Title

Perspectives on APRN prescribing of medications for opioid use disorder: Key barriers remain

Authors

Chapman, Susan A
Fraimow-Wong, Leah
Phoenix, Bethany J
et al.

Publication Date

2024-02-01

DOI

10.1016/j.josat.2023.209215

Peer reviewed

HHS Public Access

Author manuscript

J Subst Use Addict Treat. Author manuscript; available in PMC 2024 May 14.

Published in final edited form as:

J Subst Use Addict Treat. 2024 February ; 157: 209215. doi:10.1016/j.josat.2023.209215.

Perspectives on APRN prescribing of medications for opioid use disorder: Key Barriers Remain

Susan A. Chapman,
University of California San Francisco School of Nursing, Department of Social and Behavioral Sciences, 490 Illinois Street, 12th Floor, San Francisco, CA 94143

Leah Fraimow-Wong,
UCSF School of Medicine, 533 Parnassus Ave, San Francisco, CA 94143

Bethany J. Phoenix,
University of California San Francisco School of Nursing, Department of Community Health Systems, 2 Koret Way, 5th Floor, San Francisco, CA 94143-0608

Matthew Tierney,
University of California San Francisco School of Nursing, Department of Community Health Systems, 2 Koret Way, 5th Floor, San Francisco CA 94143

Joanne Spetz
Philip R. Lee Institute for Health Policy Studies, School of Medicine, University of California, San Francisco, 490 Illinois Street, 7th Floor, San Francisco, CA, 94158

Abstract

Introduction—Deaths from drug overdoses are rising dramatically in the United States. Treatment for opioid use disorders may include behavioral treatments as well as medications for opioid use disorders (MOUD). Buprenorphine can be prescribed by physicians, nurse practitioners (NPs), other advanced practice registered nurses (APRNs), and physician assistants (PAs) and required a training and a federal waiver until recently. The number of NP MOUD prescribers grew steadily over the past decade, but research has identified state-level scope of practice regulations as a barrier to NP MOUD prescribing. This article explores the contributions of, and remaining barriers faced by NP and other APRN MOUD prescribers. We describe qualitative findings from a study of NPs and other key stakeholders involved in MOUD treatment in four states with two differing levels of regulatory structure.

Methods—In this qualitative study, we conducted site visits and semi-structured interviews with NPs and other APRNs, physicians, clinic managers, and regulators in four states including New Mexico and West Virginia (full practice authority for NPs), and Ohio and Michigan (which require

(Corresponding author) susan.chapman@ucsf.edu.

Declaration of interests None for any authors

physician supervision). Interview notes were entered into a qualitative software package and coded and reviewed by two members of the research team. Data were grouped into key themes.

Results—A total of 76 participants participated in individual or small group interviews in the four states. We found key themes and several subthemes that describe NP practice in MOUD. Participants described key contributions of NP engagement in MOUD, including increasing access, serving rural areas, the unique role of psychiatric NPs, and the value of the nursing model of care in working with people with substance use disorders (SUD). Participants also identified barriers including scope of practice regulations, other regulatory barriers, stigma, and lack of supportive services to address psychosocial needs.

Conclusions—The waiver requirements were eliminated at the end of 2022 in federal budget legislation. Other barriers for NP and other APRN prescribers remain and should be addressed in practice, and in state and federal regulations. Research needs to explore the impact of the waiver elimination on MOUD prescribing and access to services.

Keywords

Medications for opioid use disorder (MOUD); Access to treatment; Nurse practitioners

1. Introduction

Deaths from drug overdoses have risen dramatically in the United States over the past two decades. Data from the Centers for Disease Control (CDC) indicate that more than 101,000 deaths occurred from drug overdoses in the year ending in August 2022 (Ahmad et al., 2023). Overdose death rates increased precipitously during the pandemic and have stayed high since then (Ahmad et al., 2023). Synthetic opioids such as fentanyl have been increasingly involved, with presence in more than two-thirds of the overdose deaths in the year ending in August 2022 (Ahmad et al., 2023). Racial disparities in overdose deaths also sharply increased in recent years, with American Indian / Alaska Native and Black Americans having the highest overdose death rates overall in 2021 despite similar rates of opioid misuse (Kariisa et al., 2022; Lagisetty et al., 2019). The rate of overdose deaths for Black middle aged men doubled between 2018 and 2021, and a CDC report found the highest increases to be in counties with greater income inequality (Han et al., 2022; Kariisa et al., 2022).

The treatment for opioid use disorders (OUD) may include behavioral treatments and counseling as well as medications for opioid use disorders (MOUD), also known as medication-assisted treatment (MAT), which include methadone, buprenorphine, and naltrexone, each with specific actions on opioid receptors. Repeated meta-analyses of a variety of studies examining mortality rates among individuals with OUD actively receiving or not receiving treatment with buprenorphine or methadone have shown that participation in treatment is associated with markedly lower mortality rates (Ma et al., 2019; Santo et al., 2021; Sordo et al., 2017). Buprenorphine can be prescribed in office-based practices by physicians, nurse practitioners (NPs), other advanced practice registered nurses (APRNs), and physician assistants (PAs) who are authorized to prescribe schedule 3 controlled substances (Comprehensive Addiction and Recovery Act, 2016). In 2020 CMS approved

treatment of OUD via telehealth (Ng et al., 2022). However, only a small fraction of those with OUD have received MOUD (Gupta et al., 2022). Significant racial disparities in access to MOUD also exist, with white individuals significantly more likely to receive treatment with buprenorphine than all other racial groups (Lagisetty et al., 2019).

Beginning in 2000, prescribing buprenorphine outside of licensed narcotics treatment programs required physicians to obtain a waiver from the Drug Enforcement Administration (DEA) (commonly called an X-waiver) after completing 8 hours of training, and clinicians had limits on the number of patients they could concurrently treat (Drug Addiction Treatment Act, 2000). The waiver regulations changed in 2016 to include NPs and PAs, and later, in 2018, other APRNs. The number of NPs with waivers grew steadily after applications were opened to them in 2017 (Barnett et al., 2019; Spetz et al., 2019, 2022). Regulatory changes in 2016 also increased the number of patients that could be treated by a single clinician. Exhibit 1 displays a timeline of federal regulations from 2000 to early 2023.

Many clinicians considered the waiver requirements for MOUD to be burdensome and viewed them as a barrier to treatment (Jones et al., 2023). Several studies have identified various possible barriers to growth in buprenorphine prescribing, including lack of mental health and specialist support, scope of practice regulations, perceived inexperience, prior authorizations, and concerns about diversion (Andraka-Christou et al., 2022; Andrilla et al., 2020).

The waiver requirement for clinicians prescribing buprenorphine for OUD was eliminated by the US Congress at the end of 2022 as part of a budget reconciliation package (Consolidated Appropriations Act, 2022). The details of implementation of the waiver elimination, notification processes, future tracking, and training requirements of OUD prescribers are still being developed. Nonetheless, research on the availability of MOUD and barriers to engagement as MOUD providers suggests that NPs and other APRNs will play an important role in expanded access to treatment, and that elimination of the waiver requirement may not facilitate sufficient workforce growth to meet treatment needs. This paper describes qualitative findings from a study of NP and APRN providers in MOUD practice in four states with differing levels of oversight for NP practice. We present key themes from interviews describing the barriers faced by NPs and other APRNs in offering MOUD treatment, as well as the contributions they were making prior to the elimination of waiver regulations. Our findings shed light on the next steps that are necessary to ensure access to treatment for those who need it.

2. Methods

This paper presents additional qualitative analysis on themes from a previous study. A full description of the qualitative methods used in this subanalysis is found in (Anonymous, 2021). We used a comparative case study approach to explore NP MOUD practice in four states selected based on variation in NP scope of practice regulations and in the percent of NPs with waivers in the state. A comparative case study methodology involves the study and analysis of an issue across multiple research sites (Creswell, 2007).

We identified states with higher-than-average opioid overdose rates in 2016. In that year, 22 states had opioid overdose death rates above 15 per 100,000. We categorized those states according to whether they allowed NPs to prescribe buprenorphine without physician oversight and according to the percentage of NPs with X-waivers and selected four states to conduct in-person site visits. The final selected states included two states with independent NP practice, New Mexico and West Virginia, and two states that required physician supervision, Ohio and Michigan. The states selected represented geographic diversity in the US and a mix of urban and rural population centers. The study was approved by the university's Institutional Review Board.

2.1 Sampling and Recruitment

From a list of known contacts in the four states and using snowball sampling, we reached out to NPs and other APRNs who were currently waivered OUD prescribers, who were waivered but not prescribing, and who were not waivered. Our primary focus was NPs although we interviewed a few clinical nurse specialists and certified nurse midwives who had prescriptive authority in their states. Other targeted interviewees included clinic managers; psychiatrist colleagues; state nursing regulatory leaders; and state policy leaders in SUD data, treatment programs, and policy. The study scheduled respondents for interviews during a 1-week site visit to each state by two to four members of the research team.

2.2 Data Collection and Analysis

Semi-structured interviews tailored to each type of interviewee were conducted by two members of our research team and included either individuals or small groups. Interviewers reviewed a consent form that assured anonymity and confidentiality of interview data. We were unable to record the interviews because many took place in clinic conference rooms where protected information about patients might be audible or in public areas for interviewee convenience and their need to meet during non-clinical working hours. One team member in each interview took detailed notes that were reviewed and corrected by both team members.

Data analysis conformed to the five steps for thematic analysis described by Castleberry and Nolen (Castleberry, J, & Nolen,A., 2018): compiling; disassembling; reassembling; interpreting; and concluding. *Compiling* occurred during review and revision of interview notes.

Disassembling was done when study staff entered interview notes into Dedoose, a qualitative software package, open-coded and reviewed by two members of the research team to identify phenomena of interest. In the *reassembling* step, we grouped data into key themes, and each interview was examined to ensure that no new themes emerged (Pope, C., Mays, N. (2006) All team members reached consensus on the key themes. We selected representative quotes that best represented common themes. In the *interpreting* phase, the research team drew analytical conclusions from the coded data. *Conclusions* are the responses to the research questions that have emerged from the data.

In terms of the team's reflexive stance, we discussed and considered the interviews during team discussions following each site visit and after data collection was completed, focusing on the interpersonal and contextual domains (Francisco M. Olmos-Vega, Renée E. Stalmeijer, Lara Varpio & Renate Kahlke, 2023). Interviewees were APRNs and other experts in MOUD, similar to members of the research team thus ensuring a high degree of shared language. This shared professional status may have introduced social acceptability bias to interviewees' responses.

3. Results

In total, 76 participants participated in individual or small group interviews in the four states. Of the interviewees, 57% were NPs or other APRNs, 34% were managers or regulators, and the remainder were physicians. We collected data from the four states on regulations and requirements for MOUD treatment at the time of interviews and have included those in Table 1.

From our analysis of interview data, we found key themes and several subthemes within each key theme that describe NP practice in MOUD (see Table 2). Themes included the unique contributions of nurses, barriers related to scope of practice regulations, other regulatory barriers, the lack of supportive services addressing social needs, and stigma-related issues.

3.1 Unique Contributions of Nurse Practitioners

3.1.1 'There's no other way many of our patients would get care'—

Interviewees saw NPs as playing a critical role in expanding access to MOUD since the passage of the Comprehensive Addiction and Recovery Act (CARA). In the context of provider shortages, interviewees of all types viewed simply having more "boots on the ground" as meeting critical access needs. The sentiment articulated by one New Mexico certified nurse midwife, *"There's no other way many of our patients would get care,"* was repeated throughout the interviews. Interestingly, the physicians interviewed were among the most enthusiastic in describing how NPs were expanding access to skilled treatment, and several noted observing increased willingness among NPs in stepping up to provide MOUD compared to physician colleagues. None of the MDs interviewed reported concerns about the role of NPs. A West Virginia medical director explained, "*No concerns. MAT's not rocket science—NPs & PAs can do as good a job as MDs."*

3.1.2 Stepping Up Access in Rural Areas—

NPs were seen as vital in creating access to MOUD in rural areas in all four states, with significant impact in local communities. In a rural county in West Virginia, a NP explained:

> "There is a shortage of physicians. If you didn't grow up here, it's hard to move here and love it. Having NPs run Suboxone [buprenorphine] programs in rural areas is great. If patients are in *** County or far away they cannot get to *** for treatment."

Several NP interviewees described working at clinics that served a wide geographic radius and having patients that drove more than an hour to get treatment. Across all four states,

rural NPs described working at clinics that were only ones offering MOUD in the area. In New Mexico, a regulator explained that APRNs made up about half of the MOUD prescriber workforce, with a greater percentage in rural areas. They reported that MD organizations saw NPs as necessary in meeting rural health needs, a major reason why they were politically supportive of NPs' independent practice.

3.1.3 The Unique Role of Psychiatric Mental Health NPs (PMHNPs)—The presence of PMHNPs was brought up by several interviewees as an increasingly important force in fighting the opioid epidemic. PMHNPs were noted as playing a role in expanding much needed access, with their in-depth mental health training being well suited for working with underlying mental health comorbidities in patients accessing MOUD. Several nursing faculty members described community pushes to start PMHNP programs in part to help serve the needs of patients impacted by the opioid epidemic. A West Virginia RN who started a recovery organization and was in school to become a PMHNP explained her choice:

> "I've worked with people in recovery for a while now. Seeing the depression and PTSD, and trauma-related disorders and the anxiety, and the withdrawal that lasts for a year or a year and a half afterward…. PMHNP is a unique opportunity to address both."

3.1.4 The Nursing Model of Care is a Natural Fit for Working with SUD— Outside of expanding access, many interviewees cited empathy, holistic care, and expertise in helping patients navigate health system barriers as distinctive traits related to the nursing model of care, and often a source of pride. A West Virginia interviewee explained:

> "I think the nursing model is amazing. We see it differently. It's not based on the disease model. There is a lot of education and time spent figuring out what the barriers are. Nurses are at heart all a little bit case manager because we figure it out.

This sentiment was echoed by many of the clinic directors interviewed. The director of a large community health network in New Mexico explained *"I don't know if this is true of primary care NPs in general, I think of them as being a little more holistic. Maybe this is just my experience of these few. But it's good, when you're in SUD treatment, it's important to see the whole person."* Interviewees attributed these unique contributions of NPs to nursing education, the nursing model of care ("nursing is caring"), and histories of working at the bedside. Ultimately, many NP interviewees saw their work as a type of calling. One certified nurse midwife in New Mexico who specializes serving patients with co-occurring substance use explained:

> "I have expertise in this: it's my job, it's what I care about doing and what I want to do. It's such an honor to take care of these families. There are so many ways that systems of care are barriers. They feel judged, they have had traumatic experiences. A safe system is important, and the system might never be entirely safe, but they need a person who needs to be available for healing. It's the best position in the world."

3.2 Scope of Practice Regulations Limit Access to Care

3.2.1 Variability and Informality of Supervision Practices—Among NPs who lived in states that required physician supervision, many reported successfully providing MOUD in team-based settings. At several interview sites, the collaborating MD was provided by the employer, with supervision requirements being highly variable and often informal. A Michigan NP who reported that scope of practice regulations had "not been a hindrance" explained a typical supervision arrangement, *"The MD has to be available by phone. No regular supervision—by phone, review clients PRN. No co-signatures for notes or scripts."* An Ohio collaborating physician reported a similar understanding of his responsibilities, *"Not much. I look at a few charts and am available to answer questions."* This MD received no distinct separate pay for his role, explaining *"I assume that's part of the medical director's pay."*

This variability, informality, and often sparseness of day-to-day supervision practices stood in contrast to the barriers experienced by some NPs due to supervision requirements, particularly for new providers and those seeking to expand MOUD services. Some of these barriers came from state-level scope of practice regulations specific to MOUD. For example, although NPs had recently gained independent practice in West Virginia, a state regulation required any clinic prescribing buprenorphine to have a physician as medical director. A NP faculty member in West Virginia who worked part time at a rural clinic described the barriers the clinic leaders faced when they wanted to start providing MOUD services:

> "They would like to have an office-based MAT program, but there is a regulatory issue with having a medical director who is waivered. They don't have one, they are largely giving up on that now because they are so busy."

Similarly in Ohio, a PMHNP practice director with extensive substance use treatment expertise was able to offer MOUD herself through supervision from an external mentor. However, she found it challenging to expand needed services at her organization because of difficulty finding a physician who was both waivered and willing to sign a collaborative practice agreement (Standard Care Agreement [SCA]) to supervise additional advanced practice practitioners:

> "It's crazy that we have to have the signed SCA. We could have more providers if we didn't need that. Specific aspects of SCA that are a problem, for example we need someone who has the waiver. We are limiting care because of that. People are dying. Fentanyl, meth is on our way."

3.2.2 Biggest burdens in areas with provider shortages—Nurse practitioner interviewees in Michigan, Ohio and West Virginia reported viewing scope of practice regulations as an obstacle to the expansion of MOUD services in their state. Many interviewees knew of colleagues who paid significant fees for MD collaboration. In addition, geographic areas existed in which MD collaborators were difficult to find. Many of the NP providers who reported SOP regulations as a personal barrier to providing MOUD practiced in rural areas and in settings with limited MD collaborators. A NP practice director in rural Michigan explained:

> "I sought out the one and only addiction physician in the county and asked him to be my collaborator. He is also on my grant for Project ECHO. He is the only collaborating physician who does MAT and takes on everyone. There is no one else."

3.2.3 Employer and Payor Policies Create Additional Scope of Practice Barriers—

Several participants described ways in which scope of practice regulations interacted with employer and payor policies to create additional barriers around prescribing and reimbursement. A number of West Virginia NPs described persistent co-signing and payor-related requirements despite the conversion to independent practice a few years prior:

> "This organization has a requirement that NP notes be cosigned… Employers can make policies however they want… Some of the MCOs say they won't contract with us and we have to bill under the physician's number."

Even in New Mexico, which has had independent NP practice for more than 25 years, an interviewee knew of a APRN colleague who was leaving their academic position because their employer had "a policy that a waivered NP cannot use their waiver for a year."

In both New Mexico and West Virginia, additional legislative efforts were needed to tackle such barriers after the initial legislation codifying independent practice. In West Virginia, a regulator interviewee stated, *"There were some issues from the RN board – the difficulty was with the payer sources. There were a few that were not recognizing NPs as autonomous so people weren't getting payment. There was legislation or a regulatory change about a year ago that addressed this problem*." In New Mexico, a participant explained that prior scope of practice-related payor issues had been largely laid to rest because of passage of a state law that payors were not allowed to restrict APRN practice.

3.3 Challenges from the X-Waiver and Prior Authorizations

3.3.1 The Waiver Requirement: Barriers and Facilitators—

The study conducted interviews before the training requirements for an X-waiver were lifted in 2021 for clinicians seeing fewer than 30 patients, and before the X-waiver was removed entirely in legislation passed in late 2022. Findings regarding the waiver as a barrier are included here as informative about the types of impacts that federal regulations may have as other regulations are considered in the future. Most interviewees found X-wavier training to be largely accessible online and/or through professional organizations. Several participants noted facilitators of waiver uptake, the most common being free online access through professional organizations and employers covering costs and continuing education time. One NP noted that more NPs in her department had waivers than MDs, in part because her NP coworkers had decided to include waiver uptake as a quality metric. Others noted facilitators included the MOUD requirements for National Health Service Corps Substance Use Disorder loan forgiveness, universities including the waiver training as part of course requirements, and employers requiring waiver possession as a condition of employment.

However, some interviewees viewed completing the waiver process itself as a barrier. Evidence of the impact of this barrier was also found in the fact that seven interviewees were interested in obtaining a waiver but had not yet started or were still in process of

completing training. A recurrent theme was the CARA Act requirement that Advanced Practice Providers, including APRNs, must complete an additional 16 hours of pre-waiver education beyond the 8 hours required for physicians. NP participants who had taken the additional training found it "repetitive", "redundant" and "a lot of filler", as one Ohio NP put it, *"They just kept hitting us over the head with the same information".*

Among interviewees who mentioned waiver capacity, about one-third were near their waiver limit. This was a particular barrier for new providers at the lower 30 patient limit and for clinics with provider turnover. One New Mexico Medical Director explained:

> "Most of the NPs can increase numbers in August of this year. They would grow if the waiver limit increases. The barrier is limits on the number of MAT clients per provider. When someone leaves we have to start again with another limit of 30."

Several interviewees described the regulation itself creating fear, and low patient limits not making sense with day-to-day practice realities. One Michigan NP had just increased to the 100-patient waiver but described persistent anxiety and meticulous record keeping to ensure she was in compliance when her waiver limit was 30. The regulatory environment felt at odds with the benefits to the community; she commented, *"They should not use fear factor if we're trying to try to treat people."* Interestingly, a number of interviewees described employers using the waiver patient limits as a way to restrict providers from increasing time spent on providing MOUD services.

3.3.2 Prior Authorization-Related Barriers Continue in Some Areas—

Barriers related to prior authorization varied widely by state. Many participants described recent improvements, but significant hindrances remained in some areas. Interviewees in New Mexico and Ohio described insurers, including Medicaid, recently removing prior authorization requirements altogether. This was viewed positively and no concerns about misuse were described. In Michigan, a new law allowed 2 weeks of buprenorphine without prior authorization, but time costs were still significant after the first 2 weeks – about 30 minutes per request, according to one medical director. Another practice director described a typical situation:

> "We have one person on staff who does the prior auths for everyone…The authorization [has] to be renewed in a certain number of months. We don't always know when that is due. We usually get covered for a year but we don't always know when the year is up. Some of our patients have transferred here and we don't know when they started. Sometimes becomes an issue when patients show up at pharmacy to get their bupe and are told their authorization has expired."

3.4 The Social Context of Addiction and Lack of Supportive Services

3.4.1 'Not just a matter of providing a pill and the patient will be fine'—

Interviewees commented on the importance of recognizing the social context of addiction and its role in both substance use and recovery. Providers noted that patient histories of structural barriers, multi-generational trauma, economic hardship, and social exclusion were inseparable from their patients' experiences with OUD. While many providers spoke of witnessing life-changing improvement in their patients' realities after starting MOUD,

many noted residual challenges faced by their patients. This theme was noted across states, and especially by interviewees in New Mexico, one of the states where, despite shortages in some areas, MOUD was generally more widely available. A New Mexico NP faculty member reported that he was still surprised by the naivete of some providers who felt that the symptoms of OUD were easier to control than they actually were. Many informants viewed addressing mental health, social determinants of health, and structural inequity as critical to addressing the opioid epidemic, with some finding healthcare to be "*too focused on [the] individual when problems are systemic."*

Interviewees viewed MOUD as one critical tool in a broad toolkit of interventions for addressing OUD, and many reported challenges when resources were unavailable such as mental health services, socioeconomic supports, and a continuum of care for substance use. Lack of readily available supportive services was seen as creating burdens for the prescribing providers themselves, which in turn affected willingness to start providing MOUD. A New Mexico policy maker explained, *"Providers want to prescribe MAT, but they get burned out being [the] only resource, especially in rural areas."* A certified nurse midwife in New Mexico reported similarly:

> "Here there is a lot of interest because they are still seeing the patients and can't help them, and they absolutely want to help them. But when you are doing 15-minute return OB visits it's impossible to do the visit plus the Subutex [buprenorphine] during that 15 minutes… people are leery because they don't have the clinical support and they really don't. To be in Albuquerque you might have an in-house social worker and a lot of other places don't."

3.4.2 The Double-Edged Sword of Therapy Requirements—Many interviewees worked in collaborative practices with social workers, counselors, and therapists, and took pride in the availability of these services. However, when counseling was required to receive Medicaid reimbursement – as it was in West Virginia, Ohio and Michigan – it served as a double-edged sword that could push patients out of treatment. As one West Virginia NP explained *"I've seen people who fail out of [program name] because they have daily issues, transportation issues, they don't get here and they miss therapy."*

Interviewees also discussed the shortage of counselors and therapists to partner with as a barrier in expanding MOUD programs. Lack of supportive services was most often cited in West Virginia, a state that has therapy requirements for Medicaid reimbursement of MOUD, but also frequently cited in New Mexico, which does not. Several interviewees in New Mexico explained that the state had recently experienced a state-wide upheaval of its behavioral health system due to later unproven allegations of fraud. One New Mexico medical director explained:

> *"Only about half [of our waivered clinicians] are currently using the waiver. This is partly because of the limitation in terms of trying to couple with BH* [Behavioral Health] *services and so there is interest on the part of the some of the providers to do the prescribing, but we don't have adequate BH services to let it get up and running. Especially at some of the remote sites that have trouble retaining BH staff."*

3.5 Hard-won culture change amidst pervasive stigma

Interviewees described pervasive stigma against both MOUD and people who use drugs as a key barrier at every level of the practice environment, from community reception, to employers, to clinician co-workers. Simultaneously, many described witnessing tangible hard-won culture change in their clinical microsystems after years of dedicated efforts.

3.5.1 Stigma at every corner—Interviewees described stigma against MOUD as deeply intertwined with generalized stigma against people with substance use disorders, and its presence both inside and outside the clinic as a major barrier to providing MOUD. Many described mixed reception in the community, with some encountering a warm welcome from local faith and community groups eager to find support, while others described community resistance. An Ohio NP explained:

> "Everyone knows someone who has been impacted. Softens them a bit. [They say] 'Wonderful what you are doing, just do it somewhere else.'"

Many interviewees also described deeply rooted community hesitancy about MOUD specifically, with opiate agonist therapies viewed as "enabling" or "trading one addiction for another." This was seen as informing the non-acceptance of MOUD in many drug rehabilitation facilities and some peer recovery groups.

The healthcare establishment was not immune to such concerns. Clinician and administrator stigma often served as a barrier to leaders seeking to start OUD-related programs in their institutions. Many informants described feeling discouraged upon finding little initial interest from their colleagues and, at times, significant institutional pushback. Several interviewees described stigma associated with "being known as a MAT provider." Interviewees saw such stigma as rooted in both broader cultural aversion against people who have substance use disorders ("I don't want that in my waiting room") and significant lack of education about treatment of substance use disorders among their co-workers. A West Virginia NP faculty member fought to include the waiver training in the curriculum for her students, but the combination of generalized stigma, lack of training about SUD, and regulatory barriers created uphill battle in her own clinical work:

> "Those of us who've gone through waiver training see it as 'this is one more person who is not going to die.' I'm a big fan of putting this into the curriculum for new NPs so they can enter without the stigma and resistance. But we need to figure out how to get the NPs who are out there now to understand this. The NPs who have had patients who have died or struggled might be interested, but then they have to bang their heads against all the regulations."

Such stigma often had direct implications for patient care. Many interviewees described practices that served high numbers of patients with substance use disorders only offering naltrexone, an opioid antagonist which is not a controlled substance, out of hesitation about opioid agonist therapies like buprenorphine, which is a schedule III drug. Several interviewees also expressed significant hesitancy about buprenorphine if they did not have a plan for eventual tapering. An interviewee in Ohio explained that the largest provider of MOUD in their town only offered it as a two-week temporary treatment course.

3.5.2 Culture change in process—Despite such barriers, over the course of years, many interviewees described tangible culture change in their institutions and hard-won successes, with interest growing and stigma slowly dissolving as colleagues learned more about MOUD and saw patients get better on it. A number of interviewees recounted examples of internalized stigma and personal transformation upon witnessing improvements in patients' lives with MOUD, such as stability, employment, and return to parenting roles. One West Virginia NP shared:

> "I didn't tell anybody here I got the waiver… I had a lot of preconceived notions and a lot of bias… But I'm born and raised here and as I've seen this crisis here. I've seen multiple attempts to improve the outcomes, but I've never seen a solution… Of all the things I've seen this is the most effective treatment. Unless some new strategy comes out in the future, this is the biggest opportunity we have to address this problem."

Such personal transformation was representative of a larger cultural change that many interviewees described as being mid-process. Clinician acceptance was often described as "improving" or "growing", with increased normalization itself serving as a facilitator of change. A New Mexico NP explained, "[MOUD] *was resisted at first, included by me, but now it's part of the culture. You have to look at yourself and your own judgements – takes a while to change."* Such change was partly facilitated by increased funding for MOUD, which interviewees described as lending both capital and social credibility in support of MOUD. One West Virginia program director explained:

> *"MAT acceptance is better than it was a year ago, it's become more normalized, both supported financially (SOR* [State Opioid Response] *grant, which required a MAT component), that gives some credibility among professionals. The providers are still coming around. They are more accepting of it as a whole."*

Culture change was also facilitated by individual champions, many of which were NPs. Interviewees described persistence and eventual success, often over the course of years, in fighting to increase SUD education at their institutions, being the first to offer MOUD in their healthcare setting and creating campaigns to increase the number of waivered providers at their workplace. Many interviewees saw addressing stigma as a key piece of the education needed to increase the MOUD workforce and advocated for increased SUD and mental health training in standard curricula across the healthcare professions. Such interviewees expressed simultaneous frustration and hope in describing the acceptance of MOUD, noting that amidst such gains, capacity was still far from meeting community need.

4. Discussion

Nurse practitioners and other Advanced Practice Registered Nurses have been an increasingly important part of the MOUD treatment provider community. Their participation in MOUD treatment through obtaining X-waivers has grown steadily since their inclusion in the waiver program in 2016 (Andrilla et al., 2019; Auty et al., 2020; Spetz et al., 2022). This growth occurred despite the greater number of hours of training required for NPs. Interviewees described tangible impacts in their communities in expanding access to MOUD and serving rural areas since the expansion of waivers to NPs, other APRNs, and

PAs and the increase in the number of patients a clinician was authorized to treat. Many also described the nursing model of care as particularly well-suited to serving the complex psychosocial needs of patients who experience OUD.

While MOUD treatment barriers created by the X-waiver have been eliminated by recent legislation, other barriers for APRNs still exist (Consolidated Appropriations Act, 2022). We found that several types of regulations and practice barriers impacted the ability of APRNs to participate in MOUD treatment and their interest in becoming a provider.

Scope of practice regulations in states that require supervision for NPs remained a barrier for NPs, who reported difficulty finding a physician supervisor willing to allow provision of MOUD. Previous studies of NP practice in states with restrictive scope of practice have cited barriers in finding and paying for supervision (Chapman et al., 2019; Martin et al., 2020). Our findings suggest this may particularly be a barrier in already low-access and rural areas where the number of potential physician collaborators is limited. State-level scope of practice regulations can also interact with institutional and payor policies to further limit care, such as co-signing requirements and payors not recognizing APRNs as autonomous providers for billing purposes. Interviewees in West Virginia indicate that, even in states with independent practice, additional regulatory efforts such as the need for a medical director of the clinic may be needed to address restrictions on APRNs.

Other barriers to NP and APRN practice go beyond the supervision requirement and differ across the country. Cultural stigma against MOUD varied regionally but was present to some extent in all states visited. Interviewees described a cultural shift that was partially underway, with tangible victories to expand access and acceptance of MOUD in their institutions. However significant residual stigma remained across communities, healthcare administrators, and clinicians. Interviewees saw efforts such as federal funding for MOUD provision, increased SUD curricula across healthcare professions, and concerted institution-level campaigns to expand MOUD as providing both concrete resources and social credibility to MOUD provision.

Interviewees emphasized that substance use disorders are frequently intertwined with complex social determinants of health, histories of stigmatization, and trauma. Many saw nursing's holistic model of care as particularly well suited to working with such factors and named the need for additional resources to address social determinants of health and provide adequate psychosocial support. Such support was seen as both helpful to patients and to prescribers themselves, who were often working in time-constricted environments where they felt limited in their ability to adequately address such needs. This echoes discussions by Winstanley and colleagues (2020) documenting efforts to expand MOUD in West Virginia, and analysis of survey data by Andrilla and colleagues in 2020 which found lack of mental health and psychosocial support as top barriers to providing MOUD cited by NPs (Andrilla et al., 2020; Winstanley et al., 2020). However, mandating therapy alongside MOUD services was viewed as a barrier to access to treatment. Interviewees reported that such requirements hindered the establishment of MOUD programs due to workforce issues and resulted in patients themselves being pushed out of care. Interviewees emphasized the

need for investment in SUD-related psychosocial services and policies addressing inequality, poverty, and other social determinants of health.

These findings are critical to note in the context of continuing racial inequity in access to evidence-based treatment for OUD and the recent sharp increase in overdose deaths among Black Americans and American Indians / Alaska Natives. Recent studies have shown continued lower rates of treatment and treatment retention for all racial groups compared to whites (Dong et al., 2023; Martin et al., 2022). In an extensive qualitative study by Hatcher and colleagues, low income Black and Latinx patients were more likely to find MOUD alone inadequate, and even isolating, if not provided with attention to survival needs and intersectional realities of oppression and stigmatization (Hatcher et al., 2018). The elimination of waiver requirements may be an important step in facilitating access to MOUD, but alone this will not address these disparities. Concerted policy efforts are needed to ensure equitable access to high quality treatment services that address the social realities of all patients.

What comes next for MOUD regulations is unclear after the recent elimination of the X-waiver requirement. What requirements, if any, will replace it are not known at this time. While the previously required X-Waiver has now been removed, new regulations may continue to impact access to MOUD. For instance, as of June 2023, the federal MATE Act, a component of the Consolidated Appropriations Act, required new or renewing DEA licensees to complete 8 hours of training on OUD, other substance use disorders and the treatment of pain (Consolidated Appropriations Act, 2022). In addition, state requirements that impact MOUD may not change with elimination of the X-waiver. Whether any federal agency will maintain a publicly available listing of MOUD providers is also unknown - this is currently provided by SAMHSA but is based on X-waiver records. Despite unknowns in the immediate wake of the X-waiver elimination, buprenorphine remains a pillar of OUD treatment.

4.1 Limitations

These findings are not representative of APRN scope of practice regulations in every state. We may have missed several key state-based issues. Specific regulations for APRNs are made at the state level with variation among the US states. However, one of the key components of regulations is whether APRNs have full practice authority or supervision is required. In this study we included two states of each level of regulation.

We did not focus our recruitment on clinicians who were opposed to participation in MOUD treatment. We used snowball sampling, which may miss some perspectives within each state. Some themes may have been missed in our analysis. Group interviews were requested by a few organizations in order to allow us to hear from multiple staff members while minimizing clinician time away from practice. This may introduce some bias in respondents' willingness to share. In the information sheet given to all respondents, we invited them to email us with any further thoughts or perspectives. To address that potential limitation, we revisited our themes multiple times in preparation for this paper.

5. Conclusion

Deaths from opioid overdose continue to rise in the US. NPs and APRNs comprise a critical and growing part of the workforce providing life-saving treatment for OUD with medications such as buprenorphine. Previous training and federal waiver requirements were seen as barrier for clinicians, and it will be important to assess the impact of their elimination on access to MOUD. However, NPs and other APRNs reported additional barriers to MOUD prescribing as well. Residual barriers need continued policy attention, including state-level scope of practice regulations, prior authorizations, the availability of supportive services, and continued countermeasures to address cultural stigma.

Funding

This research was supported by the National Institute on Drug Abuse (Grant No. 1R01DA047379–01A1) and the National Council of State Boards of Nursing.

References

Ahmad F, Cisewski J, Rossen L, & Sutton P. (2023). Provisional drug overdose death counts. National Center for Health Statistics. https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm

Andraka-Christou B, Page C, Schoebel V, Buche J, & Haffajee RL (2022). Perceptions of buprenorphine barriers and efficacy among nurse practitioners and physician assistants. Addiction Science & Clinical Practice, 17(1), 43. 10.1186/s13722-022-00321-6 [PubMed: 35945636]

Andrilla CHA, Jones KC, & Patterson DG (2020). Prescribing Practices of Nurse Practitioners and Physician Assistants Waivered to Prescribe Buprenorphine and the Barriers They Experience Prescribing Buprenorphine. The Journal of Rural Health, 36(2), 187–195. 10.1111/jrh.12404 [PubMed: 31650634]

Andrilla CHA, Moore TE, Patterson DG, & Larson EH (2019). Geographic Distribution of Providers With a DEA Waiver to Prescribe Buprenorphine for the Treatment of Opioid Use Disorder: A 5-Year Update. The Journal of Rural Health: Official Journal of the American Rural Health Association and the National Rural Health Care Association, 35(1), 108–112. 10.1111/jrh.12307 [PubMed: 29923637]

Anonymous. (2021). Barriers and Facilitators of Advanced Practice Registered Nurse Participation in Medication Treatment for Opioid Use Disorder: A Mixed Methods Study. Journal of Nursing Regulation, 12(2), 5–22. 10.1016/S2155-8256(21)00052-1

Auty SG, Stein MD, Walley AY, & Drainoni M-L (2020). Buprenorphine Waiver Uptake among Nurse Practitioners and Physician Assistants: The Role of Existing Waivered Prescriber Supply. Journal of Substance Abuse Treatment, 115, 108032. 10.1016/j.jsat.2020.108032 [PubMed: 32600629]

Barnett ML, Lee D, & Frank RG (2019). In Rural Areas, Buprenorphine Waiver Adoption Since 2017 Driven By Nurse Practitioners And Physician Assistants. Health Affairs, 38(12), 2048–2056. 10.1377/hlthaff.2019.00859 [PubMed: 31794302]

Castleberry J, & Nolen A. (n.d.). Thematic analysis of qualitative research data: Is it as easy as it sounds? Curr Pharm Teach Learn.

Chapman SA, Toretsky C, & Phoenix BJ (2019). Enhancing Psychiatric Mental Health Nurse Practitioner Practice: Impact of State Scope of Practice Regulations. Journal of Nursing Regulation, 10(1), 35–43. 10.1016/S2155-8256(19)30081-X

Comprehensive Addiction and Recovery Act of 2016, Pub. L. No. S.524 (2016). http://www.congress.gov/

Consolidated Appropriations Act, Pub. L. No. H.R.2617, 3128 (2022). http://www.congress.gov/

Creswell JW (2007). Qualitative Inquiry & Research Design: Choosing Among Five Approaches (2nd Edition). Sage Publications.

Dong H, Stringfellow EJ, Russell WA, & Jalali MS (2023). Racial and Ethnic Disparities in Buprenorphine Treatment Duration in the US. JAMA Psychiatry, 80(1), 93–95. 10.1001/jamapsychiatry.2022.3673 [PubMed: 36350592]

Drug Addiction Treatment Act, Pub. L. No. H.R. 2634 (2000). http://www.congress.gov/

Olmos-Vega Francisco M., Stalmeijer Renée E., Varpio Lara& Kahlke Renate (2023). A practical guide to reflexivity in qualitative research: AMEE Guide No. 149. Medical Teacher, 45:3, 241–251. https://www.tandfonline.com/action/showCitFormats?doi=10.1080/0142159X.2022.2057287

Gupta R, Levine RL, Cepeda JA, & Holtgrave DR (2022). Transforming Management of Opioid Use Disorder with Universal Treatment. New England Journal of Medicine, 387(15), 1341–1344. 10.1056/NEJMp2210121 [PubMed: 36129991]

Han B, Einstein EB, Jones CM, Cotto J, Compton WM, & Volkow ND (2022). Racial and Ethnic Disparities in Drug Overdose Deaths in the US During the COVID-19 Pandemic. JAMA Network Open, 5(9), e2232314. 10.1001/jamanetworkopen.2022.32314 [PubMed: 36125815]

Hatcher AE, Mendoza S, & Hansen H. (2018). At the Expense of a Life: Race, Class, and the Meaning of Buprenorphine in Pharmaceuticalized “Care.” Substance Use & Misuse, 53(2), 301–310. 10.1080/10826084.2017.1385633 [PubMed: 29161171]

Jones KF, O’Reilly Jacob M, Spetz J, Hailer L, & Tierney M. (2023). Eliminate the buprenorphine DEA X waiver: Justification using a policy analysis approach. Journal of Nursing Scholarship: An Official Publication of Sigma Theta Tau International Honor Society of Nursing, 55(3), 655–664. 10.1111/jnu.12871 [PubMed: 36624606]

Kariisa M, Davis NL, Kumar S, Seth P, Mattson CL, Chowdhury F, & Jones CM (2022). Vital Signs: Drug Overdose Deaths, by Selected Sociodemographic and Social Determinants of Health Characteristics - 25 States and the District of Columbia, 2019–2020. MMWR. Morbidity and Mortality Weekly Report, 71(29), 940–947. 10.15585/mmwr.mm7129e2 [PubMed: 35862289]

Lagisetty PA, Ross R, Bohnert A, Clay M, & Maust DT (2019). Buprenorphine Treatment Divide by Race/Ethnicity and Payment. JAMA Psychiatry, 76(9), 979–981. 10.1001/jamapsychiatry.2019.0876 [PubMed: 31066881]

Ma J, Bao Y-P, Wang R-J, Su M-F, Liu M-X, Li J-Q, Degenhardt L, Farrell M, Blow FC, Ilgen M, Shi J, & Lu L. (2019). Effects of medication-assisted treatment on mortality among opioids users: A systematic review and meta-analysis. Molecular Psychiatry, 24(12), 1868–1883. 10.1038/s41380-018-0094-5 [PubMed: 29934549]

Martin B, Phoenix BJ, & Chapman SA (2020). How collaborative practice agreements impede the provision of vital behavioral health services. Nursing Outlook, 68(5), 581–590. 10.1016/j.outlook.2020.04.002 [PubMed: 32402393]

Martin, Parlier-Ahmad AB, Beck L, Scialli A, & Terplan M. (2022). Need for and Receipt of Substance Use Disorder Treatment Among Adults, by Gender, in the United States. Public Health Reports, 137(5), 955–963. 10.1177/00333549211041554 [PubMed: 34546835]

Ng J, Niles L, Kinderknecht K, Strohmeyer J, & Olin S. (2022). Changes in Access to Medication Treatment during COVID-19 Telehealth Expansion and Disparities in Telehealth Use for Medicare Beneficiaries with Opioid Use Disorder. Office of Minority Health (OMH) Data Highlight No. 28. Centers for Medicare & Medicaid Services (CMS), Baltimore, MD. https://www.cms.gov/files/document/data-highlight-jan-2022.pdf

Pope C, Mays N. (2006). Qualitative Research in Health Care, Third Edition. Blackwell Publishing.

Santo T Jr, Clark B, Hickman M, Grebely J, Campbell G, Sordo L, Chen A, Tran LT, Bharat C, Padmanathan P, Cousins G, Dupouy J, Kelty E, Muga R, Nosyk B, Min J, Pavarin R, Farrell M, & Degenhardt L. (2021). Association of Opioid Agonist Treatment With All-Cause Mortality and Specific Causes of Death Among People With Opioid Dependence: A Systematic Review and Meta-analysis. JAMA Psychiatry, 78(9), 979–993. 10.1001/jamapsychiatry.2021.0976 [PubMed: 34076676]

Sordo L, Barrio G, Bravo MJ, Indave BI, Degenhardt L, Wiessing L, Ferri M, & Pastor-Barriuso R. (2017). Mortality risk during and after opioid substitution treatment: Systematic review and meta-analysis of cohort studies. BMJ, 357, j1550. 10.1136/bmj.j1550 [PubMed: 28446428]

Spetz J, Hailer L, Gay C, Tierney M, Schmidt LA, Phoenix B, & Chapman SA (2022). Buprenorphine Treatment: Advanced Practice Nurses Add Capacity. Health Affairs, 41(9), 1231–1237. 10.1377/hlthaff.2022.00310 [PubMed: 36067440]

Spetz J, Toretsky C, Chapman S, Phoenix B, & Tierney M. (2019). Nurse Practitioner and Physician Assistant Waivers to Prescribe Buprenorphine and State Scope of Practice Restrictions. JAMA, 321(14), 1407–1408. 10.1001/jama.2019.0834 [PubMed: 30964519]

Winstanley EL, Lander LR, Berry JH, Mahoney JJ, Zheng W, Herschler J, Marshalek P, Sayres S, Mason J, & Haut MW (2020). West Virginia's model of buprenorphine expansion: Preliminary results. Journal of Substance Abuse Treatment, 108, 40–47. 10.1016/j.jsat.2019.05.005 [PubMed: 31221524]

Highlights

- Nurse practitioners play critical roles in providing medications for opioid use disorder (MOUD) treatment.
- APRNs and their colleagues report barriers at the state regulation and practice level that impede their participation in MOUD treatment which were not alleviated by elimination of the X-waiver program.
- APRNs and their colleagues recognize the unique contributions of the nursing profession to MOUD, but practice barriers need to be addressed.
- Interviewees recognized internalized and community stigma as an ongoing and significant barrier to MOUD treatment.

2000	
Drug Addiction Treatment ACT (DATA)	Allows physicians to obtain a waiver to prescribe approved schedule III, IV and V drugs to treat opioid use disorder outside of narcotics treatment programs. Physicians must complete an 8-hour training to obtain the waiver. Excludes advanced practice practitioners.
2016	
Comprehensive Addiction and Recovery ACT (CARA)	Allows NPs and PAs to obtain waivers under the terms of DATA 2000 for a trial period lasting until October 2021: ▪ PAs and NPs must complete 24 hours of specified training ▪ Waivered NP or PA must work in collaboration with a "qualified physician" if required by state scope-of-practice laws ▪ "Qualified physician" = addiction related board certification or completion of 8-hour waiver training ▪ Excludes other APRNS
2018	
SUPPORT ACT	Makes expansion of waivered prescribing to NPs and PAs permanent (removes trial period). Expands prescribing ability to APRNs who are not NPs on a trial basis until 2023. Increases patient limit for the 1st year from 30 to 100 if the waivered prescriber works in a qualified practice setting or has addiction related board
2023	
Consolidated Appropriations Act of 2023	Eliminates the X-Waiver requirement to prescribe buprenorphine for all prescribing practitioners.

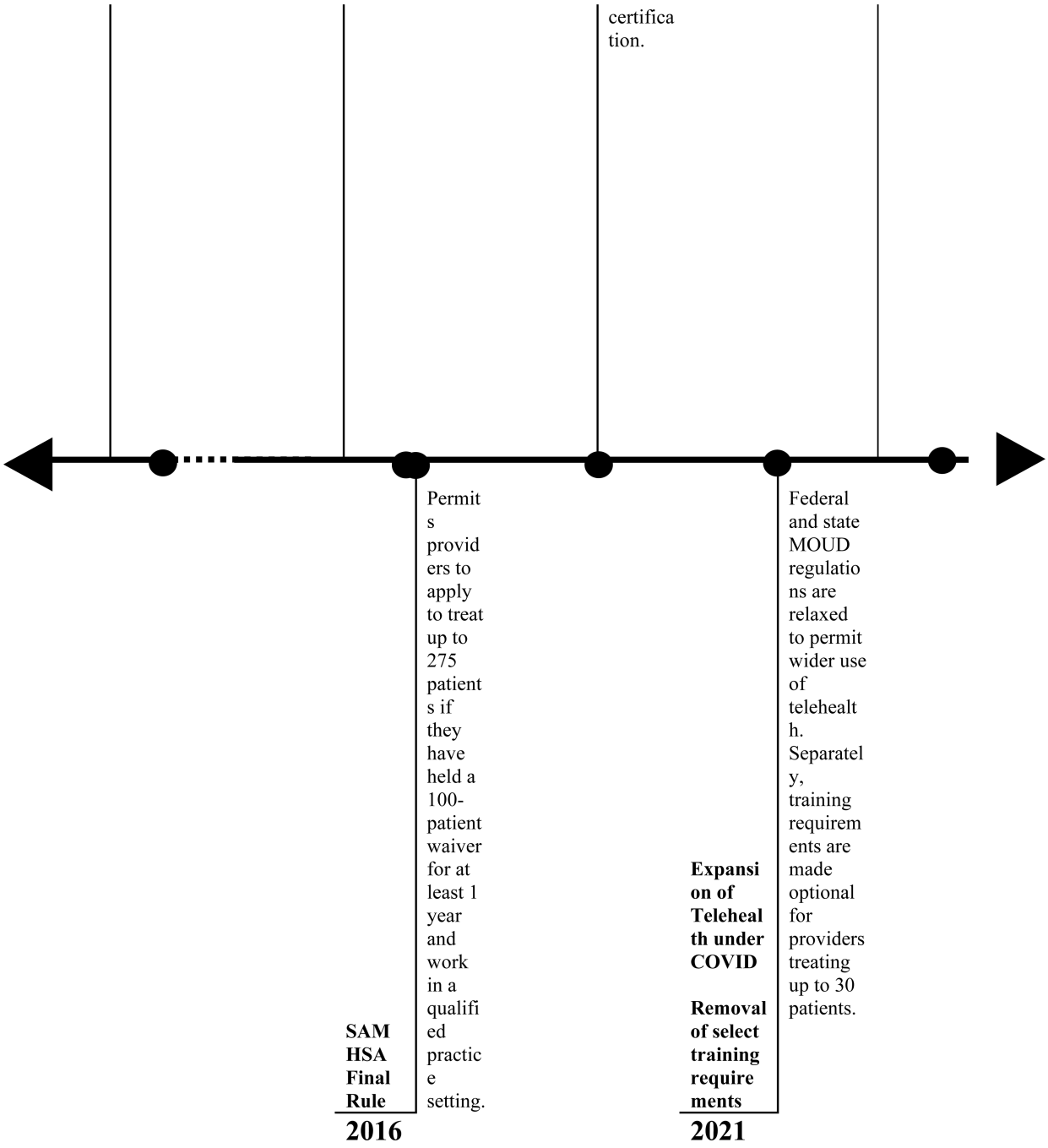

Figure 1.
Timeline of Federal Regulations regarding Buprenorphine Prescribing, 2000-Present

Table 1.

State Regulatory Environment Influencing NP Provision of Buprenorphine to Treat Opioid Use Disorder

	Scope of Practice	Requires Medicaid Prior Authorization for buprenorphine	Requires counseling or behavioral health participation for buprenorphine	State Specific Regulations
Michigan	Collaborative	No[1]	Yes	• NP authority to prescribe controlled substances must be delegated by MD (i.e.: delegating MD's identifying information and DEA number required on Rx)[6] • State Medicaid requires counseling with a provider who is not the prescriber[7]
New Mexico	Independent	No	No	• State regulations for prescribing buprenorphine contain no additional barriers beyond federal regulation
Ohio	Collaborative[2]	No	Yes	Per Ohio Administrative Code[3] • NP authority to practice is determined by Standard Care Arrangement (SCA) with collaborating MD • If not a PMHNP, PMHCNS or CARN-AP, the APRN must complete at least eight hours of continuing education related to substance abuse and addiction in each license renewal period • If not a behavioral health provider, must refer patient to behavioral health for psychosocial treatment. If patient refuses referral to behavioral health, APRN must ensure that program requires participation in 12-step or other self-help recovery program • For first 90 days of treatment, APRN shall prescribe no more than a two-week supply of buprenorphine. From treatment day #91 until the completion of 12 months of treatment, the APRN can prescribe no more than a 30-day supply of buprenorphine • Maximal buprenorphine dose is 24mg/day and must offer patient naloxone
West Virginia	Independent[4]	Yes[5]	Yes	• MD must be medical director of clinic where buprenorphine is provided • Medication treatment program must be licensed by the state • State Medicaid requires counseling with a provider who is not the prescriber • State Inspection of office site required prior to starting office-based buprenorphine treatment

Notes

1. Since December 2019.

2. NP Must have national certification in order to receive state license.

3. Ohio Administrative Code Chapter 4723–9-13 (until 2021). URL: https://codes.ohio.gov/oac/4723-9-13v1

4. NP independent practice following 3 years of MD collaboration.

5. Not required if all these requirements are met: a) buprenorphine maximum dose of 16 mg per day; b) buprenorphine maximum of 2 doses per day; c) buprenorphine prescriber is on approved prescriber list for Medicaid members; and d) member is not concurrently prescribed opioids or benzodiazepines.

6. Michigan Bureau of Health Services. (n.d.) DEA registration requirements for Physician's Assistants, Nurse Practitioners and Nurse Midwives. Retrieved from https://www.michigan.gov/documents/cis_fhs_bhser_Alert012403dearequirements_58938_7.pdf on January 30, 2021

7. State of Michigan. (2018, December 17). Michigan Administrative Code R. 325.1383. Retrieved from https://casetext.com/regulation/michigan-administrative-code/department-licensing-and-regulatory-affairs/bureau-of-community-and-health-systems/substance-use-disorder-programs-r-3251301-3251399/part-4-special-requirements-by-service-categories/subpart-b-treatment-and-rehabilitation-services/section-r-3251383-medication-assisted-treatment-mat-services-requirements

Table 2.

Perspectives on NP Prescribing of MOUD, Themes and Subthemes

Theme	Subthemes
Unique Contributions of Nurse Practitioners	*'There's no other way many of our patients would get care'* *Stepping Up in Rural Areas* *The Unique Role of PMHNPs* *The Nursing Model of Care is a Natural Fit for Working with SUD*
Scope of Practice Regulations Limit Access to Care	*Variability and Informality* *Biggest Burden in Areas with Provider Shortages* *Employer and Payor Policies Create Additional Scope of Practice Barriers*
Challenges from the X-Waiver and Prior Authorizations	*The Waiver Requirement: Barriers and Facilitators* *Prior Authorization Related Barriers Continue in Some Areas*
The Social Context of Addiction and Lack of Supportive Services	*'Not just a matter of providing a pill and the patient will be fine'* *The Double-Edged Sword of Therapy Requirements*
Hard-won Culture Change Amidst Pervasive Stigma	*Stigma at Every Corner Culture Change in Process*