

Impact of Stigma on Clinician Training for Opioid Use Disorder Care: A Qualitative Study in a Primary Care Learning Collaborative

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ABSTRACT

PURPOSE We undertook a study to examine how stigma influences the uptake of training on medication for opioid use disorder (MOUD) in primary care academic programs.

METHODS We conducted a qualitative study of 23 key stakeholders responsible for implementing MOUD training in their academic primary care training programs that were participants in a learning collaborative in 2018. We assessed barriers to and facilitators of successful program implementation and used an integrated approach to develop a codebook and analyze the data.

RESULTS Participants represented the family medicine, internal medicine, and physician assistant fields, and they included trainees. Most participants described clinician and institutional attitudes, misperceptions, and biases that enabled or hindered MOUD training. Perceptions included concerns that patients with OUD are “manipulative” or “drug seeking.” Elements of stigma in the origin domain (ie, beliefs by primary care clinicians or the community that OUD is a choice and not a disease), the enacted domain (eg, hospital bylaws banning MOUD and clinicians declining to obtain an X-Waiver to prescribe MOUD), and the intersectional domain (eg, inadequate attention to patient needs) were perceived as major barriers to MOUD training by most respondents. Participants described strategies that improved the uptake of training, including giving attention to clinician concerns, clarifying the biology of OUD, and ameliorating clinician fears of being ill equipped to provide care for patients.

CONCLUSIONS OUD-related stigma was commonly reported in training programs and impeded the uptake of MOUD training. Potential strategies to address stigma in the training context, beyond providing content on effective evidence-based treatments, include addressing the concerns of primary care clinicians and incorporating the chronic care framework into OUD treatment.

KEY POINTS

Question

- How does stigma influence delivery of training on medication for opioid use disorder (MOUD) in primary care academic programs?

Findings

- In this qualitative study, interviews with representatives from 23 programs revealed stigma as a common barrier to MOUD training program implementation. Primary care training programs identified tactics used to mitigate the impact of stigma on MOUD training endorsement and participation.

Meaning

- Despite widespread acknowledgment of the public health impact of the opioid crisis and effective evidence-based treatment, stigma persists as a barrier to MOUD training and promotion. As COVID-19 negatively impacts mental health and substance use disorders, and creates new barriers to treatment, it is imperative to build on successful strategies to address stigma and expand access to care.

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INTRODUCTION

The US Preventive Services Task Force recommends screening for unhealthy drug use, including opioid use disorder (OUD), in adults and states that “services for accurate diagnosis, effective treatment, and appropriate care can be



offered or referred.¹¹ Opioid use disorder is a complex disorder with associated adverse social consequences and comorbid psychiatric conditions and communicable diseases.^{1,3} People with OUD have an increased risk of HIV, hepatitis B virus, and hepatitis C virus infections.^{1,4} The disorder thus requires a comprehensive care model that includes medication treatment with integrated behavioral health services, support for unmet social needs, and care for comorbid conditions.⁵ Medication for OUD (MOUD) using methadone, buprenorphine, or extended-release naltrexone has become a standard treatment, and it reduces the risk of death and improves retention in treatment and well-being.^{1,4,6,7} It is estimated, however, that less than 35% of people with OUD receive treatment.⁷ Access to MOUD is limited by several barriers including stigma surrounding OUD and MOUD.⁸⁻¹⁰

Opioid use disorder affects people across age, racial, and socioeconomic groups with large relative increases in recent years among Black or African American people and in rural areas.¹¹ The pervasive impact of the opioid crisis in the United States increases the urgency for effective public health and clinical strategies to improve timely access to detection and high-quality treatment.^{12,13} This action is particularly important with the potential rises in prevalence of both mental health and substance use disorders and with increasing OUD-related deaths during the COVID-19 pandemic. According to the Centers for Disease Control and Prevention, there were more than 90,000 predicted deaths in the United States from drug overdose in the 12 months ending September 2020, about a 29% increase over the prior 12-month period.¹⁴

Despite more than a decade of work to reduce stigma, including campaigns by the Centers for Disease Control and Prevention and by the Substance Abuse and Mental Health Services Administration, stigma remains an intractable barrier to care for people with OUD.¹⁵⁻²⁴ Stigma encompasses a complex set of labels or stereotypes and prejudices attributed to an individual's social or clinical conditions and limits access to health resources because of bias or discrimination.^{23,25-29} Of the frameworks and typologies used to describe stigma, 3 types are particularly relevant for OUD:³⁰ (1) origin stigma—the belief that an individual with a stigmatized condition acquired it because of avoidable actions that were under the control of the individual³¹; (2) enacted stigma—practices of operationalizing labels and stereotypes as policies or patterns of behaviors that are directed at or perceived by those with a stigmatized phenotype³²⁻³⁹; and (3) intersectional stigma—the presence of multiple stigmatizing conditions in people and their collective impact on health outcomes.⁴⁰⁻⁴² Understanding of how these types of stigma serve as barriers to care for people with OUD is in a nascent stage, particularly in primary care clinician training environments.^{23,28,29}

The influence of stigma on efforts to address the needs of people with OUD in training environments that prepare the primary care workforce has important implications, but has received limited attention from educators and policy makers.¹¹

The National Center for Integrated Behavioral Health in Primary Care was funded by the Health Resources and Services Administration (HRSA) of the US Department of Health and Human Services to inform training in integrated behavioral health in primary care. This study aimed to evaluate barriers to and facilitators of uptake of MOUD training within a learning collaborative of primary care training programs.

This study was conducted within the HRSA Primary Care Training and Enhancement (PCTE) program. The PCTE seeks to enhance training for future clinicians, educators, and researchers to strengthen the primary care workforce, and to promote the practice of primary care in communities that are underserved. In 2017, HRSA funded primary care academic programs, including family medicine, internal medicine, and advanced practice provider programs, on implementation of MOUD care curricula as part of initiatives to improve access to OUD care. That year, the National Center for Integrated Behavioral Health in Primary Care formed a learning collaborative of the 2017-2018 cohort of MOUD awardees within the PCTE program to facilitate sharing of best practices and create efficiencies in learning; to better understand barriers to and facilitators of MOUD training implementation; and to identify the critical components needed for success. Participants in this collaborative were educators across the health professions who came together in a community practice model to share learning and best practices. Our analysis focused on how stigma influenced the delivery of MOUD training in these primary care academic programs.

METHODS

We conducted this cross-sectional qualitative study to characterize factors that affect successful implementation, dissemination, and sustainment of MOUD curricula in the primary care setting among participants in the learning collaborative. The study was approved by the institutional review board of the University of Pennsylvania.

Sample

The study team obtained a list of the HRSA-funded PCTE training sites and invited all 59 directors of the programs given the MOUD award to participate. Principal investigators included residency program directors, primary care faculty members in residency or advanced practice provider training programs, and behavioral health faculty members. We used a purposive sampling strategy to include awardees for diverse representation of clinician types (eg, family medicine, physician assistant) and locations (eg, region of the country) of primary care training programs, including both rural and urban settings, and all Census regions.

We made 3 e-mail outreach attempts to each program director. Those who expressed interest were contacted by telephone and provided verbal consent for participation. A total of 23 grantees participated in the study. Five of the

programs chose to include more than 1 person on the call (eg, also including the behavioral health lead for the program).

Data Collection

We conducted interviews between February 2018 and July 2018 with individuals who had primary responsibility for implementing the MOUD training program at their respective institutions.

Our study team, consisting of researchers with expertise in primary care education, MOUD, and qualitative methodologies, developed the interview guide. We used the Consolidated Framework for Implementation Research (CFIR) to structure the guide, and designed interview questions to elucidate factors related to implementing MOUD training, with a particular focus on barriers to and facilitators of successful implementation.^{43,44} Participants were prompted to describe the structure and characteristics of their program including the institutional setting, communication, resources, and leadership; key stakeholders and their perceptions of MOUD training and OUD care; policies that affected MOUD training; and external factors within the broader economic, political, and social context that influenced implementation (see the [Supplemental Appendix](#) for the full interview guide). Interviews lasted approximately 30 minutes and were audio recorded with the consent of each participant. To ensure validity of the data, we implemented standard practices for interviewer training. The audio-recorded interviews were then transcribed and deidentified.

Data Analysis

We entered the data into NVivo version 11.0 software (QSR International) to enable coding and support analysis. We used an integrated approach to develop the codebook and analyze the data.⁴⁵ We first created an a priori set of codes derived from the CFIR domains of inner setting (IS), outer setting (OS), and characteristics of individuals (CI).⁴⁵ Substantial content related to the theme of stigma emerged from a close reading of the first 5 interviews. We therefore created an a priori set of codes derived from key constructs on concepts associated with stigma to further code for the 3 subdomains (origin, enacted, and intersectional stigma) as defined previously.⁴⁶⁻⁵¹ Transcripts were double-coded iteratively until interrater agreement reached 80% for all nodes. Key codes were then summarized and examined for patterns of factors that drive MOUD training implementation. Coding accuracy was evaluated by a senior researcher on the team (F.K.B.), and discrepancies were reviewed and resolved by consensus. The final version of the codebook was applied to all transcripts in the data set.

RESULTS

Program and Trainee Characteristics

Table 1 shows the characteristics of the 23 participating programs. The sample included 6 family medicine residency

programs, 1 internal medicine residency program, 4 physician assistant programs, 3 programs having multiple specialties or institutional affiliations, 3 with unspecified specialty affiliation, and 6 using a consortium or collaborative model (eg, local treatment centers or Federally Qualified Health Center). Programs were located in all 4 US Census regions; 35% were in rural areas and 48% were in medically underserved areas.

Table 2 outlines the types of trainees who participated in each of the training programs. About one-half of the programs were interdisciplinary including students, nurses, and physician assistants, and the majority of programs (87%) included practicing clinicians.

Overarching Themes

Overall, participants described stakeholder attitudes, perceptions, and biases both as important to program success and as challenges to delivery of care for patients with OUD and the provision of MOUD. Clinician hesitancy to engage in the care of patients with OUD, or a “not in my practice” attitude, were reported in several interviews, implying underlying stereotypes and prejudiced beliefs. These beliefs were attributed to a perceived impact of having patients with OUD in waiting rooms or concerns that they would overwhelm the practices and crowd out existing patients. One participant said, “A lot of providers, it scares them when you start talking about drug-seeking patients... All of those biases and judgements come out.” Stigma toward MOUD as a treatment modality was another barrier to implementing MOUD training. Some participants shared clinician concerns that MOUD is not treatment but rather substitutive addiction. Participants also described community-level resistance to OUD care or lack of buy-in.

We also identified approaches that programs used to address stigma. One participant reflected that, “Again, we do trauma-informed care certification as part of this, too, so that we can really have much better understandings for that, as well, and to change our culture in that way.” Because some perceived negative attitudes may reflect a lack of resources or experience, several participants described approaches to promote incorporation of OUD care by addressing negative beliefs held by members of their training program or organization.

Stigma Analysis

Table 3 shows the results of our thematic analysis of stigma organized into the 3 CFIR subdomains—origin, enacted, and intersectional—and maps these findings to the specific CFIR constructs.

Origin Stigma

Within the origin stigma subdomain, we observed reports that primary care clinician beliefs (CFIR-CI) or community beliefs (CFIR-OS) that OUD is a choice and not a disease that were perceived as a major barrier to MOUD training. This was expressed in beliefs that primary care clinicians had a limited role in addiction services and that addiction does

Table 1. Characteristics of Training Programs in the Collaborative

Characteristic	All Programs, % (N = 59)	Participating Programs, % (N = 23)
Home department of training program		
Family medicine residency	29	26
Internal medicine residency	3	4
Pediatrics residency	3	...
Physician assistant program	7	17
Consortium/collaboration	24	26
Institution awardee (eg, hospital)	20	13
Not specified ^a	14	13
Geographic region		
Midwest	22	26
Northeast	34	30
South	27	22
West	17	22
Rural location	32	35
Medically underserved area	58	48
Primary care provider shortage area	46	30

^a Not enough information to determine specialty from abstract provided.

Table 2. Types of Trainees in Training Programs in the Collaborative

Trainee Type	All Programs, % (N = 59)	Participating Programs, % (N = 23)
Students		
Allied health (eg, PT, OT)	14	3
Medical (MD or DO)	32	13
Nursing (BSN or RN)	11	6
Physician assistant	21	10
Graduate medical education trainees ^a		
Family medicine	32	13
Internal medicine	13	5
Pediatric	6	2
Others or unspecified	8	0
Clinicians ^b		
Allied health	6	2
Family medicine	19	7
Internal medicine	9	3
Pediatric	5	1
Physician assistant	6	1
Others/unspecified	17	6
Community stakeholder trainees	4	0
Not reported	8	3

APRN = advanced practice registered nurse; BSN = bachelor of science in nursing; DO = doctor of osteopathic medicine; MD = doctor of medicine; OT = occupational therapist; PT = physical therapist; RN = registered nurse.

^a Includes residents and fellows.

^b Includes fully licensed and practicing physicians, physician assistants, APRNs, and faculty members.

not require a medical intervention, which inhibited the uptake of MOUD among clinicians. Clinicians who perceived addiction therapy as requiring willpower and patients to “change” disagreed with using MOUD and viewed addiction therapy as outside of the patient-clinician relationship. Participants noted that stigma also operated in non–primary care settings such as substance abuse and behavioral health communities that support only abstinence or antagonist therapy (CFIR-OS).

Participants reported success with addressing clinician and staff beliefs (CFIR-CI) in the moral modality of MOUD. They noted that ongoing faculty development to address clinician understanding of addiction as a disease appeared to change clinician and institutional responses to support MOUD. Participants noted that clinician acceptance of the concept that addiction is a treatable disease facilitated MOUD uptake. Some noted a culture shift (CFIR-IS) with incorporation of content to address origin stigma constructs into the training and noted that more clinicians became amenable to MOUD. Participants commented that those who have deeply held beliefs in OUD as a choice may opt to leave practices providing OUD care (CFIR-CI).

Enacted Stigma

The data revealed enacted stigma across all CFIR domains. Clinician “anxiety” (CFIR-CI) about delivering care to patients with OUD, and actual or perceived time limitations associated with obtaining the MOUD X-Waiver may be manifestations of enacted stigma. Participants often used words such as “terrified,” “fearful,” and “scared” to describe the clinicians’ reactions, and postulated that clinicians might avoid MOUD because it seems overwhelming. They reported concerns that included clinician fear of conflict (CFIR-CI) with patients over pain management, fear of Drug Enforcement Agency and government oversight (CFIR-OS) with an X-Waiver, and fear of changing their patient mix. Additionally, participants noted that clinicians who themselves struggle with sobriety may avoid MOUD. Negative attitudes toward MOUD sometimes led to a lack of support from some health care systems in programs. Some hospitals were noted to have bylaws banning MOUD (CFI-IS). One participant noted that their substance abuse and behavioral health community supports only abstinence or antagonist therapy and endorsed a local policy barring substitutive therapy (CFIR-OS). Participants also noted that substance use support groups or self-help groups with an abstinence philosophy may deter patients from using MOUD (CFIR-OS).

Assuaging clinician concerns about the experience of MOUD in their clinic and waiting rooms may be important. One program reported that doing so improved clinician willingness to participate in training (CFIR-IS).

Table 3. Stigma Subdomains: Definitions, Sample Quotes, and Related CFIR Constructs

Subdomain	Definition and Sample Quotes for the Subdomain	CFIR Construct
Origin stigma	Definition: Stigma based on perceptions about the controllability of the stigmatizing condition (ie, OUD) "So number one, they really don't believe that substance use disorders are diseases. They think that they ascribe to the moral model. And so if you don't believe it's a disease, then why would you even believe that it's treatable?" (Participant 2281)	Characteristics of individuals
	"I sat with him during one of the addiction lectures, and it was clear that he just had no idea what to do. He's sort of thinking in the old way. This is medicine. The patient doesn't want to change, and so I can't make them change." (Participant 3071)	
	"Fortunately, or unfortunately, to me that still revolves a lot around sigma and how they personally feel about it, if they're people who feel well, all they do—they just have to stop. It takes willpower..." (Participant 3291)	Outer setting
	"And in some of the rural areas, there are community standards and even ordinances that are, I would say, decidedly anti-MAT...and they are still trying to kind of apply Deuteronomic justice to the addiction problem. This is a character failing, and these people need punishment, not treatment ... they're coming on board with ideas, like universalizing Narcan, and using Vivitrol, since that's pure antagonist therapy. But replacement therapy—there are still barriers in outlying areas ..." (Participant 6081)	
Enacted stigma	"... I think that that happens not just at that program but our patients who are going to various NA or AA groups around the city. I think that the 12-step program still, depending upon which program it is, can have a culture that's against MAT, and sometimes our patients share that with us, and sometimes they don't, but I think that's been one of the big sort of cultural issues we've been working with." (Participant 3072)	
	Definition: Behaviors or policies that are enacted in such a way as to discriminate against people with the stigmatized traits	
	"It's almost like back maybe when HIV came out and it was bad... I have my first patient who's HIV positive and I don't know what to do ... they just didn't have that knowledge, and so people didn't want to learn how to even manage or treat these people ... I see the same parallel with opioids." (Participant 3291)	Characteristics of individuals
	"They have this impression that, if they get a waiver, then their entire practice will become nothing but Suboxone prescribing. They think they're going to be flooded with these addicted patients, and they're terrified to lose the variety in their practice ... that's their fear." (Participant 3071)	
	"I think we would be pretty naïve to believe that there aren't clinicians out there who have some type of a substance abuse disorder... But for others, if they have it and overcome it, basically they just need to stay away from dealing with it to protect their own sobriety." (Participant 3291)	Outer setting
	"So it's basically, it's really shut down any kind of controlled substance prescribing in many case, kind of regionwide. There's been a series of highly publicized drug busts all over the evening news and all over the newspapers. And it has really changed I think the local perception of what's safe to do in your medical practice and what isn't." (Participant 2281)	
	"However, after, quite frankly 2 very brutal conversations ... before we even got started doing that program, we knew right away that we were going to need to develop a module to accompany the training that was going to alleviate physical fears of bringing an addictive patient population into the practice ... we tried to develop a supplement to the waiver training that would help providers address all of their fears and all of their concerns, and package it into 4 hours. We did that, and when folks found out that we were going to address those things, they were very willing to sign up for the training." (Participant 6121)	Inner setting
	"I think some of it too is just you have to go out and get educated and trained. Many of them are already busy with the practices that they have, or the responsibilities in the residency, or the medical school education. They just don't have the time to take this on ... I think some of it is beliefs, but some of it is just the practicality of going and learning one more skill set." (Participant 3053)	
"... but for folks who are thinking about getting X-Waivers, it's primarily primary care ... those folks are already busy. They're already inundated, and so the weight of something like this is perceived as just a step too far. It's getting through all of those mental barriers and then getting through the procedural barriers with things like insurance." (Participant 7031)		
Intersectional stigma	Definition: The consequences of stigma on multiple attributes possessed by an individual as part of their social identity or clinical phenotype	
	"He's talking about how this has challenged his own assumptions on things. I think just going through the training ... and talking about who's involved and who are these people, and really removing that idea that these are dirty creatures that live on the street that nobody would ever want in their community, this is everybody ..." (Participant 2282)	Characteristics of individuals
	"In many ways we're lucky because we really explicitly—if you're going to come work here, you already have bought in that marginalized people matter. And that people can do ugly things and still deserve kindness. That's such hard work if that's not a core value for everyone in the institution. I think that's a huge barrier." (Participant 3011)	Inner setting
	"I think if you don't see it, you're not around it, and it's not impacting you, or your community, or your clinic, or your patients, you're going to be like it's really not—we don't have that issue around here, so it's not that big of a deal for us that we need to consider it." (Participant 3291)	Outer setting

Participants noted that the training requirements do represent a considerable barrier (CFIR-OS) and recommended the inclusion of content on acknowledging the practical realities of fitting new training into already packed schedules. Programs tried using incentives such as free trainings or continuing medical education credits to address actual or perceived time limitations.

Intersectional Stigma

Participants highlighted the potential of intersectional stigma in clinicians who do not regularly care for patients having either OUD or multiple layers of marginalization. Intersectional stigma was deduced from language used to describe people with OUD that was attributed to clinicians and community members, including language that was dehumanizing and that related OUD to populations that are housing insecure. Participants noted that stigma was less prevalent in clinical settings that specialized in populations that are marginalized, because staff and clinicians already had "open-mindedness" about the needs of the patients with OUD (CFIR-IS). One participant reflected that such practice settings are conducive for attracting clinicians who do not hold negative beliefs. Others reflected that practice settings that do not promote care for populations that are marginalized may turn a blind eye to the needs of patients with OUD and have a dismissive attitude (CFIR-IS).

Participants noted success from addressing social and perceptual barriers around patients with OUD. This approach made clinicians more aware of their own personal implicit biases regarding OUD (CFIR-CI). Addressing misperceptions about who experiences OUD and the prevalence of this disorder in the population may also reduce bias. Participants recommended training on the social science/history of drug addiction, trauma-informed models of care, conflict management, and communication strategies to ameliorate clinician fears of being ill equipped to provide care for patients they perceived as "manipulative" or "drug seeking."

DISCUSSION

Management of OUD requires a holistic approach using medications integrated with behavioral health and social services and care for comorbid conditions. Primary care is often the primary source of care for patients with OUD and is therefore critical for improving health outcomes in this patient population.⁵² Our study reveals that stigma may be limiting the delivery of MOUD by primary care clinicians, offers a conceptual framework that describes the primary domains in which stigma manifests in primary care, and points to intervention opportunities at the CFIR levels. Participants in this study reported encountering negative perceptions and biases toward people living with OUD as well as the use of MOUD in their practice. Stigma was reported as pervasive across multiple levels and was observed among ancillary staff, clinicians, and leaders of health care settings, as well as in the

community. These findings are consistent with prior literature on the association of stigma with both mental health and substance use disorders. This study provides evidence on the potential impact of stigma in the training setting and in the uptake of MOUD training.

Our findings also suggest that stigma related to OUD may be addressable. Although the stigma was at times daunting for participants as they launched MOUD training programs for primary care clinicians, there are important lessons for increasing access to MOUD from this study. Simply providing MOUD training as the sole content area may not be enough for clinicians to engage in the care of patients with OUD. Curricula on MOUD may also need to provide evidence-based best practices on how it improves patient outcomes. In addition to OUD content, training models should include content and strategies to engage clinicians in countering stigma and should address the experiences or concerns of clinicians about the care of patients with OUD. For instance, in our study, participants noted success with incorporating information on misperceptions about OUD in their training to shift organizational culture and thereby make a larger population of primary care clinicians more knowledgeable in OUD care. Our results suggest that training addressing stigma could include value clarifications and trauma-informed care approaches.^{53,54}

Successful stigma training may incorporate acknowledging and validating clinician concerns such as the impact of MOUD provision on patient diversity and clinical workload, care of patients with chronic pain, and need for conflict management skills. It may also require better clinician understanding of the effect of MOUD on improving patients' quality of life and health outcomes. This goal may be facilitated by translating OUD care into the chronic disease care framework.⁵⁵ Primary care is often the only source of care for patients with OUD,⁵⁶⁻⁵⁹ and stigma may be perpetuated when MOUD provision is physically separate from primary care or restrictions are placed on treatment and prescribing.⁶⁰

A strength of the study is its deep perspective on barriers to and facilitators of uptake of MOUD training and the specialty and geographic diversity of training programs. The study also has some limitations, however, including the limited quantitative data that did not include information on the prevalence of barriers and facilitators, and the lack of patient perspectives. With the greater proportion of clinicians having X-Waivers in more recent years, there is additionally the need for more contemporary data. Also, a gap remains regarding perspectives from community practices without affiliated training programs and from those not funded by the HRSA program.

Federal programs and legislation such as the SUPPORT for Patients and Communities Act have eased restrictions on OUD care and aim to improve the quality of this care.⁶¹ Regional centers of excellence were created to educate primary care professionals on OUD care. These steps have increased the proportion of patients with OUD receiving

MOUD in primary care.⁶² Our study suggests that HRSA's investment of supportive resources, technical assistance, and targeted training may be having a positive impact on clinician training and should continue to be advanced and improved. Sustainable, predictable funding may be necessary to allow programs to plan for long-term interventions to meet this growing public health crisis and support scalable models of integrating MOUD into primary care. As noted by Spetz and colleagues,⁵² capacity to provide MOUD care as measured by the growth in X-Waivers continues to increase; however, in recent years, this growth has slowed, while rates of opioid overdose deaths have risen.¹⁴ Potential key priority areas include continued expansion of access through primary care along with OUD training, use of telehealth for OUD care, connection of stakeholders to opioid-related resources, sharing of best practices through regional collaboratives or taskforces, and changing policy and future investments.

Achieving stigma-free OUD care will ultimately require a cultural shift in clinical and educational settings, one that readily dispels myths associated with origin stigma, as well as the designing of curricula that reinforce learning opportunities to care for people with OUD that may be applied to other health conditions in primary care. Tackling the opioid epidemic requires a cross-sector response, and it is important to note that many of the program participants interviewed identified state-level policy barriers to successful MOUD implementation including licensure requirements, insurance coverage, and funding. Additionally, it is important to address beliefs held by stakeholders in the substance abuse and behavioral health community that support only abstinence or antagonist therapy.^{7,63} Addressing such beliefs through engagement to dispel myths about MOUD may decrease stigma.

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Key words: stigma; primary care; opioid addiction; opioid use disorder; drug users; opiate substitution treatment; MAT; buprenorphine; methadone; naltrexone; training programs; medical education; addiction medicine; vulnerable populations; qualitative research

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 [Supplemental materials](#)

References

1. U.S. Preventive Services Task Force; Krist AH, Davidson KW, et al. Screening for Unhealthy Drug Use: US Preventive Services Task Force Recommendation Statement. *JAMA*. 2020;323(22):2301-2309. [10.1001/jama.2020.8020](#)
2. Sharma B, Bruner A, Barnett G, Fishman M. Opioid use disorders. *Child Adolesc Psychiatr Clin N Am*. 2016;25(3):473-487. [10.1016/j.chc.2016.03.002](#)
3. Schuckit MA. Treatment of opioid-use disorders. *N Engl J Med*. 2016;375(4):357-368. [10.1056/NEJMra1604339](#)
4. Degenhardt L, Charlson F, Stanaway J, et al. Estimating the burden of disease attributable to injecting drug use as a risk factor for HIV, hepatitis C, and hepatitis B: findings from the Global Burden of Disease Study 2013. *Lancet Infect Dis*. 2016;16(12):1385-1398. [10.1016/S1473-3099\(16\)30325-5](#)
5. Watkins KEOA, Ober AJ, Lamp K, et al. Implementing the Chronic Care Model for opioid and alcohol use disorders in primary care. *Prog Community Health Partnersh*. 2017;11(4):397-407. [10.1353/cpr.2017.0047](#)
6. Connery HS. Medication-assisted treatment of opioid use disorder: review of the evidence and future directions. *Harv Rev Psychiatry*. 2015;23(2):63-75. [10.1097/HRP.0000000000000075](#)
7. Barriers to broader use of medications to treat opioid use disorder. In: Mancher M, Leshner AI, eds. *Medications for Opioid Use Disorder Save Lives*. National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Health Sciences Policy; Committee on Medication-Assisted Treatment for Opioid Use Disorder; 2019.
8. Earnshaw V, Smith L, Copenhaver M. Drug addiction stigma in the context of methadone maintenance therapy: An investigation into understudied sources of stigma. *Int J Ment Health Addict*. 2013;11(1):110-122. [10.1007/s11469-012-9402-5](#)
9. Biancarelli DL, Biello KB, Childs E, et al. Strategies used by people who inject drugs to avoid stigma in healthcare settings. *Drug Alcohol Depend*. 2019;198:80-86. [10.1016/j.drugalcdep.2019.01.037](#)
10. Claborn K, Scott K, Becker SJ. Cross-training needs among community-based clinicians in HIV and substance use. *BMC Med Educ*. 2022;22(1):629. [10.1186/s12909-022-03682-3](#)
11. Scholl L, Seth P, Kariisa M, Wilson N, Baldwin G. Drug and opioid-involved overdose deaths – United States, 2013-2017. *MMWR Morb Mortal Wkly Rep*. 2018;67(5152):1419-1427. [10.15585/mmwr.mm675152e1](#)
12. Dowell D, Haegerich TM, Chou R. CDC Guideline for Prescribing Opioids for Chronic Pain – United States, 2016. *MMWR Recomm Rep*. 2016;65(1):1-49. [10.1001/jama.2016.1464](#)
13. Lagisetty P, Klasa K, Bush C, Heisler M, Chopra V, Bohnert A. Primary care models for treating opioid use disorders: what actually works? A systematic review. *PLoS One*. 2017;12(10):e0186315. [10.1371/journal.pone.0186315](#)
14. Ahmad FB, Rossen LM, Sutton P. *Provisional Drug Overdose Death Counts*. National Center for Health Statistics; 2022.
15. Centers for Disease Control and Prevention. Stigma reduction. Accessed Oct 1, 2022. <https://www.cdc.gov/stopoverdose/stigma/index.html>
16. Substance Abuse and Mental Health Services Administration (SAMHSA). The power of perceptions and understanding: changing how we deliver treatment and recovery services. Accessed Oct 1, 2022. https://www.samhsa.gov/sites/default/files/programs_campaigns/02_webcast_1_resources-508.pdf
17. Olsen Y, Sharfstein JM. Confronting the stigma of opioid use disorder—and its treatment. *JAMA*. 2014;311(14):1393-1394. [10.1001/jama.2014.2147](#)
18. MacDonald K, Lamb K, Thomas ML, Khentigan W. Buprenorphine maintenance treatment of opiate dependence: correlations between prescriber beliefs and practices. *Subst Use Misuse*. 2016;51(1):85-90. [10.3109/10826084.2015.1089905](#)
19. Andraka-Christou B, Capone MJ. A qualitative study comparing physician-reported barriers to treating addiction using buprenorphine and extended-release naltrexone in U.S. office-based practices. *Int J Drug Policy*. 2018;54:9-17. [10.1016/j.drugpo.2017.11.021](#)
20. John S, Boorman DW, Potru S. Identifying barriers to buprenorphine treatment for patients with opioid use disorder among anesthesiologists and pain practitioners: a survey study [published online ahead of print Aug 24, 2022]. *J Addict Med*. [10.1097/ADM.0000000000001066](#)
21. Urada D, Teruya C, Gelberg L, Rawson R. Integration of substance use disorder services with primary care: health center surveys and qualitative interviews. *Subst Abuse Treat Prev Policy*. 2014;9:15. [10.1186/1747-597X-9-15](#)
22. DeFlavio JR, Rolin SA, Nordstrom BR, Kazal LA Jr. Analysis of barriers to adoption of buprenorphine maintenance therapy by family physicians. *Rural Remote Health*. 2015;15:3019. [10.22605/RRH3019](#)
23. Lloyd C. The stigmatization of problem drug users: a narrative literature review. *Drugs Educ Prev Policy*. 2013;20(2):85-95. [10.3109/09687637.2012.743506](#)

24. Mackey K, Veazie S, Anderson J, Bourne D, Peterson K. *Evidence Brief: Barriers and Facilitators to Use of Medications for Opioid Use Disorder*. Department of Veterans Affairs; 2019.
25. Link BG, Phelan JC. Conceptualizing stigma. *Annu Rev Sociol*. 2001;27:363-385. [10.1146/annurev.soc.27.1.363](https://doi.org/10.1146/annurev.soc.27.1.363)
26. Wakeman SE, Rich JD. Barriers to medications for addiction treatment: how stigma kills. *Subst Use Misuse*. 2018;53(2):330-333. [10.1080/10826084.2017.1363238](https://doi.org/10.1080/10826084.2017.1363238)
27. Goffman E. *Stigma: Notes on the Management of Spoiled Identity*. Prentice-Hall; 1963.
28. Corrigan PW, Nieweglowski K. Stigma and the public health agenda for the opioid crisis in America. *Int J Drug Policy*. 2018;59:44-49. [10.1016/j.drugpo.2018.06.015](https://doi.org/10.1016/j.drugpo.2018.06.015)
29. Corrigan P, Schomerus G, Shuman V, et al. Developing a research agenda for understanding the stigma of addictions, Part I: lessons from the mental health stigma literature. *Am J Addict*. 2017;26(1):59-66. [10.1111/ajad.12458](https://doi.org/10.1111/ajad.12458)
30. Pachankis JE, Hatzenbuehler ML, Wang K, et al. The burden of stigma on health and well-being: a taxonomy of concealment, course, disruptiveness, aesthetics, origin, and peril across 93 stigmas. *Pers Soc Psychol Bull*. 2018;44(4):451-474. [10.1177/0146167217741313](https://doi.org/10.1177/0146167217741313)
31. Jones EE, Farina A, Hastorf AH, Markus H, Miller DT, Scott RA. *Social Stigma: The Psychology of Marked Relationships*. W.H. Freeman & Company; 1984.
32. Scambler G. Re-framing stigma: Felt and enacted stigma and challenges to the sociology of chronic and disabling conditions. *Soc Theory Health*. 2014;2:29-46. [10.1057/palgrave.sth.8700012](https://doi.org/10.1057/palgrave.sth.8700012)
33. Algarin AB, Zhou Z, Cook CL, Cook RL, Ibañez GE. Age, sex, race, ethnicity, sexual orientation: intersectionality of marginalized-group identities and enacted HIV-related stigma among people living with HIV in Florida. *AIDS Behav*. 2019;23(11):2992-3001. [10.1007/s10461-019-02629-y](https://doi.org/10.1007/s10461-019-02629-y)
34. Lekas HM, Siegel K, Leider J. Felt and enacted stigma among HIV/HCV-coinfected adults: the impact of stigma layering. *Qual Health Res*. 2011;21(9):1205-1219. [10.1177/1049732311405684](https://doi.org/10.1177/1049732311405684)
35. Link BG, Cullin FT, Struening EL, Shrout PE, Dohrenwend BP. A modified labeling theory approach to mental disorders: an empirical assessment. *Am Sociol Rev*. 1989;54(3):400-423. [10.2307/2095613](https://doi.org/10.2307/2095613)
36. Bawaskar HS. The many stigmas of mental illness. *Lancet*. 2006;367(9509):1396-1397. [10.1016/S0140-6736\(06\)68610-8](https://doi.org/10.1016/S0140-6736(06)68610-8)
37. Frank C, Zamorski MA, Colman I. Stigma doesn't discriminate: physical and mental health and stigma in Canadian military personnel and Canadian civilians. *BMC Psychol*. 2018;6(1):61. [10.1186/s40359-018-0273-9](https://doi.org/10.1186/s40359-018-0273-9)
38. Marti-Pastor M, Ferrer M, Alonso J, et al. Association of enacted stigma with depressive symptoms among gay and bisexual men who have sex with men: Baltimore, 2011 and 2014. *LGBT Health*. 2020;7(1):47-59. [10.1089/lgbt.2018.0230:47-59](https://doi.org/10.1089/lgbt.2018.0230:47-59).
39. Gray AJ. Stigma in psychiatry. *J R Soc Med*. 2002;95(2):72-76. [10.1177/014107680209500205](https://doi.org/10.1177/014107680209500205)
40. Turan B, Hatcher AM, Weiser SD, Johnson MO, Rice WS, Turan JM. Framing mechanisms linking HIV-related stigma, adherence to treatment, and health outcomes. *Am J Public Health*. 2017;107(6):863-869. [10.2105/AJPH.2017.303744](https://doi.org/10.2105/AJPH.2017.303744)
41. Chambers LA, Rueda S, Baker DN, et al; Stigma Review Team. Stigma, HIV and health: a qualitative synthesis. *BMC Public Health*. 2015;15(1):848. [10.1186/s12889-015-2197-0](https://doi.org/10.1186/s12889-015-2197-0)
42. Jackson-Best F, Edwards N. Stigma and intersectionality: a systematic review of systematic reviews across HIV/AIDS, mental illness, and physical disability. *BMC Public Health*. 2018;18(1):919. [10.1186/s12889-018-5861-3](https://doi.org/10.1186/s12889-018-5861-3)
43. Damschroder LJ, Aron DC, Keith RE, Kirsh SR, Alexander JA, Lowery JC. Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. *Implement Sci*. 2009;4(1):50. [10.1186/1748-5908-4-50](https://doi.org/10.1186/1748-5908-4-50)
44. Consolidated Framework for Implementation Research. Tools: interview guide tool. Accessed Sep 20, 2022. <https://cfirguide.org/tools/>
45. Bradley EH, Curry LA, Devers KJ. Qualitative data analysis for health services research: developing taxonomy, themes, and theory. *Health Serv Res*. 2007;42(4):1758-1772. [10.1111/j.1475-6773.2006.00684.x](https://doi.org/10.1111/j.1475-6773.2006.00684.x)
46. Corrigan PW, Schomerus G, Shuman V, et al. Developing a research agenda for reducing the stigma of addictions, part II: lessons from the mental health stigma literature. *Am J Addict*. 2017;26(1):67-74. [10.1111/ajad.12436](https://doi.org/10.1111/ajad.12436)
47. Taylor TN, DeHovitz J, Hirshfield S. Intersectional stigma and multi-level barriers to HIV testing among foreign-born Black men from the Caribbean. *Front Public Health*. 2020;7:373. [10.3389/fpubh.2019.00373](https://doi.org/10.3389/fpubh.2019.00373)
48. Li L, Lin C, Feng N, et al. Stigma related to HIV and drug use: layers, types, and relations to mental health. *AIDS Behav*. 2020;24(8):2347-2354. [10.1007/s10461-020-02794-5](https://doi.org/10.1007/s10461-020-02794-5)
49. Boyle MP. Enacted stigma and felt stigma experienced by adults who stutter. *J Commun Disord*. 2018;73:50-61. [10.1016/j.jcomdis.2018.03.004](https://doi.org/10.1016/j.jcomdis.2018.03.004)
50. Turan JM, Elafros MA, Logie CH, et al. Challenges and opportunities in examining and addressing intersectional stigma and health. *BMC Med*. 2019;17(1):7. [10.1186/s12916-018-1246-9](https://doi.org/10.1186/s12916-018-1246-9)
51. Calonge N. Clinical and community prevention and treatment service for depression: a whole greater than the sum of its parts. *Am J Prev Med*. 2012;42(5):556-557. [10.1016/j.amepre.2012.01.015](https://doi.org/10.1016/j.amepre.2012.01.015)
52. Spetz J, Hailer L, Gay C, et al. Buprenorphine treatment: advanced practice nurses add capacity. *Health Aff (Millwood)*. 2022;41(9):1231-1237. [10.1377/hlthaff.2022.00310](https://doi.org/10.1377/hlthaff.2022.00310)
53. Dichter ME, Teitelman A, Klusaritz H, Maurer DM, Cronholm PF, Doubeni CA. Trauma-informed care training in family medicine residency programs: results from a CERA survey. *Fam Med*. 2018;50(8):617-622. [10.22454/FamMed.2018.505481](https://doi.org/10.22454/FamMed.2018.505481)
54. Faherty LJ, Doubeni CA. Unintended consequences of screening for Ebola. *Am J Public Health*. 2015;105(9):1738-1739. [10.2105/AJPH.2015.302768](https://doi.org/10.2105/AJPH.2015.302768)
55. Cochran G, Cole ES, Warwick J, et al. Rural access to MAT in Pennsylvania (RAMP): a hybrid implementation study protocol for medication assisted treatment adoption among rural primary care providers. *Addict Sci Clin Pract*. 2019;14(1):25. [10.1186/s13722-019-0154-4](https://doi.org/10.1186/s13722-019-0154-4)
56. Cole ES, DiDomenico E, Cochran G, et al. The role of primary care in improving access to medication-assisted treatment for rural Medicaid enrollees with opioid use disorder. *J Gen Intern Med*. 2019;34(6):936-943. [10.1007/s11606-019-04943-6](https://doi.org/10.1007/s11606-019-04943-6)
57. Choi NG, DiNitto DM, Marti CN, Choi BY. Adults who misuse opioids: substance abuse treatment use and perceived treatment need. *Subst Abuse*. 2019;40(2):247-255. [10.1080/08897077.2019.1573208](https://doi.org/10.1080/08897077.2019.1573208)
58. Romo E, Ulbricht CM, Clark RE, Lapane KL. Correlates of specialty substance use treatment among adults with opioid use disorders. *Addict Behav*. 2018;86:96-103. [10.1016/j.addbeh.2018.03.012](https://doi.org/10.1016/j.addbeh.2018.03.012)
59. Walley AY, Alperen JK, Cheng DM, et al. Office-based management of opioid dependence with buprenorphine: clinical practices and barriers. *J Gen Intern Med*. 2008;23(9):1393-1398. [10.1007/s11606-008-0686-x](https://doi.org/10.1007/s11606-008-0686-x)
60. Gerrity M. *Integrating Primary Care Into Behavioral Health Settings: What Works for Individuals With Serious Mental Illness*. Millbank Memorial Fund; 2016.
61. Davis CS. The SUPPORT for Patients and Communities Act - What will it mean for the opioid-overdose crisis. *N Engl J Med*. 2019;380(1):3-5. [10.1056/NEJMp1813961](https://doi.org/10.1056/NEJMp1813961)
62. Wen H, Borders TF, Cummings JR. Trends in buprenorphine prescribing by physician specialty. *Health Aff (Millwood)*. 2019;38(1):24-28. [10.1377/hlthaff.2018.05145](https://doi.org/10.1377/hlthaff.2018.05145)
63. Olsen Y, Sharfstein JM. Confronting the stigma of opioid use disorder—and its treatment. *JAMA*. 2014;311(14):1393-1394. [10.1001/jama.2014.2147](https://doi.org/10.1001/jama.2014.2147)