

***2018 NCSBN Scientific Symposium - Regulation: The Economic Burden and Practice Restrictions Associated with Collaborative Practice Agreements: A National Survey of Advanced Practice Registered Nurses Video Transcript***  
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**Event**

2018 NCSBN Scientific Symposium

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**Presenter**

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- [Brendan] So, thank you, Rebecca, and thank you, everyone, for attending this afternoon. I know we're right at the finish line, so I'll try to be as concise as possible. As Rebecca mentioned, my name is Brendan Martin and I'm a research scientist in the Nursing Regulation Department at NCSBN.

And I'm here today to discuss with you the findings of a recent national survey that we conducted of advanced practice registered nurses and ultimately, those findings will be disseminated in a for



For the methodology, this is very similar to a lot of the research that we do. So we used the survey platform Qualtrics. We have a number of expert users on staff at NCSBN, so that was pretty low-hanging fruit for us. The survey consisted of about 40 questions, so it was a larger instrument in this particular instance, but that's because we wanted to cover a lot of topics. So, the four main ones were baseline demographic measures that we thought would be very important to control for downstream models.

But then we also specifically wanted to look at particular aspects of the collaborative practice agreement framework. So, are there minimum distance requirements? Are there minimum chart review requirements? Are you essentially, subject to more than one collaborative agreement? Who wrote it? Who crafted it? Etc.

We also then wanted to look at practice patterns, so what are the patient populations that the APRNs work with? What is the setting for those facilities? What are the facility types? Etc. And then collaborative practice agreements, benefits, and challenges. So, this was really what we focused on for the purpose of the research. We asked explicitly for APRNs to report if they confront any obstacles, challenges or benefits directly associated or aligned with their collaborative practice agreement.

The survey itself was in the field for six weeks and we had a single reminder about three weeks after initial dissemination, and then another secondary reminder shortly before survey close. This little guy on my left, and your right is my, at the time, six-month-old son, Cameron. I throw him in here because it's the softball to get people interested in the statistics slide.

And as you can see, he's quite the statistics wiz already with his statistics apparel. The final sample for our study was about 8,700 APRNs. So this was a very, very robust sample. And one of the things that we were immediately excited about was in our research protocol, we had kind of envisioned a two-stage design. So, we had a main analysis and then we had a supplementary, kind of exploratory analysis that we wanted to use for confirmatory purposes.

And with this sample, we were actually able to do just that. So, for the main analysis, what we did is we employed univariable, multivariable, binary logistic regression models to specifically examine fee requirements and restricted care patterns. So, in those particular instances, both of them were kind of binary questions, but we did ask follow-up questions.

If you were assessed fees, what were kind of the levels of those fees? And if you had restricted care, what were the nature of those restrictions? But for the purposes of just the outcome, it was just that kind of zero one. For the supplemental analysis then, what we had ultimately envisioned and we were able to pursue was a latent class analysis. And so, for those of you who are a little less familiar with that, what we did is we kind of tried to paint a demographic profile of APRNs who were more or less impacted by these types of formal agreements by triangulating across a number of items on the final survey.

So, we looked at APRNs responses to challenges, benefits, fees, etc. And then based on their response profiles to numerous questions, we were able to kind of distill a little bit of a profile for what type of APRN is potentially facing the most restrictions in the field. And then ultimately, all statistical analyses were conducted using SAS.

So for the final sample, I don't think that this will come as much of a surprise to most of you. Eighty percent of our final sample were certified nurse practitioners and then pretty equal proportions of our remaining sample fell into the clinical nurse specialist, certified nurse midwife, and certified registered nurse anesthetist. In terms of sex and education level, the final sample was fairly homogeneous in that 9 in 10 respondents self-identified as female and about three-quarters of respondents said that they had a master's degree followed by about 13% DNP, just under 5% Ph.D. and just under 2% bachelor's.

In terms of setting, we found that about two-thirds of our respondents said that they practice in an urban





So, kind of remove it a little bit from some of, like, the statistical estimates. And so, like I said earlier, we used essentially, multiple measures on the instrument, the survey instrument to try to triangulate are there groups of APRNs? Is there a typical APRN profile who is facing more restrictions in their day-to-day care? And ultimately, the model said there were.

There were three groups, kind of, organically in our final sample of respondents. There was a most restricted group, kind of a moderately restricted group, and then a least restricted group. The most restricted group accounted for about 5% of the sample. These were characterized by high probabilities and needing to establish and maintain their collaborative agreement out of pocket as well as higher likelihoods of encountering restrictions, disadvantages, and challenges.

About 28% of the sample kind of fell into that moderately-restricted group. The main difference between the moderately-restricted group and the majority-restricted group was the fees. So, the moderately-restricted group was more likely to report that their collaborative practice agreement fees were typically covered by the facility, so it was a little less onerous.

And then the least-restricted group basically reported little to no awareness, at least, of collaborative agreement fees. And then compared to the other two groups, fewer restrictions, disadvantages, and challenges. And so, just to give you a little bit more insight into these groups, we did kind of try to delve into that demographic profile that I was talking about earlier.

For the most restricted group, these tended to be older nurses, more established in their careers, typically practicing in rural settings and in privately-managed APRN clinics. The moderately-restricted group was more demographically similar to the least group, but really where they differentiated from the least-restricted group was in those day-to-day obstacles and challenges. So, they were more likely to report state-mandated minimum distance requirements, chart reviews, they were more likely to report that they lost or needed to change their collaborating physician or their supervising physician.

And they were also more likely to report that they were being assessed a fee, but it was being covered by the facility. That least-restricted group tended to be early career, younger nurses that generally tended to work in large health systems or facilities in urban areas. So, kind of, what does it all mean, what does that, kind of, the arc of the research.

So, kind of, mirroring the literature review that we had done at the beginning to our findings, one of the things that we really felt strongly about with this study, was that given the number of challenges facing the healthcare industry, and in particular the provider workforce shortage, we think state laws should ultimately obviously be facilitating an APRN's practicing to the full extent of their education and training.

What we're seeing, though, currently, is in a lot of states over 30 states, that's the reverse of what's true. There's kind of this patchwork of regulation which is resulting, honestly, in very significant market inequities, so you could be a resident of one state, you know, separated 10 miles from a resident of another state and the healthcare system, and the types of services that you could hope to gain access to could be very, very different just based on those differences in scope of practice regulation.





services. And then one of the challenges with this type of research is when we get 8,700 respondents and we had open-ended texted questions, we had 5,000 free text responses to some of our items and so I'm working with one of my colleagues, Dr.

try to distill insight into what are the specific types of the...because I think the next question here naturally is, there are restrictions, how can we give actors across the landscape, more information as to what types of restrictions need to be maybe pulled back.

And we're hoping that that additional sub-analysis will kind of get at distilling quantitative insights from the free text responses. So, yeah, we see a lot of power in this sample. But to your very specific question, we're looking to publish hopefully, later this fall in *Nursing Outlook*. - [Woman 1] I was just thinking, I'm from South Carolina and maybe as you tease out the data, you could do an analysis of primary care providers because 85% of nurse practitioners are primary care providers and in rural populations, you don't have MDs so you really can't get a match for match in rural populations, so you not only have costs but you also have distance.

So, would there be some leeway in getting rid of that match, you know, that exact match because you really can't find a pediatrician, you can't find an internist. You can't find anything. Something is better than nothing. So, since Peter Burrhouse just gave a talk that clinical outcomes are not an issue, and patient safety is not an issue, and as board of regulators, those are our mandates, is to provide good care and protect the public.

By using the data, can you recommend or, you know, bring that takeaway to light so that, you know, in states that have not, you know, moved forward with full practice that as people do work in these areas of rural practice, that they're doing good work and they should be continuing to do good work and these costs are just going to, you know, burn them out and they're going to let them shop and go to Maryland.

- Yeah. No, I think that that's an excellent observation. So, I don't know about the match part of your primary care basically, was 33% of the respondents' sample. So, I think one of the things that we really want to understand is, do these overall trends hold because this is the overall analysis, do these overall trends hold when we start to kind of break it out into those, like, specialty areas?

And primary care, to your point, is an absolute kind of must, you know, given the type of sample size that we'll have and the importance of, in particular, primary care. So, yeah, we absolutely do plan to look deeper into primary care and making sure that essentially MPs who can serve that role or APRNs who can serve those roles aren't being overly restricted.

- [Woman 2] And then because I think that you, you know, the data when [inaudible] healthcare.

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speak for itself, but that's certainly what we saw.

We certainly saw that where care was needed the most in particular as we project forward, that's ultimately where we're placing the most restrictions and placing the most financial burden, which seems

very counterintuitive. Yes? -

nk you very much. I think this is a follow-up to what you were saying because that's what I was sitting there trying to get an understanding when you said that the most restricted, you said that there was in terms of demographics that were with the older nurses and was that older in terms of age or older in terms of experience because it seems odd if it's variant.

- [crosstalk]. So, we looked at both. I'm glad, actually you're distinguishing. So, I might have glossed over it when I talked about the supplemental analysis, but we looked both at years as an APRN as a measure of experience, and we looked at age, demographically. In both instances, older nurses in terms of age, but also more established nurses. So, we had years as an APRN and because dealing with continuous measures can kind of sometimes get messy and how do you interpret like a one year increase, we broke it out into median and interquartile range and we basically, the median was 13 years in our data set.

And we basically said anyone who's at that median or above was considered established in their career. If you had been practicing as an APRN for 13 or more years, you fell into the most restricted group. So, again, to your point, and to the earlier point, again, the least intuitive areas are being the most impacted.

- [Woman 4] So, I just wanted to follow up on the comment about that mismatch. In Washington State, we had five years where we had a joint practice agreement requirement for prescribing two through four scheduled drugs and when we did a survey, what we found was that there was that kind of mismatch because people just had to have somebody to have that joint practice agreement, about which there was nothing joint, it was always, you know, the physician said, "Yes, he would," and then it became a business.

Well, I'll do it for \$150. So, the real question is, how much, when you have that information about their level of interaction, I would be much more interested in how big is the mismatch for people who have to have the most interaction, rather than for the people who have to have the least interaction.

So, that kind of a sub-analysis might be very interesting.

- Yeah, that's a very good point. I mean, so one of the things that we could do is we could create essentially, a new variable that basically said, "were you matched appropriately with your supervisors specialty?" And then if you weren't, it's, you know, a one, if you were, it was a zero or something to that nature and then we could break out the data that way. So, yeah, I think the list of analyses that kind of come out of this, you know, in many instances, even at the state level, when you were mentioning South Carolina, I think, you know, even at the state level, I think that there's real power, you know, obviously, not using the data for unintended purposes.

We did have a study protocol, but ultimately, the study protocol was to distil insight about this very important topic and I think we have a lot of power to do it. I think this is the last question, probably? - [Phyllis] So, thank you. Phyllis Mitchell from Vermont. Thank you for this study.

As a state, we're looking to, we're able to get rid of practice guidelines last legislative session and we're looking to move forward either with a big leap or tiny steps in the next couple of years for our APRNs.

board.

It's the medical lobbying that just is almost insurmountable, you know, they come up with these wild statistics and studies that are 10, 12, 15 years old.

And so, I think that even though you've presented this great data and we have our data and we have our

Because I think that's, no matter how much data you present to them, it may not make a difference.

- It's a tough one, there. I know.

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