services, 2016, Accessed February 6, 2017, <http://www.dhcs.ca.gov/provgovpart/Pages/Drug-Medi-Cal-Organized-Delivery-System.aspx>.
54. California Department of Health Care Services, fact sheet: Drug Medi-Cal Organized Delivery System Waiver, September 2015, http://www.dhcs.ca.gov/provgovpart/Documents/11.10.15_Revised_DMC_ODS_FACT_SHEET.pdf.
55. *Ibid.*
56. New Hampshire Department of Health and Human Services, Building Capacity for Transformation: New Hampshire’s DSRIP Waiver Program (Concord, NH: Hew Hampshire Department of Health and Human Services, 2016), <http://www.dhhs.nh.gov/section-1115-waiver/documents/nh-dsrip-overview-052016.pdf>.
57. Centers for Medicare & Medicaid Services, technical corrections letter, Technical Corrections to the New Hampshire Section 1115 Medicaid Demonstration, Aug. 1, 2016, <http://www.dhhs.nh.gov/section-1115-waiver/documents/approval-protocols.pdf>.
58. Kathy Moses and Julie Klebonis, Designing Medicaid Health Homes for Individuals with Opioid Dependency: Considerations for States (Washington, DC: Centers for Medicare & Medicaid Services, 2015), <https://www.medicaid.gov/state-resource-center/medicaid-state-technical-assistance/health-homes-technical-assistance/downloads/health-homes-for-opioid-dependency.pdf>.
59. Christina Bielaszka-DuVernay, “Vermont’s Blueprint For Medical Homes, Community Health Teams, And Better Health At Lower Cost,” *Health Affairs* 30, no. 3 (March 1, 2011): 383–386.
60. Ann VanDonsel, The Effectiveness of Vermont’s System of Opioid Addiction Treatment: In Accordance with Act 135 (2012), An Act Relating to the Treatment of Opioid Addiction, Section 1 (Burlington, VT: Vermont Agency of Human Services, 2015), <http://legislature.vermont.gov/assets/Legislative-Reports/Opioid-system-effectiveness-1.14.15.pdf>.
61. Transmittal Number (TN#) VT-13-001 authorized health home services in 9 of the state’s 14 counties, effective July 1, 2013; TN#: VT-14-007, available at <https://www.medicaid.gov/state-resource-center/medicaid-state-plan-amendments/downloads/vt/vt-13-0071.pdf>, authorized health home services in the remaining counties, effective January 1, 2014.
62. Justin Johnson and Lawrence Miller, Report on Integration of Substance Abuse Payment and Care Coordination with Physician and Mental Health: In Accordance with Act 179 of 2014, Section E.306.2(b)(1) (Montpelier, VT: State of Vermont Agency of Administration Health Care Reform, 2016), <http://hcr.vermont.gov/sites/hcr/files/pdfs/Mental%20Health%20Integration%20Leg%20Report%201.15.16%20FINAL.pdf>.
63. Dorn Schuffman, Benjamin G. Druss, and Joseph J. Parks, “State Mental Health Policy: Mending Missouri’s Safety Net: Transforming Systems of Care by Integrating Primary and Behavioral Health Care,” *Psychiatric Services* (Washington, D.C.) 60, no. 5 (May 2009): 585–588.
64. National Council for Community Behavioral Healthcare, Enhancing the Continuum of Care: Integrating Behavioral Health and Primary Care through Affiliations with FQHCs (Washington, DC: National Council for Community Behavioral Healthcare), <http://www.integration.samhsa.gov/images/res/CMHC%20FQHC%20Checklist%20v2.pdf>.
65. “Contracts and MOUs.” SAMHSA-HRSA Center for Integrated Health Solutions, Accessed February 6, 2017, <http://www.integration.samhsa.gov/operations-administration/contracts-mous>.
66. For an example of a memorandum of understanding used in Colorado, see: Colorado Health Partnerships, sample memorandum of understanding: Regarding Integrated Services, <http://www.coloradohealthpartnerships.com/provider/integrated/Sample-FQHC-CMHC-MOU-Unabridged.pdf>.
67. Charles Townley and Rachel Yalowich, Improving Behavioral Health Access & Integration Using Telehealth & Teleconsultation: A Health Care System for the 21st Century (Portland, ME: National Academy for State Health Policy, November 2015). <http://nashp.org/wp-content/uploads/2015/11/Telemedicine.pdf>.
68. Miriam Komaromy MD, et al., “Project ECHO (Extension for Community Healthcare Outcomes): A new model for educating primary care providers about treatment of substance use disorders,” *Substance Abuse* 37 no. 1 (Feb. 2016).
69. “Clinics,” Weitzman Institute, Accessed February 6, 2017, <http://www.weitzmaninstitute.org/clinics>.
70. “About CHC’s ECHO,” Weitzman Institute, Accessed February 6, 2017, <http://www.weitzmaninstitute.org/about-chc-project-echo>.

71. B. R. Harris and J. Yu, "Attitudes, Perceptions and Practice of Alcohol and Drug Screening, Brief Intervention and Referral to Treatment: A Case Study of New York State Primary Care Physicians and Non-Physician Providers," *Public Health* 139 (October 2016): 70–78.
72. "Continuing Medical Education: Board-by-Board Overview." Federation of State Medical Boards, Accessed February 6, 2017, https://www.fsmb.org/Media/Default/PDF/FSMB/Advocacy/GRPOL_CME_Overview_by_State.pdf.
73. "Continuing Medical Education." Kentucky Board of Medical Licensure, Accessed February 6, 2017, <http://kbml.ky.gov/cme/Pages/default.aspx>.
74. "An Act to Prevent Opiate Abuse by Strengthening the Controlled Substances Prescription Monitoring Program, Maine Public Law 2015 Chapter 488, http://legislature.maine.gov/legis/bills/bills_127th/chapters/PUBLIC488.asp.
75. "An Act Relative to Substance Use, Treatment, Education and Prevention," Chapter 52 of the Acts of 2016 (Massachusetts), <https://malegislature.gov/Laws/SessionLaws/Acts/2016/Chapter52>.
76. "An Act to Amend the Public Health Law, Chapter 71 of the Laws of New York, 2016, http://nyassembly.gov/leg/?default_fld=%0D%0A&leg_video=&bn=S08139&term=2015&Actions=Y&Text=Y.
77. Soteri Polydorou, Erik W. Gunderson, and Frances R. Levin, "Training Physicians to Treat Substance Use Disorders," *Current Psychiatry Reports* 10, no. 5 (October 2008): 399–404.
78. Office of Vermont Health Access, informational flyer: Buprenorphine Program: Capitated Program for the Treatment of Opiate Dependency (CPTOD), http://ovha.vermont.gov/for-providers/buprenorphine_flyer_2.pdf.
79. Addiction Health Services and Implementation Research. The Dartmouth Psychiatric Research Center, Accessed February 6, 2017, <http://sites.dartmouth.edu/ahsir/implementation-research/medications/vt-mat/>.
80. "Integrating Mental Health, Substance Use and Physical Health Care," Michigan Department of Health & Human Services, archived webpage as of December 26, 2016, archived webpage retrieved February 7, 2017, http://web.archive.org/web/20161226000849/http://www.michigan.gov/mdhhs/0,5885,7-339-71550_2941_58005-251689--,00.html.
81. "PCMH Education Pilot Project." Ohio Department of Health, last modified November 20, 2015, Accessed February 6, 2017, <http://www.odh.ohio.gov/landing/medicalhomes/Education%20Pilot%20Project.aspx>.
82. "CDC Guideline for Prescribing Opioids for Chronic Pain." Centers for Disease Control and Prevention, 6 January 2017, Accessed February 6, 2017, <http://www.cdc.gov/drugoverdose/prescribing/guideline.html>.
83. Office of the Press Secretary, fact sheet, Obama Administration Announces Additional Actions to Address the Prescription Opioid Abuse and Heroin Epidemic, last modified March 29, 2016, Accessed February 6, 2017.
84. "Prescription Opioid Overdose Data." Centers for Disease Control and Prevention, last modified December 16, 2016, Accessed February 6, 2017, <http://www.cdc.gov/drugoverdose/data/overdose.html>.
85. "Prescribing Data." Centers for Disease Control and Prevention, last modified December 20, 2016, Accessed February 6, 2017, <https://www.cdc.gov/drugoverdose/data/prescribing.html>.
86. "PDMP Legislation & Operational Dates." Prescription Drug Monitoring Program Training and Technical Assistance Center, Accessed February 6, 2017, http://www.pdmpassist.org/content/pdmp-legislation-operational-dates?order=field_pmp_operational_value&sort=asc.
87. "Injury Prevention & Control: Opioid Overdose." Centers for Disease Control and Prevention, last modified March 23, 2016, Accessed February 6, 2017, <https://www.cdc.gov/drugoverdose/pdmp/>.
88. Yuhua Bao et al., "Prescription Drug Monitoring Programs Are Associated With Sustained Reductions In Opioid Prescribing By Physicians," *Health Affairs* 35, no. 6 (June 1, 2016): 1045–1051.
89. Stephen W. Patrick et al., "Implementation Of Prescription Drug Monitoring Programs Associated With Reductions In Opioid-Related Death Rates," *Health Affairs* 35, no. 7 (July 1, 2016): 1324–1332.
90. Lainie Rutkow et al., "Most Primary Care Physicians Are Aware Of Prescription Drug Monitoring Programs, But Many Find The Data Difficult To Access," *Health Affairs* 34, no. 3 (March 1, 2015): 484–492.
91. The Network for Excellence in Health Innovation. Physicians and PDMPs: Improving the Use of Prescription Drug Monitoring Programs (Cambridge, MA: New England Healthcare Institute, 2015), http://www.nehi.net/writable/publication_files/file/pdmp_issue_brief_11.18.pdf.
92. Thomas Clark, et al., Prescription Drug Monitoring Programs: An Assessment of the Evidence for Best Practices (Washington, DC: The Pew Charitable Trusts, 2012), http://www.pewtrusts.org/~media/assets/0001/pdmp_update_1312013.pdf.
93. Ibid.
94. The Network for Public Health Law. Legal Interventions to Reduce Overdose Mortality: Naloxone Access and Overdose Good Samaritan Laws (St. Paul, MN: The Network for Public Health Law, 2016), https://www.networkforphl.org/_asset/qz5pvn/network-naloxone-10-4.pdf.
95. "'Over the Counter' Naloxone Access, Explained." The Network for Public Health Law, 2016, Accessed February 6, 2017, https://www.networkforphl.org/the_network_blog/2016/03/01/745/over_the_counter_naloxone_access_explained.
96. The Network for Public Health Law. Legal Interventions to Reduce Overdose Mortality: Naloxone Access and Overdose Good Samaritan Laws.
97. The American Medical Association Task Force to Reduce Opioid Abuse (comprised of 27 national and state provider associations) supports both of these strategies, as clinically appropriate. For more information, see: <https://www.ama-assn.org/delivering-care/increasing-access-naloxone>.
98. Phillip O. Coffin et al., "Nonrandomized Intervention Study of Naloxone Coprescription for Primary Care Patients Receiving Long-Term Opioid Therapy for Pain," *Annals of Internal Medicine* 165, no. 4 (August 16, 2016): 245–252.
99. Emily Behar et al., "Primary Care Patient Experience with Naloxone Prescription," *The Annals of Family Medicine* 14, no. 5 (September 1, 2016): 431–436.
100. Alexander GC, Frattaroli S, Gielen AC, eds, *The Prescription Opioid Epidemic: An Evidence-Based Approach* (Baltimore, Maryland: Johns Hopkins Bloomberg School of Public Health, 2015), <http://www.jhsph.edu/research/centers-and-institutes/center-for-drug-safety-and-effectiveness/opioid-epidemic-town-hall-2015/2015-prescription-opioid-epidemic-report.pdf>.

101. Centers for Medicare & Medicaid Services, CMCS information bulletin: Best Practices for Addressing Prescription Opioid Overdoses, Misuse and Addiction, January 28, 2016, <https://www.medicare.gov/federal-policy-guidance/downloads/cib-02-02-16.pdf>.
102. Tami L. Mark et al., "Medicaid Coverage of Medications to Treat Alcohol and Opioid Dependence," *Journal of Substance Abuse Treatment* 55 (August 2015): 1–5.
103. William B. Vogt et al., "Medicaid Cost Control Measures Aimed at Second-Generation Antipsychotics Led to Less Use of All Antipsychotics," *Health Affairs* 30, no. 12 (December 2011): 2346–2354.
104. Christine Y. Lu et al., "Association between Prior Authorization for Medications and Health Service Use by Medicaid Patients with Bipolar Disorder," *Psychiatric Services (Washington, D.C.)* 62, no. 2 (February 2011): 186–193.
105. Tami L. Mark et al., "The Effects of Antidepressant Step Therapy Protocols on Pharmaceutical and Medical Utilization and Expenditures," *The American Journal of Psychiatry* 167, no. 10 (October 2010): 1202–1209.
106. Christine Y. Lu et al., "Unintended Impacts of a Medicaid Prior Authorization Policy on Access to Medications for Bipolar Illness," *Medical Care* 48, no. 1 (January 2010): 4–9.
107. "An Act to Amend the Insurance Law and the Public Health Law," Chapter 69 of the 2016 Laws of New York, http://nyassembly.gov/leg/?default_fld=%0D%0A&leg_video=&bn=S08137&term=2015&Actions=Y&Text=Y.
108. "An Act to Amend the Public Health Law," Chapter 71 of the 2016 Laws of New York.
109. "An Act to Increase Opportunities for Long-Term Substance Abuse Recovery," Chapter 258 of the Acts of 2014 (Massachusetts), <https://malegislature.gov/Laws/SessionLaws/Acts/2014/Chapter258>.
110. Massachusetts Association of Health Plans, letter to the Health Policy Commission, Annual Cost Trends Hearing, Oct. 17, 2014, <http://www.mass.gov/anf/budget-taxes-and-procurement/oversight-agencies/health-policy-commission/annual-cost-trends-hearing/2014/testimony/mahp-testimony.pdf>.
111. Felice J. Freyer and Yasmeen Abutaleb, "Substance abuse bill keeps coverage for inpatient care," *The Boston Globe*, July 31, 2014, <https://www.bostonglobe.com/lifestyle/health-wellness/2014/07/31/final-substance-abuse-bill-keeps-provision-requiring-coverage-for-inpatient-care/9HNtcc5UjPXYNdLdtNNyYL/story.html>.
112. American Society of Addiction Medicine, letter to Massachusetts legislature, Coverage for Acute Treatment Services and Clinical Stabilization Services under HB4236/SB 2142, July 10, 2014, http://www.asam.org/docs/default-source/advocacy/letters-and-comments/asam-letter-ma-hb-4248-and-sb-2142-july-3_2014.pdf?sfvrsn=0.
113. Substance Abuse and Mental Health Services Administration, Medicaid Coverage and Financing of Medications to Treat Alcohol and Opioid Use Disorders (Rockville, MD: SAMSHA, 2014), <http://store.samhsa.gov/shin/content/SMA14-4854/SMA14-4854.pdf>.
114. Michael A. Yokell et al., "Buprenorphine and Buprenorphine/naloxone Diversion, Misuse, and Illicit Use: An International Review," *Current Drug Abuse Reviews* 4, no. 1 (March 2011): 28–41.
115. Michelle R. Lofwall and Jennifer R. Havens, "Inability to Access Buprenorphine Treatment as a Risk Factor for Using Diverted Buprenorphine," *Drug and Alcohol Dependence* 126, no. 3 (December 1, 2012): 379–83.
116. Robin E Clark et al., "The Impact of Prior Authorization on Buprenorphine Dose, Relapse Rates, and Cost for Massachusetts Medicaid Beneficiaries with Opioid Dependence," *Health Services Research* 49, no. 6 (December 2014): 1964–79.
117. U.S. Department of Health and Human Services, Center for Medicare & Medicaid Services, Federal Register 81, no. 61 (March 30, 2016).

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