2021 NCSBN Scientific Symposium - Nurse Practitioner Roles in Addressing the Opioid Crisis: Impact of State Scope of Practice Regulations on Provision of Medication-Assisted Treatment Video Transcript

Event
2021 NCSBN Scientific Symposium

More info: ncsbn.org/15185.htm

Presenter
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- [Moderator] Joanne Spetz is Director and Brenda and Jeffrey L. Kang Presidential Chair in Healthcare Finance at the Philip R. Lee Institute for Health Policy Studies at University of California, San Francisco. She is also Associate Director for research at Health for Center at UCSF. Her research focuses on the economics of the healthcare workforce, organization of healthcare services, and quality of healthcare, particularly of the nursing workforce and long-term care.

- [Dr. Spetz] Hi, I'm Joanne Spetz. And, my presentation is on Nurse Practitioner Roles in Addressing the Opioid Crisis. In this study, we're focusing on the influence of state scope of practice regulations and the provision of medication treatment for opioid use disorder.

My collaborators are Susan Chapman, Beth Phoenix, and Matthew Tierney, who are from the UCSF School of Nursing, and Laurie Hailer who is an independent data analyst. The study focuses on medication treatment for opioid use disorder, which is an evidence-based approach to treat people with opioid dependence or addiction.

There are three medications now used for opioid treatment. Methadone has been around the longest and is a full opioid agonist. It's a Schedule II drug and can only be offered in a licensed narcotics treatment program. It's typically administered as a directly observed treatment, meaning that people must go to the program site for treatment on a regular basis.

Buprenorphine is a semi-agonist and a Schedule III drug. Because it has what some call a ceiling effect, it has a relatively low risk for abuse or overdose. A common formulation has the brand name Suboxone, which includes Naloxone, the opioid overdose reversal drug. So, if a person tries to abuse this formulation, they get a large dose of Naloxone, which generates opioid withdrawal symptoms that are quite unpleasant and a deterrent to abuse.

Naltrexone is the third medication and it's a full opioid agonist, meaning that it latches onto opioid receptors but does not have any analgesic or opioid-type effects. Because it is not an opioid it is not a scheduled medication. It is used for other substance use disorders including alcoholism.

Vivitrol is an extended-release injection version of this medication. In this study, we're focusing on buprenorphine. The reason we're focusing on buprenorphine is that in 2000, the Drug Addiction Treatment Act authorized physicians to apply for a waiver from the requirement that opioid treatment occur in licensed narcotics treatment programs.

So, these waivers are commonly known as the DEA-X waiver and allowed physicians to offer buprenorphine treatment in their offices or other non-treatment program settings. The first waivers were issued around 2002 and, to get a waiver, a physician must complete eight hours of training in the management of opioid use disorder. During the first year of the waiver, the physician is authorized to manage up to 30 patients at a time.

And, after 1 year, the physician can apply to manage 100 patients. Starting in 2016, physicians can apply to manage up to 275 patients. The vast majority of physicians have a 30-patient waiver and other studies have found that many waivered physicians have never prescribed buprenorphine or have treated only a few people. The relatively small number of physicians with waivers and their low rates of prescribing buprenorphine has resulted in a nationwide shortage of buprenorphine providers, particularly as the opioid crisis emerged.

This map shows the availability of physicians with DEA-X waivers, regardless of whether they are actually treating any patients. This is from a study conducted by Holly Andrilla and her colleagues at University of Washington. The blue-colored counties had at least one waivered physician in both 2002 and 2016.

The yellow counties had a provider in 2016, but not in 2012. So, these are counties where they had an improvement. The red counties had a provider in 2012, but it lost that provider by 2016. And, the white counties never had a provider.

Note that many of the areas that are white and red are places where the opioid epidemic has had the most impacts including Kentucky, West Virginia, Virginia, Illinois, Georgia, and the Great Plains states. In response to the worsening opioid crisis, Congress passed the Comprehensive Addiction and Recovery Act or CARA in 2016.

This legislation allowed nurse practitioners some physician assistance to obtain waivers as a temporary provision. But note that other APRNs were not included in the 2016 CARA. These advanced practice clinicians must take 24 hours of training. Yes, that's three times the number of hours required for physicians. The 2018 opioid bill which was called the Support Act, made the NP and PA waivers permanent and added other advanced practice registered nurses.

The regulations have no additional requirements on advanced practice clinicians if they are in a state that allows them full practice authority. But, if they're in a state that requires physician oversight, the physician also must be qualified to obtain an X waiver or meet other criteria. So, note that for physician assistants, they always have to have physician supervision. So, they always are going to have to have a

physician supervisor that meets these criteria whereas for nurse practitioners and other APRNs it will vary state to state.

State requirements for physician oversight are common. This map indicates whether nurse practitioners are allowed to prescribe Schedule III medications without physician oversight. Remember that buprenorphine is a Schedule III medication. The orange states never let a nurse practitioner prescribe a Schedule III drug without physician oversight.

Although, I'll note that California is changing that rule thanks to a bill that was signed by our governor last year. The blue states allow NPs to prescribe Schedule III medications without physician oversight upon licensure. And, the purple states require physician oversight for a specific period of time ranging from six months to five years before the NP can prescribe without oversight.

Note that these categorizations do not match the AANP categories as this map does not consider whether a physician board oversees NPs or any of the other regulatory attributes that the AANP considers in their map. We are caring only about Schedule III prescribing for this study and so for our analysis we lumped the blue and purple states together.

Now, I want you to look at the map of availability of X-waivered physicians in 2016. Do you see a potential relationship between the areas with no waivered providers and the areas with physician oversight requirements? It sure looks like it when you put these maps side to side. This brings us to our research questions.

First, we wanted to know if NPs are less likely to get waivers if physician oversight is required. This question can be answered with quantitative data. Second, we wanted to identify other barriers to NPs getting waivers and offering treatment. We know from the literature that other factors such as a lack of acceptance of buprenorphine treatment in the local healthcare community, stigma faced by patients, lack of mentoring, and reimbursement problems create barriers to clinicians offering buprenorphine.

Third, we wanted to identify facilitators of NP engagement and medication treatment for opioid use disorder. The literature indicates that Medicaid coverage of buprenorphine, availability of education materials, and access to mentors are among the factors that support physician involvement in medication treatment and we wanted to see what factors might be specific to nurse practitioners.

For the quantitative part of our study, we used two main data sources. First, we obtained state-level counts of waivered clinicians from SAMHSA, the Substance Abuse Mental Health Services Administration, through a Freedom of Information Act request. The file we received was dated September 2018.

Second, we purchased full lists of all people and entities registered with the Drug Enforcement Agency, or DEA. These lists were accessed on a quarterly basis and include an indicator for X waivers and also indicate how many patients the clinician is allowed to treat. One frustrating thing with the data is that all APRNs are grouped together.

So, we cannot identify nurse midwives or clinical nurse specialists separately from nurse practitioners, they're all coded in the same group. So, let's start with the state-level data that were from September

2018 at which time only NPs could get X waivers, other APRNs could not get them yet. This map shows the percent of NPs in the state with an X waiver.

The darker shaded states had higher percentages which reached a maximum of 10.4% in Maine. The lighter states had lower percentages with the minimum being 2.4% in Tennessee. In fact, in Tennessee, NPs are not allowed to prescribe buprenorphine, so any waivered NPs in that state still were not allowed to provide medication treatment.

So, let's go back to the physician oversight map, which was adjusted here to depict September 2018. After that year, Virginia and Florida had changed their regulations. You can see what might be a relationship between the percent of NPs with waivers and whether NPs must have physician oversight for Schedule III prescribing.

And, in fact, when we estimated a regression, controlling for whether physician oversight is required and the percent of physicians with waivers, we found that there was a significantly lower percentage of NPs with waivers in states that required oversight. In fact, the percentage is about 1.75 times higher in states that do not require oversight for Schedule III prescribing compared to states that do require oversight.

This result was published in the Journal of the American Medical Association in early 2019. Now, let's look at some newer data. This chart shows the number of clinicians with X waivers nationwide through the end of September 2020. You can see notable growth for all clinicians, but less so for PAs than for NPs and physicians. Let's take a look at the percentage of clinicians with waivers.

Now, this is really striking. By early 2019, a greater percentage of NPs had waivers than did physicians. The only reason there are more physicians with waivers numerically is that there are just simply many more physicians in the United States than NPs. Another way to look at this is the total number of patients who could be treated if every clinician treated the maximum number allowed by their waiver.

Here you can see the share of treatment capacity that is accounted for by NPs and that it's growing rapidly. This is due both to NPS getting waivers and due to them quickly advancing to 100-person treatment waivers. Finally, this chart shows the growth trajectories of the percent of NPs with waivers by whether physician oversight is required for Schedule III prescribing.

What we saw in September 2018 has continued with greater proportions of nurse practitioners getting waivers when oversight is not required. Finally, this map shows the percent of treatment capacity provided by NPs. The highest state is North Dakota at 37% of their treatment capacity provided by NPs and New Mexico is not far behind at 33%.

Tennessee is at the bottom, which is not surprising since they banned NPs from offering treatment. Finally, we explored whether NPS were more likely to obtain waivers in rural counties and whether this depends on whether physician oversight is required. As seen in the first column, there is a slightly higher percentage of NPs in rural counties with waivers than in urban counties, but this difference is not statistically significant.

In the second column, we can see that there is a significantly higher percentage of NPs with waivers in rural areas when physician oversight is not required. And in the third column, there is a smaller

percentage of NPS and waivers in rural areas when physician oversight is required, but this difference is not significant.

So, not only do oversight requirements inhibit the total growth of the NP workforce for opioid treatment, but they have a larger negative impact on rural communities. Similar results were published by Michael Barnett and his colleagues from Harvard University in late 2019. In order to answer our last two research questions about barriers and facilitators to NPs obtaining X waivers and engaging in opioid treatment, we conducted in-depth qualitative research in four states.

We first identified states with high rates of opioid overdose because these are the places where greater access to treatment is most desperately needed. We then identified states in each of our physician oversight categories. And finally, we picked one state in which a relatively high percentage of NPs had waivers and a state in which a relatively low percentage had waivers.

Note that the high percentage for restrictive states was about equal to the low percentage for states that did not require oversight. Our states were West Virginia, New Mexico, Michigan, and Ohio. In each state, we had teams of two to four researchers conduct the site visits. We were lucky and we finished our site visit to New Mexico in February 2020.

If we'd been a month later, we might not have been able to finish the work. We recruited potential interviewees by reaching out to known contacts including APRN practitioners, behavioral health clinics, opioid treatment clinics, nursing leadership organizations, and nursing program faculty.

We used snowball sampling to identify additional potential interview subjects. We wanted to be sure to interview APRNs with X waivers or an interest in getting a waiver, clinic managers, physicians, state regulatory leaders, and other state nursing and policy leaders. As you can see, more than half of the interviews we did were with APRNs. Interviews were either with individuals or small groups.

One interviewer would lead the interview while the other took notes. We did not record the interviews because they often took place in non-work public settings such as coffee shops. Interview notes were reviewed by each of the 14 members who participated in the site visit research. We then met to develop consensus on key themes.

We then coded the interviews within those initial themes and we reviewed the themes and codings iteratively to ensure that no new themes were emerging. We identified four key thematic areas that I'll talk about today. Not surprisingly, scope of practice barriers were the first thing. Physician oversight requirements are a barrier in and of themselves but there are some more subtle barriers.

The inconsistency of regulations creates challenges for NP engagement in medication treatment much as for general APRN practice. NPs who practiced in the border areas of Ohio and Kentucky, for example, found the differences in scope of practice regulations frustrating.

Some states also have additional specific requirements that add confusion. For example, West Virginia had granted NPs the ability to practice and prescribe without physician oversight in 2017. But, they also passed a bill requiring that all buprenorphine treatment programs have a medical director who must be a physician.

So, this legislation may have been intended to reduce the risk of pill mills but it also forced NPs to find a physician medical director to engage in buprenorphine treatment, so it was a barrier. In contrast, New Mexico has a history of more than 20 years of full practice authority. And in that state, NP engagement and medication treatment was fully embraced.

Other regulatory and organizational factors create barriers to NPs offering buprenorphine treatment. Medicaid regulations came up in many of our interviews. All state Medicaid plans cover buprenorphine treatment but some have specific requirements. For example, in West Virginia, those in treatment must have four hours of therapy per month, one of which must be one on one.

The state has a significant shortage of therapists. Some NPs expressed frustration that they couldn't offer medication treatment in some parts of the state because there were no therapists to fulfill the therapy requirement. Prior authorization requirements exist for some Medicaid plans and commercial insurance as well in various states around the country.

This also creates a barrier to NP interest in offering treatment and patients accessing treatment. We encountered a number of reports that some clinics, hospitals, and other providers placed restrictions on APRN provision of buprenorphine treatment. These restrictions varied ranging from requiring the first visit to be with a physician to requiring greater oversight of NP's buprenorphine prescribing.

We also heard that there's a lot of stigma both against people with opioid use disorder and against buprenorphine or other medication treatment. This exists both within practices and in the larger substance abuse treatment community. This was a notable barrier to NP engagement and treatment. It should be noted that some organizations had policies in place that explicitly supported all clinicians, including APRNs, in offering buprenorphine treatment.

And, some practices and communities were very supportive of buprenorphine treatment. For example in West Virginia, we heard concern that although APRNs wanted to expand medication treatment access, the 12-step programs often discouraged it. In contrast, we did not hear nearly as much about stigma in New Mexico.

There were other important facilitators of APRNs offering medication treatment. Both APRNs and physicians commented that the holistic nature of nursing education and practice was a very positive benefit of their ability to get waivers. It was recognized that APRNs were not just more prescribers, but that they bring a holistic perspective of patient care that is particularly powerful for opioid use disorder treatment.

The extent to which state government leaders and nursing champions advocated for expanded treatment, coordinated their efforts, and encouraged APRNs to get involved also were important. For example, even though Ohio requires physician oversight of NPs, government leaders have focused on expanding treatment, and in their eyes, this includes APRNs.

This may explain why Ohio has one of the largest percentages of NPs with waivers among the states that require physician oversight. Local nursing culture was also noted as a facilitator. The more that APRNs

are networked with each other and the more they learn from each other, the more they are supportive of going into buprenorphine treatment.

And access to free training to fulfill those 24 hours of training requirement was also important. Growing numbers of APRN education programs are including addiction training in their curriculum and some are even providing the full 24 hours of training so all graduates are qualified to apply for an X waiver.

Some are also offering education on substance use disorder treatment in their pre-licensure nursing programs. This can be important because RNs who work in hospitals often encounter patients with opioid use disorder and they can play a positive role in facilitating medication treatment. Some APRN education programs are also partnering with psychology, social work, and other professional schools to develop interprofessional training.

At New Mexico State University, for example, the APRN education program is playing a leadership role in a training program that includes social work and criminal justice students. Many faculty also are engaged in buprenorphine treatment in their community-based clinical practices which can offer APRN students real-world exposure to care of this population.

I'll close with three points. First, full practice authority could increase the ability of APRNs to provide medication treatment, and we strongly encourage that all states seriously consider this. This could have an even bigger impact in rural areas. Second, other health care regulations and organizational cultures are important to increasing uptake of X waivers by APRNs and also by physicians.

Finally, as more education programs include waiver training, additional research should examine the extent to which graduates actually provide treatment services. Thank you very much for your listening to my presentation and feel free to contact me if you have any questions.

Hi, I'm Joanne Spetz and I am ready for questions and answers. I know there's a little bit of a delay for questions coming into the queue.

I'll note that after I did that recording, there have been some press articles about the possibility of eliminating the so-called X waivers for some proportion of clinicians, perhaps focusing the initial proposal that the Trump administration had put out was to reduce it or eliminate it for physicians caring for 30 or fewer patients.

Those regulation changes have been put on hold by the Biden administration. Those of us who believe that APRNs have an important role in opioid care were a little dismayed that they were not included in a potential X waiver elimination. So, we'll see what happens next. So, we have a question in around whether completion of the educational requirement for obtaining the x waiver was a barrier and whether the eight-hour requirement is a barrier for physicians.

And of course, for advanced practice nurses, the requirement is 24 hours. We definitely heard from the people that we interviewed that this was a barrier, the whole training process in general, or the training requirement. In addition, there was no rationale that was ever provided for APRNs being required to do 24 hours of training versus the physician eight hour of training.

Some of the nurse practitioners we spoke with quipped that they thought that it was the same as the physician training. They just said everything three times. So, in terms of that being a barrier, seemed absolutely like it probably was. What was interesting and also maybe a barrier is the mentoring question. You know, a lot of the training is available online.

It is often available free. It's good quality. But, when you're taking care of your first patient, we heard from people that we interviewed, just kind of that fear of taking care of a first patient with buprenorphine, especially if a person is in a relatively smaller solo practice or is the first one in their practice to be offering buprenorphine treatment.

So, that need for mentorship and networks is very important. And, that may be something worth considering and true for both physicians and for advanced practice nurses. So, thank you for that question, Tracy. I'm taking a quick look to see if anything came into the chat as a question and I don't see anything there. So, please use the Q&A section to ask any questions.

We are continuing the research project. We now have funding from the federal government. So, we will be continuing mostly the data analysis components to look at the roles of advanced practice nurses in expanding access to medication treatment.

And, we're interested in the colocation of providers and the degree to which advanced practice clinicians are moving from their 30-person waiver up to the higher numbers of waivers. So, Michelle Buck asked, "Are there any outcomes data in states with higher levels of APRNs providing buprenorphine treatment in terms of relapses or overdoses or such?"

The short answer to that is, not yet. The overdose question, I have spoken with a couple of graduate students who are interested in trying to look at that. And using the idea that you have different states that regulate APRNs differently, provides an external source of variation in the rates at which people are taking up waivers.

And, that is an opportunity to essentially do a natural experiment, where in some states, the APRN workforce is growing more rapidly in other states. And, that natural experiment then might help you better assess whether any changes in overdoses or negative outcomes is causal.

We also know that there are a number of people who've been interested in studying advanced practice engagement and buprenorphine treatment using insurance claims data or Medicare claims data. And, that's an area where it's very difficult to measure what the "quality of care" would be for those populations.

But, we do have interest in that. We were really struck with the qualitative comments that people made, both physicians and nurses, about how they perceived the APRNs not only just added more, you know, more people to battle the opioid epidemic, but also that the nursing training and perspective was really valuable and that holistic approach to care was really important.

So, I have time for one last question I have been told and so I'm looking to see if any other questions come in before we close. All right, I'm happy to share my slides and any of the papers that we've put

together. We are hoping to have some more publications coming out soon and we are continuing to do work on this, thanks to a grant from the National Institute for Drug Abuse.

But the original funding from National Council of State Boards of Nursing absolutely got our work off the ground and was cited in our reviews from NYDA as having really provided a strong basis for our overall proposal. So, we are really excited and grateful for the support from NCSBN in this work. Well, I see no other questions.

So, I'm available to answer questions offline. Feel free to email me. I'm easy to find online and I'm happy to share my slides. Thank you.