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2018 NCSBN Scientific Symposium - Practice: Business Case for Employment of Hospital-Based Advanced Practice Registered Nurses: Scope of Practice, Patient Outcomes, Nurse Retention, Financial Impact Video Transcript
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Event

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Presenter

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- [Dr. Jeannie Cimiotti] Thank you for the invitation to be here today. From what little I've seen from this morning, it seems like it's a very exciting conference. The keynote was great. And some of the information that I'll provide just kind of backs up what was said earlier.

I'm a Mac person, so I'm just like... Okay. You'll probably see that what's listed on your handout is a little bit different from the title I chose today. Because we have so much information from the study and so much data, I thought, "Well, you know, we all know about the scope of practice issues." And I mention that later on a bit.

But what are the organizational mandates? Because when you're talking about acute care and other organizations, they often don't, you know, give nurses or APRNs the full scope, even as per the law. They have their own regulations internally. So just a little bit of background information.

There is quite a bit of literature that's being published over and over on APRNs in primary care because of that focus of rural health and such that we heard earlier, and the restrictions that are on their practice. But we don't really know a lot on what's happening in acute care hospitals, and how organizations are restricting nurses within acute care hospitals, even though the number of APRNs in hospitals is increasing.

Probably, and I would think personally, that they're used in the role of hospitalist, but we don't know for a fact if that's actually happening. So I was fortunate to work with colleagues where we surveyed nurses in four states, all types of nurses, registered nurses, advanced practice nurses.

And those states were California, Florida, New Jersey, and Pennsylvania. The rationale for selecting those states was, first of all, they employ about a quarter of all the nurses in the country. And I had been

working with this team before, and this specific survey, which was in 2016, we also had surveyed those states in 2006.

So we had data at several points, and we wanted to stay with those states and we could follow those states. So we actually drew a random sample of APRNs from the four states, from the licensure list. You can get those from the Boards of Nursing. They provide the address and name and other information on the nurses. And that 50% random sample gave us 21,629 APRNs in those 4 states.

Then, we surveyed them using what's known as the Dillman method. If you've done survey research before, you know that the Dillman method is extensively validated. It's hopefully going to improve your response rate. Typically, what we do is we send out a postcard, we make it flashy, there's nurses on it, and it's sent out to the entire 21,000-plus APRNs, "The survey is coming. The survey is coming."

It's like Paul Revere announcing, "The survey is coming." And then, about five days later, the survey arrives in the mail. In this case, it was an eight-page survey with a return postage envelope. And you're hoping that they'll have mercy, and they'll fill out the survey and return it.

We were lucky to have a 30% response rate. You might think that's low, but actually that's pretty good for survey research. And those returned surveys actually numbered 6,490. Now, what we do with our research team is we assess for non-response bias. So what we do is, after the fact, after we've sent these surveys multiple times and postcards, and they're still not sending back what we'd like, because we really hope for more than half, we go and we draw a sample of non-responders, and this is another validated technique.

And what we do is we send a bit shorter survey, incentives, we send them money, we call them. We really become aggressive with the survey method. And we take those responses, and typically we've always had more than 90% respond for that non-responder.

I don't know if it's because it's shorter, I don't know if it's because it's the money, but they do it. And we always find out that, "You know what? There is no response bias." The only differences we see are demographic differences, and that's not what we're interested in. Even though we do want a diverse workforce and such, we're interested in what's happening within the organization and the quality of care, and there's never any differences.

They're all rating the environment the same and patient care the same. So of those 6,490 APRNs, there were 5,497 that reported they were working in health care. Nine hundred and thirty-three, unfortunately, said they were retired, unemployed, or they were working in a profession other than nursing.

Even though this presentation is on hospital-based APRNs, I thought it was interesting to just let you know where they work, and since there was no way to tell when you sampled them, except that they were APRNs, they were licensed. And we saw that they were in primary care, acute care, and other settings.

We actually used defining criteria, as per Joanne Spetz and her team. So if the APRN indicated they worked in an ambulatory clinic, outpatient, long-term care, home care, physician office, nurse-managed

clinics, and the others that you see listed there, we grouped them into primary care. Of course, the acute care APRNs worked in hospitals, and there were 1,642 of them working in 457 hospitals.

There were 685 that were working in what was defined as other settings... dialysis, mental health, pharmaceuticals, and other non-hospital settings. And there were 448 who elected not to answer the question. So focusing on our task, which was the hospital-based advanced practice RNs, we found that, on average, they were almost 49 years of age.

They were overwhelmingly white at 81% and female at 90%, 8% of the APRNs were self-identified as Hispanic. They reported, on average, 22 years of experience as a registered nurse, 11 years of experience as an APRN, and 80% of these APRNs reported that they were employed full-time.

This is just a graphic to show you the racial composition. Again, 81% were white, and these are the hospital-based APRNs, and 5% black, 7% reported that they were Asian, and 7% selected "Other."

When we asked them about their education, training, and experience, we found that 88% of APRNs, their terminal degree was at the master's level, and that 4.3% were currently enrolled in a DNP program.

Which I thought these numbers were a bit surprising, especially in light of the IOM report, where we're hoping that we have more and more nurses that are doctorally prepared. So I was quite surprised that 88% reported their highest level of education was the master's level and that only a little over 4% were enrolled in a doctoral program. Seventy-seven percent of APRNs received their graduate education through a traditional in-person program, 3% reported they were educated online, and 20% reported that their graduate education was through a hybrid program.

Seventy-six percent of APRNs reported that they hold national certification. And this was a little interesting question that we also asked them. I imagine you're aware through the Affordable Care Act, there was the Graduate Nurse Education component, similar to the GME, Graduate Medical Education.

And 19% of APRNs took advantage of that program, where hospitals were reimbursed through the ACA for clinical training of APRNs. It was specific to APRNs. This is just a graphic to show you the job characteristics of hospital-based APRNs.

Their position, the majority of them, about 78%, are nurse practitioners. There's a small percentage, about 5%, that are actually working as staff nurses. And then, we have nurse anesthetists, other nursing care, the CNS, nurse managers, and other administrative positions at very low percentages.

You might find that the fact that some of them are working as staff nurses a bit surprising. However, in my career in the hospital, I can remember that happening, and the rationale was because of salary. Some of those bedside nurses that had been there long enough were at a higher salary scale than they would have been paid as an APRN, so they elected to stay at the bedside.

You can see, when we looked at these APRNs, where they're working, the majority are working in adult med-surg units, followed by other hospital settings, the Emergency Department, the Adult ICU, hospital-based ambulatory clinics, and pediatrics. When we asked them about additional job characteristics, 11% of APRNs reported they used personal costs related to collaborative practice.

So they were paying out of pocket for some of these associated costs. Although 93% reported they had an APIN number, only 36 were billing under their own NPI. When we asked who their supervising units were or departments, 41% of APRNs were supervised by Nursing, 47% were under the Department of Medicine, and 12% reported "Other Unit."

In that case, we didn't ask for additional details, but you could think maybe Anesthesia, or something, had their own units. Twenty-seven percent of APNs work more than one job. And this one was like a knife in the chest when these data surfaced, 83% of APRNs reported that they're doing the job of the bedside nurse and non-nursing personnel.

Now, you talk about scope of practice and what's happening. My humble opinion, and I'm sure of others in the room, an APRN should not be doing non-nursing tasks. We also asked them about care delivery and telehealth, with our interest in the compact and how those issues might work. And we found that 19% of APRNs reported using telehealth, and these are, again, acute care APRNs, in-state, 14% reported providing telehealth services out-of-state, and a little under 1%, or 0.2%, reported providing telehealth outside of the U.S.

Now, I don't know how that plays into our practice regulation, but there are a number of large academic centers in this country that are collaborating with hospitals in other countries. From some of the research that I did when I was looking at this, I saw China happened to be one of those countries where a lot of the hospitals are collaborating with hospitals here in the U.S.

This is a map you're probably very familiar with. I just thought I'd include it, because you can see that California and Florida are two states are highly restricted, and Pennsylvania and New Jersey have reduced practice.

But when we looked at these, and of course, there's a time constraint here today, but the only differences we really saw across states were demographic differences. Pretty much the same restrictions that were in one state were in the others. And of course, you're talking about hospitals, so how much of that is organizationally driven?

When we asked specifically about scope of practice, 67% of APRNs reported that they can practice to the full extent of their state's legal scope. Twenty-four percent reported they cannot practice to full extent of their state. And they reported on several factors, and these were the most common.

They were required to discuss most patients with a physician. They were limited to the patients they were allowed to see. They required physician signature for prescriptions, for referrals and supplies. And this last one was kind of troubling, physician supervision was required, but the physician was not always available.

And if so, they were too costly. They had to pay the physicians. And this just goes to show you... the frequency of how APNs reported this. And you can see the 40%, a very large percentage, reported they had to discuss patients with MDs. But still, I mean, the others or about anywhere from like 13% to 14%, which are restricting the care that these APRNs can provide in a hospital.

APRNs who reported that they cannot practice to the full extent of their state's scope of practice, also told us about what was happening to patients, and they said that patients were experiencing very long time delays for their appointments. There was delays in getting services and specialist appointments.

They were having delays in getting their prescriptions or having necessary forms completed for supplemental care, such as physical therapy or outpatient services. And there were delays in being discharged from the hospital. And again, here's a graph that just shows you the percentage of nurses that were reporting this. And you want the patients to have the best of everything.

So any of these, any blue bar in here is disturbing regardless of the percent. I mean, but to say that they have to wait... 42% of APRNs are saying patients have to wait for their care, or they can't... A delay in their prescriptions. I mean, that's... You know, that's problematic. We also asked APRNs about their job-related outcomes.

Ten percent reported that they were dissatisfied with their job. Nineteen percent reported job-related burnout, which was measured through the emotional exhaustion subscale of the Maslach Burnout Inventory. And 11% of APRNs reported they intend to leave their job in the next year.

When we asked them about quality and safety, 44% of APRNs, less than half, would describe the quality of care as excellent. Only a third graded their hospital as excellent on patient safety, and only 26% graded their hospital as excellent on the prevention of infection.

Lessons learned. Few APRNs are prepared at the doctoral level, and there is obviously a noted lack of diversity among the workforce. There are organizational mandates placed on APRNs to prevent them providing the full extent of their scope of practice, and this results in delays of needed patient care.

Many hospital-based APRNs are doing the work of staff nurses. And APRNs have identified issues with the quality of hospital care, patient safety, and infection control. At this time, I'd like to just acknowledge my research team. We've been working together for decades, and that would be doctors Linda Aiken, Matthew McHugh, Hillary Barnes, Jeffrey Harmon, and Yin Li.

Thank you. We're doing questions now? Questions now or after? - [participant 1] So when you say APRNs were working in staff nurse positions, were they employed in staff nurse positions, or some of that work was delegated to them?

- The 80% who said they were doing staff... That was delegated to them to do staff work or non-nursing work they were doing. The small percentage were those that were actually employed, on that one slide, as a staff RN. And I believe, though we didn't ask, it was probably salary-driven. -

[participant 2] You mentioned that only 75% reported that they were National Board Certified. And I was wondering how they're able to bill if they're advanced practice nurses? Because you have to be National Board Certified under CMS...

- Right. And maybe that's why only 36% or whatever were allowed to bill. They had a number, and I could go back to that slide. It was... - I don't think you're allowed to even... Well, in Pennsylvania, you

can't work without a National Board Certification, period, whether you bill or you don't bill. So I was just curious about that.

- Yeah. I was too. Do any of those states not require certification? [crosstalk]

- Well, they're always different anyways.

- May I ask a few more questions?

- Sure.

- So did you look at any of this data state by state?

- We controlled for state in the models. We didn't see differences on the environment and the quality and such. We saw demographic differences.

- You did?

- Yes. We saw demographic differences. I didn't include those, but I believe they were younger out in California. They were more diverse out in California. I mean, by that, there was more racial diversity among the workforce in California.

- Another question I have is, were you at all surprised at the breakdown by the type of roles? I think it was 78% nurse practitioners, but very few CNSs and CRNAs. And these aren't people that are employed in hospitals.

- Right.

- So if that would differ, I think, from my state, which is Minnesota, we wouldn't see a... not more than NPs, but more CNSs and more... - And that could be organizationally driven. I mean, maybe the organization gives them that title? We didn't ask them whether... We just, "What's your job description?" You know? So that could be an organizational issue, where the hospitals refer to them as "nurse practitioners."

- And perhaps the CRNAs were employed by physician groups and didn't get the surveys [inaudible]

- Well, there were some in there. There were CNRAs. And of course, you're right, there were smaller numbers. I mean, CNRAs are smaller, in general, compared to the entire population. So there would have been fewer of them that were surveyed.

- Can you just clarify, the scope of practice was facility-driven? That wasn't necessarily what they're allowed to do in that state?

- Right. Those were facility restrictions.

- So even... It could be a full-practice state...

- They would still be restricted based on the organization. - [participant 3] I was wondering, when you looked at how patient things didn't happen because of restrictions, like, they couldn't get an appointment, those kind of things, did you also look to see if that happened where there weren't restrictions just to make sure?

Back to the [inaudible] example?

- Right, exactly. We did. We looked at the practice... We actually looked at the environment, which I didn't include in here also. There's an environment scale. Ronda Hughes had mentioned the practice environment scale in her presentation that measures the environment. Well, there is an organizational scale also for nurse practitioners that Lusine Poghosyan has developed, and we looked at that.

And it's similar questions, whether there's good relationships with physicians, whether you can practice to your full extent, does administration understand your role? And when that environment decreased, when it was poor, when the nurses started to say that the scale went down, the poor outcomes of patients went up. So we did see a correlation that you would expect.

When nurses were saying there were issues... The care, the quality of reported care decreased.

- I know you reported that patients waited longer for their prescriptions. Did you also look at the access to care, the time that patients waited to see a physician, or a nurse practitioner?

- No, not the exact time. No. It's just that we asked if they waited a long time. We didn't ask for a timeframe. Yes?

- I just wanted to... When you said, "Where do they work?" the other thing I was thinking about too was, a lot of acute care NPs may be associated with, for example, an interventional cardiologist. So they may spend some time in the outpatient office, but then they may also do their time in the hospital. So they're not necessarily hospital-employed, but they might be privately employed by a physician.

But I just would say, I think this is really important research because, you know, we've worked so hard to get around state [inaudible] provider laws, and then here's a whole other set of regulations limiting practice. And that would be, you know, the hospital associations, or even the system itself. We've had to fight with our local hospital in terms of hiring NPs and giving them privileges.

They didn't want them to have privileges without a year of experience, but they would hire PAs with no experience.

- Right.

- And it was kind of like, "Are you kidding?" So it's interesting, and I really applaud what you're doing. And hopefully, you guys get more into some of those roles [inaudible] that keep our practice down, that are hidden from people.

- And, you know, it was surprising also, on the practice environment scale, one of the questions asked, "Does nursing administration understand your roles?" And a lot of the APRNs said, "No." I mean, they disagreed that they... They said, they don't under... How could another nurse, how could Nursing Administration not understand the role... [inaudible]

- So I'm curious. You know, the low percentage of people who were billing under their own name, did you ask about incident-to billing? Because I think that's something that drives a lot of NP or APRN services now being billed under the nurse's name because they get a higher level of reimbursement.

So was that something... - I don't recall seeing that on the survey. It was very extensive, I could have missed it, but I don't think we did ask that. - [participant 4] Oh, let's see. I had two comments. First, I thought it was really interesting about the nurse practitioners reporting that they were doing nursing work.

And I think that would be interesting to look at a little more carefully. Because I think about, I'm a nurse practitioner, I work in a hospital setting. [inaudible] But I think me and a lot of my colleagues would report that we do some nursing work, but we do that very purposefully, and it allows us to establish relationships with charge nurses.

Say, for example, the nurse, if they can't get a line on a patient, we might go do it because we want to prevent that patient from having to get a central line. Or we may go put in a catheter in a difficult patient. So that's nursing work, but it really preserves patient safety, and it helps us to build that rapport with the bedside nurses so that they feel more comfortable calling us. So I was thinking about that, just that that was something interesting to look into more.

Because I can't imagine a situation where, nursing work would be delegated. I don't know who would do that to an advanced practicing nurse.

- Right. And we did ask the degree. I mean, that was a categorized question. But we did notice, as that percentage of APRNs increased, that they were doing nursing and non-nursing tasks, the quality of care went down. - [inaudible] And then the other, I was going to also say, this is such important work.

Because in North Carolina where I work, I hear a lot from my colleagues, "Well, even if scope of practice is changed, it will impact us." And so it's kind of a demoralizer to get them involved in political action to, you know, lift these regulations. So I love this look more at, "What are the outcomes for the patients?" Because that's how we can ultimately, I think, sway hospital administrators.

- Okay. You're welcome. Any other questions? You're good? Okay. Thank you. And I'll be available after...