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Applying PLAR to determine entry to practice competency of internationally educated nurses for RN licensure.

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Introduction of presenters: We are delighted to be here to tell you a little about the PLAR Research Project undertaken in the last 3 years at Mount Royal College in Calgary, Alberta. In this PLA project, we developed a comprehensive system of assessment for nurses who've been educated outside of Canada. At the same time, we worked closely with our provincial licensing body (CARNA) to develop a process which could be used to determine eligibility of internationally educated applicants for RN licensure.

We have about an hour to tell you about the project before we take questions I will spend about half that time describing the development of the project and my colleague will take the remaining time talking about the process from the point of view of the licensing body.

My talk will be divided into 3 main sections: the development of the PLAR process itself; some of the challenges that were addressed; and some of the lessons we learned as the project unfolded.

Let me begin by giving you a bit of background to the development of the project. In early 2003, Mount Royal College received funding for this research and demonstration project from Human Resources and Skills Development Canada. A major impetus for this study, and the interest of the federal government, of course, is the current and anticipated future shortage of skilled workers in Canada, not least in the profession of nursing. (In 10 years' time, 2016, it is estimated that we will be experiencing a shortage of as many as 213,000 nurses.) We also know that there are numbers of nurses who have been educated outside this country and who are now resident in Canada, but are unable to practice because they are not licensed and are often not aware of and not prepared for the differences in nursing practice here. Our goal was to find ways to expedite their advancement and preparation for professional nursing practice in Canada. And we wanted to do this, of course, by building on their already-acquired skills and abilities, using prior learning assessment.

The project was developed in three stages: the first year focused on study of the situation to give us the essential background for the work and the development of the PLAR process itself. The second year saw the first implementation of assessments. The third year was intended for evaluation and fine tuning of the process.

The Study:

In that first year, we did substantial investigation into PLAR practices in nursing and into programs working with internationally educated nurses to get a general picture of the situation. When we began this work, very little had been researched and even less written about. We surveyed professional licensing bodies to get their sense of the challenges facing the licensure of IENs; we surveyed nursing education programs to find out how PLAR was being used across the country; we interviewed many nurse managers and educators who have worked with IENs to

determine their perceptions of their readiness for practice. We reviewed the literature and used contacts and connections with international nurses to develop a baseline of data that addressed the barriers and challenges faced by IENs. And we also considered the challenges faced by licensing bodies, hiring departments and nursing managers - some of whom were IENs themselves.

What we discovered were a number of clear challenges. The challenges which face new immigrants (and which are listed below) I think are obvious to this audience and include such issues as learning a new language, dealing with financial challenges, and the complexity of juggling family, work and multiple responsibilities while trying to establish a life in a new country. Less obvious and perhaps more particular to the nursing profession were the sometimes vast differences in nursing roles and responsibilities in this country as compared to the IEN country of origin. All of these challenges contributed to considerable difficulty for the IEN in passing the national registration exam.

- Complex credentialing processes
- Challenge of language fluency
- Knowledge and practice deficits
- Examination preparation
- Lack of socialization and mentoring opportunities
- Financial barriers
- BN entry
- Need for employment readiness skills

The development of a system of PLAR:

Now let us turn to what constitutes the PLAR process itself:

We first establish the language fluency level of the candidate. Without a sufficient level of fluency the process of assessment is extremely problematic – for the reason that it becomes difficult to differentiate between the candidate's knowledge of nursing and the ability to express that knowledge. Thus, a sufficient level of fluency is required for assessment.

The full assessment consists of:

First, an initial set of paper and pencil diagnostic tests and an interview which acts as a screen for the applicant's general nursing knowledge and skills.

The results of the diagnostic are analyzed and the candidate is interviewed. Then, if the candidate performs well, this is followed by:

- clinical judgment testing,
- modified Triple Jump to assess nursing decision-making and critical thinking; and
- modified OSCE assessment using contextualized case management situations
- clinical lab assessments.

By way of this process, we can identify how well the IEN meets critical nursing competencies - followed up with pretty specific feedback. Remedial programs, then, can be individualized or tailored to the needs of the IEN, allowing them to make more efficient progress towards their license as RNs.

(The areas of assessment of nursing competency include the following: Canadian health care context, math skills, pharmacology and drug administration knowledge, interactional skills, health assessment, knowledge of culture and diversity, general nursing theory and nursing interventions, management of common clinical skills, communications, health assessment skills, teaching and

health promotion, ethical and professional practice decision-making and relevant legal considerations, clinical judgment, problem-solving and critical thinking.)

As is clear from the above list, the assessments, in sum, address a very wide range of nursing knowledge. It is not hard to understand that nurses educated offshore might not be familiar with our drugs, our particular technology, our approaches to legal and ethical issues. But there are also very wide differences between countries in what nurses are allowed to do, what responsibility they have for independent assessment of clients, for example. Nurses in Canada work quite independently and that is often not the case elsewhere. So of necessity the range of assessments are quite extensive.

Standards Used for the Development of the PLAR in Nursing Project

A number of standards or criteria guided our approach to the PLA development.

They included 6 criteria: comprehensiveness, validity, reliability, authenticity, currency, and sufficiency. I will address each of these with a bit of explanation. I would also note that we had an external evaluation team out of Vancouver who conducted an ongoing assessment of our work for the three years that we were in the development of this project.

Addressing the Issue of “Assessment Comprehensiveness”

It might be rather obvious that comprehensive assessment is important in a complex discipline such as nursing. The fact that nursing is a discipline governed by provincial legislation and that practice must meet certain standards is also of consequence to how comprehensive the assessment process needed to be.

At the outset, as a preliminary step in the research process, Registrars of nursing colleges and associations (these project participants are “consumers” of this PLAR system as well as the IENs) were asked to identify essential elements of the assessment process. They responded with a broad list of requirements that they felt were important to attend to: 1) the use of English in the health care system, 2) orientation to the culture of Canadian nursing, the role of nurses, and Canadian health care, including ethics, 4) opportunities for education and further post-assessment, 5) accessibility and affordability, 6) assessments based on the essentials of entry to practice, and 7) consistent program standards and processes. These requirements played a role in the comprehensive approach we took to the development of the project.

Also high on our priority list was to include a variety of assessments that would elicit the best information about our candidates. As you know, the usual PLAR “toolbox” typically includes paper and pencil tests, portfolios, self-assessment, structured interviews and direct observation. We decided to test a number of different tools to get a better sense of what would be useful, efficacious and cost-effective and what would best contribute to an overall picture of the candidate’s competency and readiness for entry to practice. This would allow us to compare and contrast the different learnings we could gain of a candidate’s competence and draw insights as to cost-effectiveness. We discovered as we did so that a more comprehensive assessment process enabled us to develop a kind of “triangulation” of assessment that helped to confirm our assessment findings and, in the final analysis, better reflected the totality of the candidate’s competencies. This proved really useful.

What of the other assessment standards we applied to the project? Let's turn to the standard of validity.

Addressing the Issue of "Assessment Validity":

Establishing validity requires you to ask if your assessments actually measure what they should measure. We struggled initially with how we would establish a fair and valid assessment of the IEN candidates - - that is, what we would use as a benchmark against which to assess the competence of candidates. We had a lot of choice! Sets of competencies and standards of nursing practice vary from province to province across the country.

We ultimately decided to use the set of competencies used for our national licensing examination, the Canadian RN exam. The advantages? These competencies provide a national standard. They are stated in clear, specific language. They have currency (again one of the six standards for the assessment process), but because they are in effect from 2005 through 2009, they also have some longevity. Furthermore, they were developed with the input of nurses from across the country and have undergone a thorough development process to establish validity. And, of course, they are the entry to practice standard against which all other entry level nurses in Canada are already being measured. That is, every new graduate in Canada is tested against this set of competencies.

As an added measure to address validity, we developed a blueprint for the assessment to ensure its inclusiveness. The final blueprint then, addressed the national nursing competencies and in addition, also included the special concerns that professional associations and nursing managers identified as problematic for IENs entering Canadian practice. (Just for example, IENs often have difficulty with medication administration because of the difference in drugs from country to country so we ensured that this kind of assessment was adequately represented.) For the final tests of validity, an independent researcher was asked to conduct a content analysis of the resulting assessments to assure its representativeness.

Addressing the Issue of "Assessment Reliability":

The second criterion, reliability, was addressed through the administration of the assessments to graduating students from the BN nursing program at MRC. Parallel forms of the assessments administered on consecutive days allowed for test-retest consistency. The large student numbers (100+) allowed us to conduct extensive item analysis for the improvement of various facets of the assessment. We looked at a variety of measures, ensuring, for instance, a range of item difficulty, good discrimination indices, equivalence and consistency, and so on.

Marking guides, developed with the input of expert nurses and based on the CRNE competencies, were used to standardize the assessment of the candidates. For the OSCE and the tests of critical thinking, clinical judgment, physical examination and psychomotor skills, measures of reliability and objectivity were addressed by standardizing tasks, developing performance standards through a process of "expert" consultation and through the use of scoring checklists.

The criterion of authenticity:

What about the criterion of authenticity? It is a premise of this PLAR Nursing project that paper and pencil tests can only go so far in providing a true picture of the candidate's abilities in such a practical discipline as nursing. The system of PLAR described initially in the research proposal indicated that we would include context-specific measures of assessment. Case management situations, specifically, were highlighted to ensure that candidates would be required to demonstrate "authentic" skills and abilities representative of typical nursing situations. Consequently, a series of assessment strategies were developed to provide a more holistic understanding of IEN strengths and capacities. Tools were developed to measure nursing knowledge, health assessment skills, psychomotor skills, critical thinking skills and clinical

judgment skills through demonstration, interview and clinical lab assessment – so not just the knowledge of these could be assessed, but how candidates could put them into actual practice.

Sequencing of the PLAR Process

You will note that our PLAR model moves from an initial diagnostic to assessments of more complex knowledge and abilities. Why this sequencing of the PLAR process?

The PLAR design team gave much thought to the sequencing and procedures for testing as they did to the actual types of testing. When, for instance, does one administer the “authentic” case management assessment? We asked at the outset if it was possible - or desirable - to administer a “high stakes,” single shot assessment? We were fortunate to have as a team member someone who herself had been an IEN. She felt that administering a context-bound, competency-based test – as the first, “high stakes” test that the candidate would encounter -- would disadvantage most candidates unfamiliar with the context of Canadian nursing. We needed to find out what the potential of the IEN was for eventually succeeding in practice. This is why we decided to begin with a diagnostic assessment instead - which reduced as much as possible the confounding variable of contextual knowledge.

This decision was taken in light of the fact that the Canadian Registered Nurse Examination (CRNE) consistently poses significant difficulty for IENs. The information that the PLAR Research Project acted on when developing its set of assessments came from the CARE Project in Toronto which reported passing rates of only 28% for IENs writing the licensure exam for the first time. Unfamiliarity with contextual clues and Canadian practice expectations is one of the reasons posed for the high IEN failure rate on the national licensure examination – it really presents a major stumbling block to the entry of IENs into nursing practice in Canada.

Consequently, the PLAR system incorporates a number of different assessments, increasingly more “real or authentic” as the process unfolds. The testing process first attends to the diagnosis of strengths and problem areas. Armed with an initial diagnosis of strengths and problem areas, then, the candidate is able to determine where more knowledge was required and where improvements in skill and competency are required. The process of assessment is then “levelled,” assuming that candidates who demonstrate success in one assessment would progress to the next.

In addition, we developed the idea of a leveled assessment process for reasons of “resource use”, moving from less resource intensive processes to more, and moving from a general picture of the candidate’s skills and abilities to more specific, detailed and comprehensive findings. This would allow for the difficulty of putting a lot of resources into the assessment of a candidate who is not ready for practice and reduce the anxiety and negativity of the experience for candidates who clearly need more in the way of preparation.

There remains one last criterion, that of sufficiency, to address. I will include “sufficiency” in my discussion of the challenges we encountered in the development of the PLAR process.

Addressing the Challenges in the PLAR Process:

The criterion of sufficiency. We learned through the development and delivery of the PLAR process that IEN candidates present with very different strengths, weaknesses, personal goals and personal challenges. Our challenge as assessors is in determining the point in the PLAR assessment process where we can make a confident decision about a candidate’s potential ability. At what point in the process have we met the criterion of “sufficiency,” and gathered enough evidence to make a sound decision about the candidate and an accurate prediction of eventual success?

It was clear in our analysis and evaluation that a single assessment measure would not provide us with a sufficient level of confidence in the assessment. However using a variety of assessment measures and using the competencies as a benchmark for success or failure provided us with a way of triangulating the data from a candidate's assessment and took us a long way towards answering the dilemma of "sufficiency." I think it also helps that the assessment team are very familiar with general assessment and evaluation, with nursing standards of practice and have significant experience in evaluating students at all levels of program so they have substantial level of comfort in the process.

The challenge of dealing with "gaps" in the candidates' readiness:

Two particular "gaps" became abundantly clear: First, the need to provide special language training for nurses was particularly obvious. Almost every participant in our study (a total of 44 participants were registered in the project) benefited from additional language training that included special attention to the "language of nursing." Such specialized programs are rare indeed and we had to develop one as an adjunct to the research.

Second, most, if not all, participants need some form or other of upgrading, "gap" filling, and at the very least, an orientation to the expectations of Canadian nursing practice. Again such programs are rare. Most are "one size fits all." And one thing we learned from this project - - everyone is different in terms of their needs. Again, as an adjunct to our research, we developed a special set of courses and study guides to attend to the particular needs of IENs.

And, unfortunately, not all candidates will be successful. While it was easy to become invested in the success of the candidates we met, it became increasingly clear that we needed to balance our responsibility in meeting the candidate's needs and our professional obligation to ensure safe practice. Where registered nurse practice is not a realistic or appropriate goal, candidates must be counseled to look at other avenues to contribute to health care.

On the other hand, where candidates have the potential of meeting the requirements of licensure, we recommend very specific, targeted preparation, elements of which might be different to meet the needs of different individuals. The various assessments of the PLAR process provide information to determine what each candidate might need with respect to "filling the knowledge or skill gaps." However the provision of adequate and timely programs to candidates who often are compromised by their own pressures of time, family, and finances, we are finding is a huge challenge in itself.

Lessons Learned:

The PLAR research and demonstration project held many lessons.

Our analysis tells us that single assessment strategies do not begin to capture the many and varied competencies that mark the nursing discipline. Our best information came from an analysis of the totality of all of these measures which provided us with a well-rounded, and what we ultimately thought might be a truer, more realistic, picture of the IEN's skill, knowledge and abilities.

English language fluency as well as nursing-specific language fluency is essential to the safe practice of nursing. Furthermore, the assessment process itself can be confounded if the candidate does not have sufficient language skills. IENs need opportunities to develop a higher level of fluency and specific language skills than is provided by most immigration services.

Assessment of nursing practice competencies is essential – this means helping IENs to become familiar with the entry to practice expectations and standards common to Canada.

Educational opportunities to fill the inevitable knowledge and skill gaps are also essential. Supervised instructional time in the clinical setting is invaluable for helping IENs to adjust to the scope of practice and the intense pace that characterizes our health care settings.

Personal support measures must be included as IENs face innumerable challenges as they adjust to life in Canada. Such measures include professional development and peer learning opportunities (candidates learn a lot from each other and act as strong supports to one another), study groups, examination preparation, mentoring, family and financial support, employment readiness skills, and so on.

One final insight for the design team was very useful. Mental health strategies incorporate a concept known as “assessment as intervention.” That is, while we as assessors gain important knowledge about the candidates’ abilities as they go through the assessment process, the candidates themselves gain equally valuable insight into their own strengths and challenges which helps to set them on a path of self-knowledge upon which they can take action. This latter is probably of as much or more value as they go forward with the process of preparing themselves for Canadian practice.