Regulation Matters:
a CLEAR conversation

Episode 67: Practice Authority, Workforce Diversity, and Equity of Care – New Research

July 11, 2023

Line Dempsey: Welcome back once again to our podcast, Regulation Matters: a CLEAR conversation. I'm your host, Line Dempsey. I am currently the chief compliance officer with Riccobene Associates Family Dentistry here in North Carolina and Virginia, and I'm also CLEAR's president for the 2022-23 membership year.

As many of you are aware, the Council on Licensure, Enforcement and Regulation, or CLEAR, is an association of individuals, agencies, and organizations that comprise the international community of professional and occupational regulation. This podcast is a chance for you to hear about important topics in our regulatory community.

An important topic that a lot of regulators are turning their minds to is DEI - diversity, equity, and inclusion. Some recent research from West Virginia University shows that states with full practice authority for nurse practitioners tend to have greater workforce diversity and greater equity in healthcare delivery.

Joining us today is Alicia Plemmons. Among her many titles, she is Coordinator and Research Fellow with the Knee Center for the Study of Occupational Regulation. In her research, Alicia and her colleagues explored the relationship between practice authority and the diversity of the nurse practitioner workforce. We're so glad to have you with us today to talk about your research. Welcome.

Alicia Plemmons: Thank you for having me on. This seems like a lot of fun.

Line: It certainly can be, and I look forward to the conversation we have today. So, your research report was entitled "Exploring the Relationship Between Nurse Practitioner Full Practice Authority, Nurse Practitioner Workforce Diversity, and Disparate Primary Care Access." Tell us a little bit more about that. What were you and your co-authors initially interested in understanding about nurse practitioner diversity?

Alicia: Absolutely! So, we had sort of this original idea a few years ago, when me and my co-author Shishir Shakya - he's Nepalese and living in a state that had restricted scope of practice - We were discussing sort of the difficulties his wife was having when finding a provider that really understood her cultural background and some of the concerns that she had. This conversation later started to expand over the next few years, as we talked to some of our colleagues who were representatives of marginalized communities in nursing schools, just to see if they saw sort of a similar pattern of where their graduates were wanting to move, or ideas of what sort of pieces of autonomy really seem to matter to students, especially students from marginalized communities.

So eventually we decided to formalize this research question. Myself, Shishir, and Ed Timmins, who's also in the paper--we're all economists--while we also worked with three fantastic people from nurse practitioner programs. We decided to formalize this research and compare sort of the ethnic and racial composition of different state populations to the nurse practitioner workforce in those states, because we really care about the diversity of practitioners and access, especially for marginalized communities.

So full practice authority was one way that we thought there might be a vehicle, if autonomy is important to these types of practitioners, to being able to go serve these communities if that's something that we actually see happen in the data. And we wanted to explore that a little further.

Line: So, with these practitioners from marginalized communities, why would you expect practice authority to matter to nurse practitioners in those areas?

Alicia: Sure. So, the literature up until what we found really showed that cultural competence is important for patient comfort. And it's also associated with higher rates of adherence to schedule follow-up visits, medication routines. And at the same time, the National Center for Health Statistics found disparities in healthcare access, especially in marginalized neighborhoods, was resulting in shorter life expectancies and higher infant mortality rates. So, we were curious about access to practitioners who understood both the concerns of a community, and, for example, how different conditions present on different types of skin types or other questions like that to see if maybe they are able to identify conditions and treat patients faster.

So, healthcare providers who identify as people of color are more likely to practice in underserved communities and enter primary care specialties compared to their white counterparts. And this is really important, because the Association of American Medical Colleges found that there's a large incoming shortage of available physicians expected in the upcoming decade of nearly 135,000 in some of the worst statistical reports. This is large and is disproportionately forecasted to have a much wider effect in underserved and marginalized and diverse communities.

So, we were curious about sort of this autonomy of nurse practitioners with full practice authority in that it's not just prescribing medicine or treating patients, but it's the ability to work independently without a collaboration contract with a specific physician. If physicians are not located in these

underserved communities, there's nobody for these nurse practitioners to have those collaboration contracts with, which means that nurse practitioners aren't able to go to those communities either.

So, we were wondering if removing some of those collaboration contracts or the strict collaboration contracts allows more practitioner mobility and access to these communities that might have this drastic shortage of physicians.

Line: That's excellent. How did you approach measuring diversity of your nurse practitioners and the communities that they would serve?

Alicia: When we approached this, we used data from the NPI, which is the individual numbers assigned to each practitioner that are provided to the National Plan and Provider Enumeration System. We used this data from 2014 to 2020 prior to the pandemic. And through this, we were able to understand a little bit more about nurse practitioners. While they don't report their exact ethnicity or race, we were able to use a language processing model developed by statisticians at Princeton University to sort of predict race and ethnicity by comparing surnames and attributes of these nurse practitioners to census records.

So this was really interesting because it was one of the first times that race and ethnicity of nurse practitioners was ever really talked about before, or even attempted to be measured. Now, it wasn't only important to understand the nurse practitioners, but also the patients that they serve. So what we did was we worked with the Medicare beneficiary files through the Medicare part D, also from 2014 to 2020, which was right before sort of the start of the pandemic. And we derived a lot of information on these patients, such as their ethnicity and race, because that information is reported by practitioner. We also looked at the demographic statistics provided through the 2020 census on ethnic and racial composition of each one of these communities as well.

So those are the three pieces we sort of brought together, and we looked at how they were comparing. So, did we have areas that were particularly diverse, and what was happening there? Did we have areas where there may not be access to underrepresented or marginalized practitioners in communities of color. Those are things that we were really focused on at this time, and we really brought together those pieces of data to try to better understand what relationships were happening here.

Line: So, in the end, what kind of results did you find?

Alicia: When comparing demographic trends sort of among these populations to the available practitioners in these populations, in most cases the fraction of nurse practitioners from community of color is much smaller than the overall fraction of the population belonging to that racial or ethnic group. That in itself isn't really surprising. It's sort of an intuitive result that we've seen before. But it's the first time it's really been able to be tested that we saw this stark disconnect happening across

different states, and we really wanted to understand why there was this lack of representation, how it affects patients of color, and we did that by proxying, using Medicare beneficiaries.

And we found that they're more likely to want to visit nurse practitioners of their same racial and ethnic group who may have higher rates of cultural competency and leading to more patient comfort, especially within these marginalized communities. So, our results provide some evidence that the communities of color in their overall population are not aligning with the nurse practitioner workforce and the diversity of nurse practitioners available in these areas, especially in areas that have restricted or reduced scope of practice.

So, states that have more Asian practitioners, especially relative to the population (excluding California and Texas, which do have reduced scope of practice) - three of the five states that they have this increased prevalence in were Nevada, New Mexico, and Wyoming, which have sort of this long standing history of full practice authority. We also found in areas where there were more black nurse practitioners, especially in black communities, and had more population diversity were in Utah, Wyoming, and Vermont, which were also full practice authority states.

So, full practice authority does not appear to sort of influence the race and ethnicity of Medicare beneficiaries that are seen by white nurse practitioners. But we do see that black nurse practitioners are not only moving into these areas, but able to serve more black Medicare beneficiaries as well. That we see increases on these care statistics, which is really important when we start thinking about diversity, inclusivity, and access for communities of color.

Line: So as in most studies, there usually are some type of limitations. Did you have limitations with yours?

Alicia: Sure. So, as a researcher and economist, I can say that there's no perfect study. If there were perfect studies, I wouldn't have a job because we would already have all the answers. But as a researcher, especially on this topic of diversity in the practitioner workforce, this is meant to be the start of a conversation, not the end of a conversation. So, what we hoped to do by presenting this initial finding was start to inspire more people to think about diversity in the nurse practitioner workforce and start to think about research and data collection in this area.

Data availability is a huge issue across the board in the healthcare field. Since private insurance data tends to be either prohibitively expensive or entirely inaccessible, researchers like me have to sort of depend on Medicare beneficiary files that are provided through CMS. And these are predominantly geared towards people who are enrolled in the part D of Medicare. So, this means we may not have data for every single nurse practitioner, because not every single nurse practitioner may see a Medicare beneficiary, even though the vast majority do. This also means that we can't stratify our data even further to be able to look at sort of infant or child populations. What we have to do is we have to look at the population as a whole. But it would be really nice if we could also think about things such

as access to family practice when it comes to the lens of children and children help as well, and it's something that I hope people do in the future.

An additional limitation is that NPI records that we collected through NPPES do not ask practitioners to actually report their ethnicity or race. So, we had to use the language coding model developed by Princeton University and using census records to be able to identify what the most likely race and ethnicity for each practitioner was and then develop cut-offs. We had to be more than 80% confident that these aligned, which meant that there was a lot of noise introduced into the data that might keep us from seeing as clear of results as what we would have if we had that exact data.

Line: Yeah, it's certainly interesting. So, what could this mean for essentially creating pathways to maybe empower nurse practitioners from marginalized communities?

Alicia: But what I want to point out is that this research is just one step in understanding how sort of autonomy in practice or removing collaboration contracts (especially in areas where there may not be a physician for that collaboration contract), how this might affect where practitioners decide to locate and set up shop. If marginalized communities are going to be disproportionately harmed by the lack of physicians or the upcoming physician shortage for the next 10 years, and there may not be physicians to have these collaboration contracts with, that means that there are areas that may not have any access to a healthcare provider. Being able to bring in a nurse practitioner because we remove just one piece of sort of this ruling might be able to help increase not only the diversity of practitioners, but giving diverse communities access to more practitioners available to them. So that's something that we wanted to point out is things that we think are really important, especially as educators and as some of us on this paper as economists.

We really hope this also brings attention to the importance of data collection and availability, and that people start to consider when analyzing these policies, especially the cost/benefit analysis of proposed legislation, when thinking about these terms, understanding that not only are we looking at sort of the cost piece, or what the eventual prices are but thinking about what does this mean for access? And what does this mean for access for groups or areas that might be disproportionately harmed by other types of policies or other types of shortages? So, addressing different ways in which new practitioners may be able to enter and serve marginalized, underrepresentative communities before the shortages get worse, actually analyzing it right now before it gets worse, is really key to ensuring that we maintain accessible and quality healthcare for everybody moving forward.

Line: That's fantastic. Well, thank you so much. It's great to hear about your research and its implications. So again, thank you for speaking with us today.

Alicia: Thank you so much.

Line: And it has certainly been our pleasure. We'd like to continue this conversation. So here are some questions for our listeners to think about.

- If full practice authority encourages nurse practitioners from marginalized and underrepresented communities to join the workforce, is this a potential pathway for further addressing the primary care shortage that's happening right now in the US?

- Are there other potential pathways for addressing ethnic and racial disparities in healthcare access?

We graciously appreciate and thank our members for your feedback. We, as many of you know, have recently launched a new Regulatory Network platform, and questions like these will be posted there for member feedback and discussion. And if you haven't already joined the CLEAR Regulatory Network, we invite and encourage you to join and take part in the online discussions.

I also want to thank our listeners for tuning in for this episode. We'll be back with another episode of Regulation Matters: a CLEAR conversation very soon. If you're new to this podcast, please subscribe to us. You can find us on Podbean or any of your favorite podcast services. And if you've enjoyed this podcast episode, please leave a rating or comment in the app. Those reviews help us to improve our ranking and make it easier for new listeners to find us.

Feel free also to visit our website at www.clearhq.org for additional resources, as well as a calendar of upcoming programs and events. Finally, I'd like to thank our CLEAR staff, specifically Stephanie Thompson; she is our content coordinator and editor for this program. Once again, I'm Line Dempsey, and I hope to be speaking to you again very soon.

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