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**2018 NCSBN Annual Institute of Regulatory Excellence (IRE) Conference -
Unlocking the Potential of Big Data for Nursing Regulators Video Transcript**
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Event

2018 NCSBN Annual Institute of Regulatory Excellence (IRE) Conference

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Presenter

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- [Cathy] I would first of all like to make reference to an article that was recently published, I coauthored, called "Wisdom within: unlocking the potential of big data for nursing regulators."

And that's the piece of work, that is the reason why I'm here. You can find this open source on the internet, it was published in the International Nursing Review by Wiley Online. And if you want a link to that or to any of the references, or the material I'm going to talk about today, please send me an email or approach me afterwards, I'd be happy to do that.

I like to start with people, and so aside from what you might know about me already, I just want to introduce myself I think to you. These are some things, some pictures that I think describe what's important to me.

This is me over here in the shades and the cowboy hat. I love music. I usually have music in my head. I wake up and there's a song playing in my head, and I volunteer at a big music festival every summer in Edmonton. I love to garden. I have the world's biggest and most expensive pet that you can ever imagine, it's a horse.

My daughter, the pretty one here in the front is the one who rides it and I clean up behind, and I carry things and pay the bills. She's almost 19, and she's fantastic. I think she'll be a vet tech when she grows up. Her brother is behind her, and he has really short hair in this picture but it's quite long now.

He's got the longest hair in the household, and he's 15, and aspires to be a bass musician. He loves old, prog rock, and I think that there's probably some folks here who might be familiar with Deep Purple and Pink Floyd, and Mike Oldfield, and Soft Machine, and that's his music.

I have no idea how that happened. I love hockey. This picture is kind of dim here. That's the Edmonton Oilers in the orange. That's a statue of Wayne Gretzky wearing an Oilers jersey. And I'm crazy about hockey. The last thing I thought maybe would be helpful for you to know and might help you

understand how I'm approaching this topic is this little meme that's in the corner, and it says, "I do not have ducks, they are not in a row."

I have squirrels, and they're at a rave inside my head. I want to talk to you today about how my organization, which is a regulatory organization in addition to be professional association, approached this question of, how do we use the data that we have, the information that we have to make better decisions?

And I'm going to talk to you in the context of a data analysis project that we carried out over five years, between 2011 and 2016. And when we first started planning for this piece of work, we were of the mind, and we confirmed this by undertaking a review of the literature, that there was a paucity or a dearth of evidence to inform the kinds of decisions that we make in our regulatory roles.

And we were very, I think sometimes almost embarrassingly conscious of this fact, that there's not a lot of science that supports some of the rules that we've been accustomed to following in our work. And this project was really an effort to add to the body of information or evidence in a meaningful way to help provide the foundation for the decisions that we make.

We undertook this effort in the context of in Alberta at the time when I first started my job as the registrar in 2009, the employers in Alberta were facing massive nursing shortages, and they were crazy busy recruiting overseas.

And we're small, I know there's some big regulators here, and we're really small in comparison. And we went from a period of time when we would get 400 applications from international nurses a year, to getting 400 applications a month.

And we were awash in paper, because at the time, we used a lot of it. And we were unprepared in terms of how we were organized in our processes and etc. to deal with this really rapid change in volume.

And layered in over top of that was a huge imperative to get bums in seats, feet in boots on the ground looking after people. And there was a tremendous amount of political pressure, external pressure being applied to our organization to hurry up and get on with it, and get licenses out to these applicants.

Over time, with a small group of staff seeing large quantities of information on a daily basis, we started to appreciate patterns in the information that we were considering as we were trying to decide who should get a license and under what circumstances.

And it was those sorts of anecdotal theories that really became the genesis of this data analysis project. I'm not sure, there we go. So we didn't realize at the time that we were embarking on a big, big data, I use that term loosely, project.

And in truth, in comparison to millions of pieces of information, we were looking at something that was much smaller, although for us, it was quite, quite big. In our context as regulators, I've looked at previous, like historical records that we've had, and we used to gather information about our registrants on three by five index cards.

I found this in our archives, and we recorded name, age at the time they were registered, religion, school of nursing that they graduated from, and their marital status. That was the information we're capturing on three by five index cards if you can believe it.

It's mind boggling, isn't it? My organization, the College and Association has been around for 102 years now, so this is going back to the beginning. Now, we collect a whole bunch of information about people.

And when we sat down to plan out this data analysis that we wanted to do, our working group of staff, guided by the expertise of a statistician and a researcher who was very well versed in using large administrative data sets, so this was our team, and we're planning this project.

And we identified 380 variables or characteristics that we were interested in exploring about internationally educated nurses. Now, we didn't go that far, we narrowed it down quite a bit. And it was a statistician and our research partner, Dr.

Greta Cummings that talked us off the ledge, because they said, "You're just crazy if you think you're going to look at 380 characteristics." So our data set was not extremely large for sure. I'm just going to skip over this big, because I think that we've got a pretty good concept of big.

But I just want to get, talk a little bit about why Big Data? And although at the beginning of our project we didn't necessarily appreciate this, we have come to appreciate it since, is that really, a smart decision requires both data and science, as well as intuition.

And I don't think it's realistic to completely ditch one in favor of the others. And perhaps it's a trick or an art to figure out how to balance all of those aspects. Data provides insights, it complements our intuition, and this quote here, Ziko, who I saw speak at a data management conference last fall, felt that it should be the primary driver for business decisions.

And I know that we'll consider whether an aspiration to be data-driven is really where regulators should go. I'd like to suggest that analytics or having capacity to understand data isn't an option anymore, and I think the speaker before lunch really illustrated that point for us.

If you're interested in learning more about what the industry has to say about this, I would encourage you to go to this blogspot, blogs.gartner.com, and read some of the pieces there. They're very informative and easy to understand.

Especially like me, I'm not a data person, I don't have a technology background, I am not an epidemiologist or a statistician, I just have friends that are. So, I think that data will broaden the platform for our decision making, and it enhances transparency and consistency.

Could it enable nimble policy response? I guess it depends on what your definition of nimble is. We took five years to do this piece of work, and we did make some policy changes along the way.

I don't know if five years is nimble or not. So the name of our project was the "Learning from Experience" project. And if you're interested in our technical papers and more information about how we carried out the project, please visit our website. And if you just search LFE, you'll come to a landing

page that's got links to our publications, all of our technical and data reports, newsletters and etc., etc., a description of what we did and why we did it.

The purpose of our project was to use evidence to improve the internationally educated application process. Like I mentioned, we were awash in applications, under a great deal of pressure to speed things up, but we were also under a great deal of pressure to rationalize why we were deciding what we were deciding.

We frequently heard from managers, health system leaders, and then individual, international applicants. You know, I went to the same school of nursing as my girlfriend, and we worked in the same place, and she got a license and I didn't. How come that happened? And I was like, "Well, I don't know. I don't know, it's just different because."

That's not a very good place for a regulator to be defending their decisions on. Ultimately, we looked at 3,504 international applicants submitted over a four-year period of time.

We included an analysis of demographic information, information about their nursing education, their previous nursing registrations, and work experience. We did undertake an ethical review. This was a quality assurance initiative, that's what our ethics review revealed.

Sorry, I've got to keep track of...I'm advancing slides on my iPad here, and realizing that I'm not doing the same for you guys. I'm sorry. And so just a little bit about the steps in the project.

The first piece of work was to conduct a baseline analysis of application data. But before that, we had to get data into a form that we could actually use it. And this was I think our first significant learning. The system that we use to collect information and manage our workflow is not a database.

We don't put stuff in there for the purpose of analyzing it, extracting it, analyzing, and then doing something with it, we use it to manage our work, it's a CRM, a customer relationship management software tool. It's really sophisticated, is super complex, but it's not for analyzing data.

And we learned this because in order to capture an end of 3500 applicants, we had to spend almost 18 months cleaning and entering data. Half of our data was in our CRM, the other half was in paper, on files that were, you know, stacks and stacks and stacks of them.

So that, three, full-time data entry clerks under the supervision of a project manager, and that's what they did. This wasn't staff internally. And I do have to say that we were so very fortunate to receive generous grant funding from our government, from the federal government as well as the provincial government in order to do this.

We couldn't have done it without that for sure. So we carried out this baseline analysis, and I'll go a little bit more into the approach to data analysis that we used. We identified a number of policy and procedure or practice changes that we could undertake in how we managed international applications.

And we implemented those changes. We let them soak in for a while, and then we did a post implementation analysis. We carried out some other side projects along the way too. I just want to talk a

little bit about the baseline data for a second here.

So the demographic information that was revealed to us about our applicants was at the time of this study, the average age of the applicant was 32 years old. And this was in contrast to, at the time, the average age of the registered nurse in Alberta was 45, and similar for RNs across the country.

Males composed 18.4% of our applicants from outside of Canada, whereas in Alberta, 5% of our registrants were men. Almost three quarters of our applicants were from the Philippines or India. And that representation in terms of country of education has persisted for a very long time in Alberta, and for much of Canada.

Our top five countries over the last 10 years have always been the Philippines number one, India number two, the United States in third or fourth, applicants from the United Kingdom or Ireland, and then Australia and New Zealand rounding it out. Twenty-seven percent of our applicants had a degree that was considered comparable to an Alberta baccalaureate degree.

We have a baccalaureate as entry to practice requirement for registration in Alberta. Our legislation does allow, and actually demands that if you don't have a bachelor's degree as your initial entry credential, that we consider a combination of education, experience and other credentials in order to determine if that person is substantially equivalent for registration purposes.

So we do have this other aspect of work to practical experience that has a place in our decision making for licensure, and it's not based just on education credential alone. But it's important. So 27% of our applicants had a degree that we considered comparable, and that is educated as a generalist for 3 or 4 years after 12 years of primary and secondary education.

And for those of you who have been involved in international registration, you might have heard something there that would be important to remember, is that a lot of models of education in other countries of the world have nurses starting their post-secondary education after 10 years of primary and secondary school.

And this is particularly... this was particularly prevalent in the Philippines at the time, that we were experiencing this change in application volume, and that we were doing this study. Almost all of the applicants at the time of our study were what we considered to be current in practice. And here's the next big data effort that I would really like to be involved in, our definition of currency is that you've worked or practiced as a registered nurse for at least 1125 hours in the previous 5 years.

And anybody who can help me figure out what the evidence is for that number in 5 years, and why that makes you current, otherwise no one is competent, I'd love to go there. I really would. Because we can't find a shred, we can't fight a shred of science in any profession that says the magic number is 1125 and 5.

But I bet there's... I'm seeing all these heads nodding, and I know it's such a prevalent requirement for the nursing profession around the world. So as I said, majority of our applicants at the time met that currency definition, and their average time between the time they applied and when they last practiced was only four months, so it was a four-month delay.

So here's a bit more about the data analysis techniques that we used. We spent lots of time doing data management and cleaning, and then we did like the frequencies. You know, how many of this? How many men? How many women? How many baccalaureates? Bla-bla-bla-bla-bla.

We did bi-varied analysis, so we measured one characteristic against another. And then we measured all the characteristics, we took one out, and then determined that combination of characteristics against an outcome, a decision making step along the way, multi-level regression modeling.

We also spent quite a bit of time analyzing time. How long does it take to go from one stage to the other to the other? Because remember, we were under a lot of pressure from the outside world about taking too long. And so we wanted to be sure that the amount of time an individual was experiencing toward licensure, how much of that was ours, and how much of that was under control of the applicant.

Because there's a number of decision points that they have to make along the way, about whether they continue to pursue registration. At the end of the project, in order to do our post implementation analysis, we had to take a bit of a different approach, because by then, toward 2015, '14, '15, the volume of applications had dropped off quite considerably.

The world economy changed, our economy changed in Alberta, we're very...you know, the money that comes into Alberta, it's very resource dependent. When the price of oil tanked, so did nursing vacancies. And the need to recruit was solved because all of a sudden our health system couldn't afford to pay the nurses, so I guess we can figure out a way not to need so many.

So we took an exemplar analysis approach to do our post implementation analysis. So what was important? What was linked? What was most likely linked to passing the entry to practice registration exam and getting a license?

That's what we wanted to know. What characteristics of these applicants. Remember I said we started with 380 variables that we were curious about, and we narrowed that down to about 60 characteristics that we examined. And what was revealed in our analysis is that five things seem to matter.

First of all, the education credential actually did seem to matter. And by that, I mean a baccalaureate degree taken after 12 years of primary and secondary education. That seemed to matter. Education taken in a country where the scope of practice or the role enactment of the registered nurse was similar to that of what we find in Alberta or Canada.

And we determined this by doing an analysis of what was legislated, so what was written in nursing practice acts around the world, or what was defined or easily publicly available to describe the role of the registered nurse in that particular country or country group.

Practice currency, even though we don't know what the magic 1125 and 5, where that comes from, but practice currency mattered. And actually what we learned is that recency of practice was important, and we found that there was this effect that if there was four years between the time of application and the last practice, they were almost 100% not likely to pass the exam and gain a license.

And if you think about it, our currency definition is five years. So this is one finding that I would be very curious to explore more just to get, to understand that better. Consolidation of education was also important.

So not only the most recent practice as a registered nurse, but we also saw a strong correlation between when the nurse graduated and then went into practice, that if there was a delay between those two stages, that it had a negative impact even sometimes 10 or 15 years later.

So if they didn't enter practice right away, it seemed to be negatively correlated with their success on exam and ultimate registration. And you know there's all sorts of reasons for that happening, and some of them are completely beyond the control of the individual.

And life happens, you get on a nursing school and you have a baby. And maybe your husband moves, or maybe you're graduating in a place that has no jobs for new graduates like the Philippines. But that was another factor that made a difference. So we learned all of these things, and we undertook to change our policy as a result, and this is...

I think this is a representation of a previous slide where I said that a good decision is a combination of intuition and data and science. So we sat down with our intuition, with our expertise of staff who had been involved in registration decisions for a long, long time, and we undertook a number of policy changes as a result of this.

Some other things that we did, I just want to take a second to mention this, we created a self-assessment tool, and we put it on our website, so an international applicant before they started could go in and answer some questions about their credentials and their experience, and get some information, some feedback back to say, this might happen, just to help them make a big, you know what could oftentimes be a very life-changing decision to pick up yourself and all your stuff and your family and move around the world to make a go of it somewhere else, in a new country.

One of the things that we did, as a result of seeing this effect of having experience or education in a place with a context of care that was similar to ours, is that we made a number of videos to show what nursing practice was like in Alberta.

We had registered nurses, practicing registered nurses, script them, act in them, do the dialogue, and we created the scripts around various nursing competencies. So one scenario was around dealing with a patient who wants to refuse care, self-determination.

Because there are aspects of relational communication in that kind of a situation, ethical decision making, and ethical behavior, as well as educating your patient and understanding what's going on with them, and giving them information about the consequences of the decisions they make.

So we shot these videos, they're posted on our website, we're happy to send you links or let you link to them on your own websites, quite...they're really nicely done, really short and hopefully helpful. In addition to the policy changes, we developed assessment criteria, checklists that led us push decision making down.

We have a combination of technical and administrative staff, and then registered nurse staff who are part of the decision making chain in our organization. And the criteria and checklist that we developed helped us create processes that drove lots of decision making down to our administrative and technical staff, and kept the more complex situations for their registered nurses or deputy registrar to determine.

This is just an example. It's a screenshot of the assessment criteria checklist, and it's a legal size paper. But it's got our entire policy on one page, which has been tremendously helpful to ensure that it's very clear at a glance what stage the applicant is at, and what decisions have been made, and what is remaining.

If anyone wants a copy, please email me and I'll send it to you. I'm sorry, I just want to... before I go on, I want to make one comment. I mentioned the recency effect. That we found that if a nurse had been out of practice for four or more years, they were very unlikely to pass the exam and gain a license, and so we implemented a policy decision as a result of that.

We have this currency requirement, 1125 and 5, but we don't have an end in our law, we don't have a rule or a piece of statute that says, after this period of time, go back to school from the beginning.

So we established a policy that if 10 or more years had elapsed since last practice, that that would lead to a finding of ineligibility at the time of application. That has not been tested on appeal, other aspects of our policy changes have, but that decision has not.

And quite frankly, the few individuals who were in that situation and received that decision can actually appreciate the rationale, because this research, this data analysis project of ours helped us establish clear reasons, transparent, I hope, or transparent reasons, so that the person could see themselves and how the policy had been applied to them and why.

In our scheme of international registration in Alberta, we quite frequently have people complete bridging or gap education. So we'll find a gap in their educational credentials or in their work experience that demonstrate that there's a gap in competencies, and we'll direct them to education that is specifically intended to close that gap.

We used to get all crazy at managing that process. And for every course that they took, we would...they would complete a course and we'd stop them, give us a transcript, okay, now we'll let you go to the next course. We got out of that. That was in the timeline analysis we found that that was contributing significantly to the elapsed time that an applicant experienced, so we stopped doing it.

And now we just say, "Here's the whole works that you have to do, come back when you're done, and we'll pick it up and carry on after that." We also made some policy changes in how we manage overall application time limits. We used to have this two-year rolling lapsed policy, so as long as you kept making forward progress within two years, you would continue.

And again, that was really stretching out some timelines. So we went to a phased approach with how we approach that particular piece. So some of the results of changing these policies, and I apologize that this is a busy slide, and probably is super tiny in your handouts.

Our baseline data is on the left of the table, and all these numbers represent days, numbers of days, calendar days from the point at which the application was complete and we had all the information gathered so we could you know make decisions and see what we've got, until various decision points along the way.

Initial assessment, so that's the paper-based assessment. SEC is substantially equivalent competence review, and we use a clinical competence assessment as part of our bucket of tools in assessing international applicants, and it's modified as keys as well as multiple choice test of knowledge.

So that's a component of our decision making analysis. Post bridging education, we have gated... we have a temporary or provisional permit, taking the first exam, getting the results, and then initial registration is the yellow row at the bottom.

Okay, so when we started out, our baseline analysis was on average, it took 656 calendar days from beginning to end. At the end of this project, we were seeing that the elapsed days were 305, so we cut the time in half.

Now I'm going to confess, this looks so great, and any external stakeholder hopefully would be happy with this. We haven't sustained that reduction in time, and not because we've fallen back into bad habits but because due to circumstances beyond our control, we have a bottleneck now at the bridging education stage, and it's a capacity issue.

So we've got one provider at a post-secondary, and they have limited funding, and so have cupped their enrollment. And we've got an accumulated waiting list as a result. So, the lessons learned.

And like I mentioned, at the beginning of this initiative we didn't see ourselves as, I don't even think that we were data aware maybe, but we certainly didn't see ourselves as a data-informed or data-driven organization.

But by the end of it, we certainly were beginning to appreciate that taking this kind of approach to the information that we have in-house could really be informative in terms of setting policy, and even offered us a glimpse of an opportunity to be able to predict what would happen to certain individuals under certain circumstances.

There's a skill set involved in this, there's an issue of what your data looks like, and there's all sorts of opportunities for collaboration and partnership that I'll talk about now. So this is a picture of the evolution of a data-driven company, and whether we all ever get to the point where our organizations are what you would consider data-driven.

There's certain steps along the way that probably would serve us very well. Maybe at the beginning of our journey we were data resistant, I think that in truth, we were probably data ignorant. We just didn't know. We didn't know what kind of information we held.

I would say now that we're at the stage where we are becoming data aware, and maybe we're even getting to the point where we are data guided. And I hope that we become data savvy at some point. So

what does that mean being data aware or data guided?

This isn't in your handouts, I'm sorry. I see I sent my slide deck to Coleen, and then I saw who was speaking before and after me, and I started thinking, "Oh, there's other stuff I want to talk about," so I made a few tweaks. Again a very busy slide, and it's probably a good thing it's not in your handouts. This was our organization chart in 2009.

And so that was a couple of years before we undertook this project. And I included this here just to tell you that, if you were to examine very closely, there's nowhere in here that is something that you could easily identify as research, analyst, business intelligence, chief information officer, none of that appears here.

We were quite traditional. We have registration, we have professional conduct, we have corporate services, you know, lights on, bills paid, that kind of thing. And professional practice, you know, practice guidance, policy setting, standards setting. And then communications, seems reasonable. Our organization has changed since then, and this Learning from Experience project I think really opened us up to the consideration of how we can structure ourselves differently to support an effort to become data savvy if you will.

So we've moved to an approach where we've got our chief executive here and public affairs, and we have four portfolios, business portfolios, registration, professional conduct, program approval, that's me over here on the right, our chief professional practice officer who's here in the audience with us today, and that's practice support, policy and standards.

Our continuing competence program lives here. Chief Operating Officer, lights on, bills paid, that kind of responsibility. And we created a chief information officer role and a business intelligence department. Now, our CIO is a statistician, and he's got 20 years of experience in CIO, CTO, and chief financial officer positions.

I had a chat with a fellow speaker about not letting the chief information officer rule the world, and Damon would laugh at me if he was here to hear me say that. I do have to say in his favor and as a desirable characteristic of skill set, he's really customer obsessed, and he sees his customers as the folks internally that he's working with, so staff and decision makers in the regulatory services area, as well as in our professional practice office.

And this is what the chief information officer's portfolio looks like. And I'll just... I'm going to just mention the four functional areas that we have right now. So we have a business supports area that is composed of business analysts, and application specialists, and a project manager role.

We have our IT manager, and they look after our infrastructure, our networks, our systems, our hardware. We have an organizational performance area, and the manager here is an evaluator.

And then we have some folks with operational and business expertise, as well as data analysis and reporting. The fourth area in our BI department is records, and our records manager is brilliant, and has three clerks and a research librarian on her team.

And that's where we are now with the skill set and bums and seats, and perhaps that will change over time. I think that as we continue to do more work around data management, we'll learn more things about how we've organized ourselves and assigned responsibilities.

So I guess the message is that it starts at the top and it starts in the middle and it starts where all the action happens. There's no, probably no current agreement out there about what are the key skills that support data-informed decision making.

You certainly have to understand how to collect and identify relevant data, and remember that we've all built our systems for one purpose, and now we're going to try and figure out how to get something different out of them. And a thoughtful approach to that is probably the most important. Skills in using software to perform statistical analysis is important, although does everybody have to be able to do that?

Probably not. I think it's important to be friends with statisticians and epidemiologists whether that's in your organization or external to it. I ordered the book, the Davis and Logan book, I'll put it in my purse and carry it with me. So interpreting data and analyzing it is important, and understanding how to do that, and what it means in your decision making, whether it's at the policy level, at the strategic level, or at the coalface of dealing with individual issues or circumstances, it sure is important.

There's a little bit of...there's a combination here of using your gut and using your logic, which one am I, Nancy? I'm Kirk. I tend to rush off and jump into things.

I need to be rescued by Spock on a regular basis. But together, those two perspectives and worldviews are quite powerful. Just a word about data, I just want to go in further a little bit on this idea.

Data is messy. It's like sausage making, like you don't want to see what goes into it. And oftentimes, it's in places where you didn't even realize, we still...we're so guilty of this. We've got lots of I think lots of rich information in our professional conduct data.

However, some of that is in our CRM, other components are in written decisions of our hearing tribunals, others are in spreadsheets, we've got this massive Word document on our file servers, that is our call log. And we have really developed a taste for the potential that's offered to us by analyzing this data.

My colleague, Shelley MacGregor, talked to you about that. It was the form, the basis of her IRE project that she presented yesterday morning. However, getting all of this info out of the call log and paper records and electronic system, putting it together in a meaningful way to analyze is probably our most significant hurdle that we're facing right now.

Lastly, I would like to put in a plug for unlikely partnerships. Not every organization employs statisticians or epidemiologists or researchers or data analysts, data entry clerks, surveyors, evaluators, futurists.

But there's lots of connections to be made, some of them right here in this room, and others as close as your nearest post-secondary institution, I would bet. And we ought not to be closed to those opportunities, and they certainly have been integral in our work.

I'd like to just take a moment to acknowledge the support that we had from the Alberta government, the Ministry of Health, as well as Health Canada which is our federal ministry and our research partners at the University of Alberta and at Mount Royal University. Thank you for being so interested and smiling encouragingly at me.

And I would look forward to your questions and comments. Thanks so much. I'll stay for questions? I know, okay. Nancy has one. -

[Nancy] Cathy, thank you for that excellent presentation. And you probably know what I'm going to ask, because I've asked it before, but can you tell us what you found different between ADNs and BSNs from the US?

- Oh, okay. So we...one of the side pieces that we did was to analyze the results of the clinical competence assessment. You might remember I told you that that was a component, a stage along the way that about 70% or 75% of our applicants were required to do a clinical competence assessment.

So we took 1000 SCC results. At the time, that report was 19 pages long, and it would give you information on 78 key competencies. And what we saw was that there were gaps in competence assessment of associate degree nurses.

Now, I want to be super, super cautious about this, because it was a really small number. And there was not sufficient information for us to be confident about any correlation with that. But it was something that we observed.

- And my second question was, you came to 4 years with the data since practice, but then your regulation was 10 years, why couldn't you go to 4?

- We chickened out. We got nervous. And I think what we were most concerned about is that we have this in our regulation, like in our statute, it's five years.

We saw this effect at four years, and we realized that if we started to cut international applicants off after four years, but anyone else, like a Canadian, educated nurse who has a lapse in practice and then wants to reenter, as long as it's within five years they can do that, we realized we would be in...there was going to...we'd be in some trouble there in terms of fairness.

So we knew that we couldn't go with four years, even though that's what our data showed us. We picked 10 years because we got cold feet even at 5 years. And we didn't have anything hard and fast in our statute that said that there was an end point to the number of years away from practice.

So after, this was probably the aspect that we debated the most, like over three months. It took legal opinions and then we come back together and our pro project manager was so frustrated because we couldn't make a decision. And so we just went with something that felt right, and 10 years seemed to be... have some face validity I guess, and be reasonable to implement as a policy.

And knowing that it was a policy, we could change it if we were compelled to, if we lost on appeal

maybe we would consider changing that. Or if we had more information, we would change that. So that's the rationale for that. Other questions?

Okay, thank you very much again for your attention.