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

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

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 lrenc 25 708.72[(N)]n order

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.