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

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, BT/F1 12 Tf1 0 02naVâ@ hem as to n thoducatatata xqs çÁv

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 [illegible] but [illegible] 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 NVt [illegible]

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

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