2018 NCSBN Scientific Symposium - Education: Consensus on Nursing Education Regulatory Quality Indicators: A Delphi Study Video Transcript

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What is the background of this study? As many of you know, most boards of nursing approve nursing education programs.

And in order for the program to be made eligible to take the NCLEX, they have to be approved by a Board of Nursing. I think there's one state, Utah, where it is accreditation, but even then, if they don't get accredited, the board steps in. So the boards have been, you know, using legally defensible metrics.

But many of them use NCLEX pass rates. And you know, that does measure the first year of practice of a new graduate. It is minimal standards. But, you know, there are other metrics that may be out there that are also legally defensible, that they could use other than those first time pass rates.

So we did a trends in nursing regulation. We had a committee that looked at, what are some of the trends that boards are looking at in the future in regulation of nursing education programs? And one of them was, they wanted to know what some other metrics might be. So we started working on… We had a committee, the board established a committee and we began to look at, what could we be using for other metrics besides NCLEX pass rates or especially first time pass rates?

So we thought, this might be a pretty easy assignment because we know the accreditors have metrics. So let's just see what the research is in back of them because since it's legally defensible, really has to be based in the evidence. So we looked at what the accreditors use. They also use NCLEX pass rates, but they also use employment rates.

And they use graduation rates and they have specific numbers that they use, 70%, 70%, and 80% for pass rates. So we figured that must be, some, let's look at the studies for those, we'll present that to the boards and we'll go that way. However, we found they don't have any evidence on which to base it.

What they use, is the U.S. Department of Education standards. So we went to the U.S. Department of Education. We said, "Well, you must, you know, have some research that you base this on." Same kinds of questions. And we actually had a conference call with the person who was working with this and, you know, they said, "We really don't have any metrics. There really is not much out there in higher education. What we do is look at, if the program wants funding, they have to, you know, graduate, they have to pass the NCLEX, and they have to get a job.So that's what we look at."

So we began to think, maybe we're going to have to collect our own evidence. So one of the things we did is this Delphi that we'll talk about this morning. And that is looking at the consensus of what those metrics might be from the viewpoint of boards of nursing, educators, and those who work with new graduates.

So that's our Delphi study. We are also doing a larger study, a quantitative study with thousands and thousands of records where we have gathered from 43 boards of nursing. And for those of you in the audience, thank you for giving us some of your data, their approval statuses as well as their annual reports and their site visit documents for the last five years.

And what we'll be looking at with that study, are predictive analytics to see, what are those characteristics of a program that is related to either full approval, approval being, you know, provincial, or probational, or whatever the boards call it, or approval removal. And so that we might be able to look at red flags and maybe take action a little bit earlier.

So for this study, we're looking at regulatory quality indicators. You'll see RQIs, that's what that means, the Regulatory Quality Indicators. And so we looked in the literature, part of our charge from the board was to do a comprehensive literature review.

So one of the things we found with quality indicators, was quality clinical experiences. And I think probably the best study for that is the banner 2010 study that we're all familiar with. The Carnegie Study of Nursing Education, which really did a quantitative and qualitative study, on nine of the best programs in our countries, and really came out with the clinical experiences are the best of what we are teaching today, and they should be integrated more into our didactic teaching, which they found as being not as good as it could be.

NCSBN also did a study. Kavanagh and Swizda in 2017 published a great study on the crisis of competency and that practice education gap. And then Tamara Odom-Maryon is going to be next. And she and another group of researchers, did a large national study looking at that… Their outcome was NCLEX pass rates.

But they looked at, what are the characteristics of a program when NCLEX pass rates are statistically, you know, increased. And what they found, both of these two separate researched groups found public universities had higher NCLEX pass rates. Now, it could be based on a whole lot of other things and I think, Tamara's going to talk to you about some of the things, but one of the things that Mariana Alexander and I thought about, maybe they have more resources and more access to quality, clinical experiences.

Also we have Tamara, who looked at faculty and student program characteristics. One of the things I loved about what she found was a higher percentage of full time faculty.

Pit et al, also did an integrative review, and found some similar things in terms of student and faculty characteristics. Oermann has done a lot of work with systematic evaluation of programs. Really not the data to show that it makes the program any better. But a lot of work with that, showing that it could make it better.

And certainly accreditation does show that, you know, the systematic evaluation of their programs, when they do a good job at that, they tend to do better. Of course, we have licensure pass rates, that's all in the literature, the accreditors use 80%. But their 80% we found when we did our literature review, is based on what most boards use.

And then of course, the U.S. Department of Education. There's not a lot in the literature to really support that as being a sole use of looking at the program. And then practice readiness really popped out at us a lot from the literature kind of newish.

Really love the work of Kavanagh and Szweda from Cleveland Clinic. We also, both in our study of transition of practice, working with Joe Silvestri and others. And also Jennifer Hayden's study of simulation, looking at practice readiness of the first six months. After graduation, we looked at the first year and finding that new graduates both again, separate studies, new graduates tend to rate themselves lower than their managers or preceptors do.

And so also Benner, looked at practice readiness and actually one of her recommendations was another exam following that first year in practice. Looking at employment rates was very interesting. Matsudaira comes from the U.S. Department of Education. And really, they said it's very unreliable because first of all, there are regional employment that, you know, you really have to take into account.

So for example, Feeg and Mancino have found that the Northeast for example has lower employment rates than the South or Midwest. Same with the West has lower employment rates. So you have to consider that, but also you have to consider the student might get a job, but might be fired in that first month or second month or something. And it doesn't come out that way.

So not as reliable. The same thing with graduation, and it's also called retention and persistent rates. They aren't as reliable because you never know what is happening with a student, why they might be leaving a program, and also it doesn't take into account those part time students. So those were areas that really didn't give us enough research to call it legally defensible.

So for this part of looking at that, we had these three study questions. What are the characteristics of programs that graduate safe and competent nurses? So remember, this is a consensus of everybody that took part in the survey. What are the red flags when a program is beginning to fall below standards?

And what are the outcomes that you should be using to determine if a program is graduating a safe and effective student? So the Delphi approach really was developed in the 1950s at the time of the Cold War. And they were looking at what would be the effect of, you know, some of the technology on wars following this?

So they tried many different kinds of studies and they brought in focus groups, but they finally developed, and it was really with RAND Corporation, this Delphi method, which is individual but then also looking at consensus. And you can see the assumption is, that the group opinion is more valid than the individual opinion looking at consensus.

But they also don't have that influence of a focus group, where you're all together. So it's a little bit of a different approach that way. And it's been definitely used successfully for policy and education questions. One of the most recent education questions that you might be aware of, is the in Quezon, when they looked at all those competencies and when they should be introduced, they really found that using the Delphi with experienced, seasoned educators would know that best.

And that's how they decided when they will be introducing those concepts. So the Delphi is usually in three, sometimes four rounds. It's an iterative kind of a survey method where the first round, we get qualitative responses. What do you think those characteristics should be?

And then the second round, they all rate them as to how important they are. And then in the third or fourth, or how many rounds it takes to get to consensus, they say, "You rated this, this way. However, the group rated it this way. Would you like to change your rating?" So we're trying to get to consensus, in those third and fourth rounds.

So our sample was the… All of the education consultants that are on my list, my primary education consultant list, from boards of nursing. So there's more than 50 because some states have more than one. And then, educators. And we got this list from NCLEX. And then, clinical nurse educator.

And we got this list from the Association for Nursing Professional Development. So inclusion criteria, we just included all the education consultants. For the educators, they had to teach students for the last two years and they had to have a master's degree.

And then for the clinical educators, they had to be working currently with new graduates. So we went through IRB, we were exempted. And we did… One of the things we found in the literature was the way you ask the question is very important, so that everybody understands your questions in the same way.

So we piloted the questions with education consultants, educators, and clinical nurse educators. And we did come up with some different wording based on how we asked the questions. As you can maybe imagine, it was the clinical nurse educators that really, maybe didn't have our same lingo as the education consultants and the educators did.

So regulatory quality indicators, probably most educators would know what we meant because they go through approval and certainly the boards would. But the, you know, clinical nurse educators really didn't, and so that's why we worded the question the way we did in terms of characteristics. Then we sent out an email using our Qualtrics inviting them to participate, if they met the criteria.

So they had to meet our inclusion criteria. And if they were willing to take part and met the criteria, then they clicked into a demographic survey. So these were the final questions that we came down to. And again, you can see we really tried to word them so that they'd be clear across all levels.

So what are the characteristics of nursing education programs? Then we put that little slash, quality indicators, that graduate safe and competent. So remember we're regulation, so we're not looking like the accreditors do a quality of the program, we're looking at safe and competent. What are the red flags when a program is falling below the standard of graduating safe and competent nurses?

And now, you can imagine we worried a little bit, that maybe the clinical educators wouldn't know what this is because they just get the new graduates. But we were surprised when we looked at the surveys, they seem to have an understanding of that and seem to be able to rate it. And then, what outcome measures could boards use to determine?

So what we were hoping they'd give us is, not all those outcome measures that are out there, but what could boards use? And you'll find that some of them, maybe they couldn't use but we'll see. So, you can imagine in round one when you get back all of the qualitative data, we had a lot of data. So we used three different ways of doing content analysis because we wanted to get down to the specific RQIs, red flags, and outcomes.

So this is where our scholar in residence was a qualitative... And still is, a qualitative researcher and she went by hand and looked at themes. And then Joe, used NVivo software and looked at word frequency and text in looking at it.

Then Emily, used R, just kind of to confirm and validate what we had already found. So we were pretty comfortable with the content analysis. So then we sent out…Once we had these all listed, we sent out round two.

How important are the RQIs or red flags and outcomes? And we used from Benton, who had done a Delphi in 2013. We used his rating scale because some of them use the five point Likert, but then many choose the middle one.

So we used the One, Unimportant, to Four, Very Important. And by the way, as we developed this Delphi, we also, back in the methodology part, we had to decide on, you know, what would consensus be?

And again, we used what Benton had used in 2013. And that was, they went to Robert rules. And Robert's rules uses 67%, two thirds. And so, that's what we set before we got anything back. So then with our round two analysis, we used SPSS and just simple descriptive to see.

And we put together the two unimportant and then the two very important categories. And we used mostly means and interquartile ranges in order to look at it. We did calculate means and standard deviations.

But medians are best used in a Delphi because it's that mid-range. And then, we looked across the groups with a one way analysis of variance to see if there were differences across the groups. And interestingly there were, and we might have expected this. The clinical educators were a little bit different in their responses than both the educators and the education consultants were.

So our sample, you can see we had a pretty good response rate, 59% of the educators. And I can tell you, especially from educators, I would get question after question. Now, what do you mean by this, or how should we do this? So we... I got lots of questions by them. The clinical educators, 57% and our education consultants, 81% response rate.

Of course, I wanted everybody but... So then we looked at the demographics of the educators, education consultants, and clinical educators. And you can see that…Look at the number of educators who had taught for more than 5 years, 95%. They were pretty similar, the education consultants and educators...

Except for that, only 54% of the education consultants had more than 5 years experience in regulation. But otherwise, pretty similar, similar with doctoral education and age as well. Exactly the same with age. And then the clinical nurse educators were a little bit different.

You can see only 19% had doctorates. And I think that would be expected. And then they were a little bit younger but they still have lots of experience. So our results, our agreement ranged. After the second round, 78% to 100%. And remember our set rate was 67%.

So every single one of our items, we had agreement on. We didn't have to go to round three. Which, if you can imagine round three, you put this and the group put this, do you want to change your mind? It would have been a lot of finagling with our Qualtrics to do that. So we were a little happy about that. And none of the ratings had a median below three.

And our interquartile ranges were also excellent as well. So here they are. And these go from percent of agreement down. So we had 18 RQIs, and you can see evidence based curriculum that emphasizes quality and safety standards and evidence based curriculum that emphasizes clinical reasoning skills.

And I'm thinking about the next generation NCLEX and this fits in beautifully. And these were 100% and 99% agreement on these. And as you go down, you can see faculty are very important. The program having a system in place to address student practice errors. Now, one of the things you can do on a Delphi, if it doesn't come out from any of your groups, you can kind of add something yourself just to see if it will come out with agreement.

We added this one and we got it from Anne Marie Shin, who's going to be on our panel later, because this is one of the things that they have in their requirements for approval in Canada. And we thought, "What a great idea?" A systematic process not, you know, counting the errors and reporting them to the board.

But a systematic process in place to remediate student errors. And it came out with high agreement on all three groups. And then faculty teaching clinical courses, who are current in their clinical competence. There was nothing that came out that faculty should have a master's degree or a doctoral degree, but it was current in their clinical competence.

And it's very interesting because that crisis of competency by Kavanagh at Cleveland Clinic, was on one of our conference calls. And one of the things she told us on the conference call was, they have their students do a medication exam, you know, when the students come just to make sure they're on target.

And so they thought, "Maybe we should have our clinical faculty do that exam, too." You know, if they're teaching the students... They did, and many of them failed. And so the faculty said, "Well, what do you expect?" I haven't been in the clinic over 15 years. And Cleveland Clinic said, "Well, why are you teaching clinical students then?"

So it was really that eye opener. The consistent leadership in the program, and what came out time and time again, is collaboration between education and practice. And this kind of goes to that readiness for practice. Institutional support, and certainly, NCLEX pass rates are going to come up.

Significant opportunities for a variety of clinical experiences, again, this keeps coming up. That consistent full time faculty that Tamara found as well. And then clinical experiences being augmented with simulation. And then at the very bottom, but still reached our level were admission criteria.

And I think it was the clinical educators that didn't find this as important as the other two groups. So then we looked at red flags. Again, speaking to faculty, lack of consistent and prepared clinical faculty. And again, this was 100%. Limited clinical experiences that don't prepare students.

Again, speaking to that importance of those quality clinical experiences. Again, leadership in the program comes up and then there's nobody that said it had to be an 80% NCLEX pass rate. But it was the trend of the pass rate is inconsistent or decreasing.

And then it was complaints. Complaints either, you know, from employers or students, or complaints to the board, maybe from faculty. Faculty attrition and administrator attrition. And this was an interesting one, unwillingness of the healthcare institutions to host clinical experiences.

I've seen that. When I was a clinical instructor, I saw that. I saw certain schools pushed out because they just didn't supervise their students. And so this came from the clinical educators, but was highly, high consensus. Student attrition, the curriculum being based on teaching to the NCLEX, which is one of the things we're hoping our recommendations will help with.

The faculty cannot just think about first time pass rates. And then over-reliance on simulation, which was an interesting one to come. Then outcomes, you know, NCLEX pass rates, the relationship that the nursing program has with its clinical partners.

And again, these are from, you know, top consensus down. So this was a… What was that one? Let's see... 97%, and I love this one because, again, it came from our clinical nurse educators, but everybody agreed with it.

So it's kind of a new thing that you could look at, that boards could look at. And then employer satisfaction, a little bit harder for boards to collect, graduate preparedness for interprofessional. I think, you know, you could look at the experiences that they have with interprofessionals, the graduate satisfaction with the program.

Some of these, you know, are pretty similar ones that some of you have now, graduation rates. And then, consistency of employment rate with regional data. So it might be another way to look at that. The very last one is history of the Board of Nursing discipline with graduates in the nursing program.

This one would be harder to collect and remember it takes... I don't think the people rating this realized it, but it takes a while to get through the system. And so we don't know how that one would, you know, stand out with boards. So conclusions, quality hands-on clinical experiences, where the faculty can really focus on faculty development for these kind of experiences.

And a meaningful collaboration between education and practice. Not, you know, where can we have our clinical placements? But from the bottom up, planning the program. Administrator and faculty consistency and well prepared faculty. So these results will be integrated into our larger quantitative study.

And I think I ended just on time. Here is my contact information. And I guess questions you could ask at the panel time, right? Thank you very much.