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Past Event: 2021 NCSBN REx-PN Conference - The REx-PN Practice Analysis and Test Plan Transcript

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Event

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More info: <https://www.ncsbn.org/16034.htm>

Presenter

Aly Brenton, MSN, RN, CNL, Test Development Associate II, Examinations, NCSBN

Hello, my name is Aly Brenton, and I will be providing an overview of the REx-PN Practice Analysis and Test Plan. Objectives for this presentation are to provide you with, an understanding of the purpose of the REx-PN exam, to describe important features of the practice analysis and test plan process, an awareness of how the practice analysis and Canadian entry-to-practice competencies inform the REx-PN Test Plan, to be able to discuss the purpose of the REx-PN Test Plan, and to know where to access the available REx-PN publications and educational resources.

The purpose of the REx-PN regulatory exam is to ensure client's safety and public protection. The exam achieves this by adhering to three foundational principles. Number one, fair and comprehensive. Processes are in place to make sure that the REx-PN exam is fair for all that take the exam and comprehensive of nursing practice in British Columbia and Ontario.

Content within the REx-PN exam is a direct result of gathering data about activities of entry-level nurses in BC and Ontario through the practice analysis. Additionally, nurse volunteer panels perform ongoing item reviews to ensure elimination of bias to provide a fair examination for all exam writers.

Our psychometrics team also diligently monitors all REx-PN items and perform statistical analyses to ensure each item is devoid of potential bias and every exam administered falls within the exam specifications. These processes ensure the REx-PN is testing nursing knowledge only. Number two, entry-level.

REx-PN items are developed specifically to assess entry-level nursing knowledge. This characteristic is important. As we know, nursing practice evolves with time and experience. For the purposes of the REx-PN, our definition of an entry-level nurse is one who has been practicing for 12 months or less.

REx-PN content is referenced using textbooks, journals, and websites commonly used in nursing curriculum to ensure content reflects what is taught within educational programs. An item may be reworked if it does not contain entry-level material. Number three, current practice.

It is essential that the exam items reflect current nursing practice and not contain outdated concepts and tasks. To ensure the REx-PN is up-to-date with current scope of practice, a practice analysis is conducted every five years. All items undergo a cyclical item review process to ensure currency of content. This review process not only involves staff, it involves panels of nurse experts from BC and Ontario providing input to nursing practice.

Items not consistent with current scope of practice can be immediately removed from the item pools. If there is a change in scope of practice outside of the cyclical item review, a database search can be performed and content can be pulled down immediately. Now let's get into some of the details of the REx-PN Practice Analysis.

The diagram here is a representation of the entire item development process for the REx-PN. As you can see, the items are thoroughly vetted and reviewed during this process that takes approximately 12 to 18 months before they are operational or scored on the exam. Our focus today is to explain in detail the beginning of the item development process with the REx-PN Practice Analysis and test plan.

A practice analysis can also be called the job analysis. A systematic study of the tasks performed in a job. It is designed to elicit detailed information about the responsibilities and duties of a job. The data collected from a practice analysis can be used in various settings, such as the hiring of employees, performance assessments, and in our case, licensure decisions.

For the REx-PN Practice Analysis, entry-level LPN/RPNs evaluate activity statements and rate them by frequency and importance. The REx-PN Practice Analysis is performed every five years and before the data can be collected, a panel of nurse experts convenes to help determine the activities performed by an entry-level LPN/RPN nurse.

Once this is completed, the practice analysis is then sent out as a large-scale survey to entry-level nurses within British Columbia and Ontario in their first 12 months of practice. Demographic information, including work environment and work experience, is obtained from these nurses in BC and Ontario, as well as the ratings on the frequency and importance of each nursing activity statement.

Based on this data, we may find that some nursing activities are performed very often but are not as important. It also may tell us that certain nursing activities are extremely important, even if they are not performed very frequently. The data results from the practice analysis survey helps guide the content distribution in the client needs categories of the REx-PN Test Plan.

Subject matter experts are all nurses that have worked alongside educated or are themselves, entry-level nurses, within the first 12 months of practice. The SMEs represent the geographic areas of BC and Ontario, major nursing specialties, and practice settings.

During the panel, the SMEs use their professional expertise and are provided with various resources about the LPN/RPN nursing practice. These resources include a summary of nurse leader interviews, activity logs, and documents on nursing competencies. Outcomes of the meeting include a list of activity statements and an approved structure on the test plan categories.

The SMEs also complete the practice analysis survey sent out to entry-level nurses to help validate the data results. Shown here is an example of a few activity statements that were developed during the practice analysis panel. There were a total of 153 activity statements created, which reflect activities that entry-level PNs may perform on the job.

Activity statements are intended to be concise and quantifiable job tasks that can be incorporated into a wide-scale job survey for data collection. While the practice analysis is important to the REx-PN, entry-level competencies or entry-to-practice competencies are also worth noting here. The REx-PN is one of the criteria an applicant must meet.

These competencies are addressed in the nursing curriculum. Like other entry-level exams, the REx-PN is not intended to test everything a student is taught in their education program and does not test all competencies needed throughout a nurse's career. The regulatory exam is designed to measure that the applicant has the necessary knowledge, skills, and abilities needed to practice nursing safely and effectively within their first year of practice.

The mapping analysis was conducted in which the competencies of nursing curricular in BC and Ontario was systematically compared to the activity statements within the practice analysis and determined alignment between the two. The results of the analysis showed that the REx-PN Test Plan aligns with the competencies LPN or RPNs need in their first year of practice.

All but one of the entry-level competencies mapped to the REx-PN activity statements in corresponding content. The one competency that did not map to the REx-PN Test Plan was number 19, distinguishes between the mandates of regulatory bodies, professional association, and unions.

This competency is not tested on the REx-PN, rather it is taught in the education program. An example of the mapping is displayed and the document can be located on the CNO and BCCNM websites. Now I'll briefly go over some of the LPN/RPN demographic results from 2019 practice analysis. The sample of nurses captured in the practice analysis panel reflected the 2018 population of LPN/RPN entry-level nurses.

The sampling of nurses followed the distribution of entry-level nurses across British Columbia and Ontario, 6,625 nurses were randomly sampled. The web surveys went out and were conducted in February through March of 2019. As you can see here, the majority of the responders to the survey were graduates of LPN/RPN diploma programs at 88.5%.

Based on these two graphs, you can see at the time nurses completed their survey, on average, a little over 10 months had passed between the time nurses completed their education, then obtained their license and gained employment. The top three client health conditions that nurses reported caring for most frequently were clients with stable chronic conditions, behavioral/emotional conditions, and clients at end of life.

It's important to note that respondents could select more than one option, which is why the percentage is greater than 100%. The majority of newly licensed LPN/RPNs reported that on their last day of work prior to completing the survey, they cared for adult clients in the varying age ranges. The published report and full details of the practice analysis can be found on the NCSBN, BCCNM, and CNO websites and are available to the public.

Next, I'll provide you all with some very valuable information about the REx-PN Test Plan. The REx-PN Test Plan includes in-depth information of the content categories and activities that were result of the data collected from the practice analysis. In order to keep up with current nursing practice, the test plan is updated every five years.

The information is also reviewed and approved by the Practical Nurse Exam Committee or PNEC, which has final oversight of the exam. The test plan is a valuable tool to exam writers preparing for the exam by providing information on how the exam works and what content may appear on the exam just like a study guide.

The test plan also provides direction to item writing volunteers to ensure each item is linked to the appropriate test plan category. In addition to assisting candidates and volunteers, the test plan helps staff classify the items. Each activity statement is assigned into each one of the eight test plan categories.

This is to ensure every exam writer receives a comprehensive exam which contains the required percentages of each client needs category. Effective January 2022, the distribution of content of the eight test plan categories in the REx-PN exam is displayed.

All of these test plan categories are a result of the 2019 REx-PN Practice Analysis and have been reviewed by the PNEC. Each exam will contain a specific distribution of items from each of these test plan categories, regardless of the total number of items appearing on the writer's exam. To accommodate this, the distribution of content in individual examinations may differ slightly, plus or minus 3% in each of these categories.

Before getting into the specific test plan categories, it is important to recognize the REx-PN exam integrated processes. These processes are fundamental to the practice of nursing and are integrated throughout all the test plan categories. Regardless of the test plan category, exam content could also contain these six concepts. For specific definitions of these integrated processes, please refer to the published test plan on NCSBN's website.

Our first test plan category is Management of Care. Category 1 is the largest test plan category found on the REx-PN making up 21% of the exam. In total, there are 27 activity statements with examples of four shown here. Relevant content in this area includes, but is not limited to collaboration with interdisciplinary teams, establishing priorities, advanced directives, confidentiality, and client rights.

REx-PN second test plan category is Safety and Infection Control. This content area comprises 13% of the content on the exam and has a total of 13 associated activity statements with four examples shown to the right. Related content in this area includes, but is not limited to emergency response, minimizing harm and risk, incident reporting, and standard and infection precautions.

Test Plan Category 3, Health Promotion and Maintenance. Nine percent of the exam content here is relating to the aging process, developmental stages and transitions, as well as various health promotion in screening nursing care activities. There are three examples of activity statements listed here with a total of 19 activity statements contained in this category.

Category 4, Psychosocial Integrity. At 11% of the exam, this test plan category content is related to behavioral interventions, coping mechanisms, and therapeutic communication. You can see there are four activity statements in this category shown here. There are a total of 19 activity statements in Category 4 on the REx-PN.

Basic Care and Comfort is the fifth test plan category out of eight on the REx-PN exam. A few examples of content in this category are related to assistive devices, basic personal care, and nutrition. Nine percent of the exam content will be from this area.

Four of the 16 activity statements taken directly from the test plan category are shown here. The sixth test plan category is Pharmacological and Parental Therapies, making up 17% of the exam. As you can imagine, this test plan category is related to pharmacology.

There are 22 activity statements with 4 example statements shown in the slide. Much of the content in this category can be related to medication administration, interactions, blood and blood products, central venous access devices, and parenteral or IV therapies.

Making our way through the eight categories, our seventh is Reduction of Risk Potential at 11% of the exam content. From this test plan category, exam material may include lab values, diagnostic tests, changes in vital signs, and system-specific assessments. This category contains a total of 19 activity statements, and you see the specific examples of activity statements in Category 7 listed here.

Our final test plan category, Physiological Adaptation at 9% of the exam outlines nursing content pertaining to acute and chronic physical health conditions as well as life-threatening illnesses. There are 18 activity statements derived from the practice analysis for Physiological Adaptation with 3 examples shown here.

As you can see from these activity statement examples, the related content could include hemodynamics, fluid and electrolyte imbalances, medical emergencies, and pathophysiology. Considering we've only scratched the surface on the information you can find in the REx-PN Practice Analysis and the Test Plan, please take advantage of these publications that are found on the web.

In addition to these, through NCSBN's website, you can also find previously recorded presentations, exam FAQs, and links to BCCNM and CNO websites. We'll have a live Q&A coming up next. So be sure to put your questions in the Q&A box.