Cardiac-Vascular Nursing Role Delineation Study

Executive Summary

The American Nurses Credentialing Center (ANCC) contracted with PSI Services LLC to perform the role delineation study (RDS) for the ANCC Cardiac-Vascular Nursing examination in 2018. An RDS (sometimes referred to as a job analysis, practice analysis, or work analysis) is a scientific inquiry conducted to identify the tasks and work activities performed, the context in which those tasks and activities are carried out, and the competencies (knowledge areas, skills, and abilities) required to perform a job role successfully1. The RDS results become the basis of a variety of human resource management initiatives. For certification, the results are used to create a validated assessment of required job competencies. This report introduces the methods and results of the RDS for the Cardiac-Vascular Nursing certification examination.

Methods

ANCC assembled 10 clinicians certified in Cardiac-Vascular Nursing to serve on the content expert panel (CEP) in spring 2018. The panel members feature a wide variety of work-related characteristics, such as years of experience, work setting, geographical location, and areas of expertise. This diversity helps develop a scope of practice reflective of the roles and responsibilities of the job and relatively free from bias.

The RDS process used in this study yields examination specifications that accurately reflect the scope of practice, allowing for the development of fair, accurate, and realistic assessments of candidates’ readiness for certification. The process comprises three major activities:

1. **Content Expert Panel (CEP) Meeting** – A gathering of subject matter experts to discuss and develop a description of the scope of practice in terms of tasks, skills, and knowledge

2. **RDS Survey** – A large-scale survey of clinicians not involved with the CEP to validate the tasks, skills, and knowledge developed during the CEP meeting

3. **Development of Examination Specifications** – The development of the examination specifications by the CEP on the basis of the survey results

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On March 8-9, 2018, PSI conducted a two-day, in-person meeting with the CEP at ANCC headquarters in Silver Spring, MD. With PSI facilitating, the CEP discussed the scope of practice; developed a list of tasks, skills, and knowledge statements that reflect the job role; organized the statements into a domain and subdomain structure; reviewed rating scales to be used on the subsequent survey; developed demographic questions for the survey; and conducted a linkage analysis. The current ANCC Cardiac-Vascular Nursing Test Content Outline (TCO) and the *Cardiovascular Nursing: Scope and Standards of Practice* served as resources when developing the task, skill, and knowledge statements. For the linkage activity, the CEP identified links between the tasks and knowledge/skill statements to ensure that each task was covered by at least one relevant skill or knowledge area and that each skill and knowledge area had at least one associated relevant task. Linkages provide evidence that the knowledge and skills are applicable to the job.

The RDS survey included the task, skill, and knowledge statements, as well as demographic questions developed by the CEP. PSI programmed, administered, monitored, and analyzed the survey. Respondents provided ratings on the importance and frequency of each task and the importance of each skill and knowledge statement.

A pilot of the survey, conducted April 18-24, 2018, included five cardiac-vascular nurses, who reviewed the survey for functionality and clarity. Based on the feedback received, no modifications were made to the survey.

The live survey was administered April 26 to June 7, 2018. The invitation was sent using online survey software to 1,501 individuals. All invitees were active ANCC cardiac-vascular nurses, selected using the stratified random sampling procedure based on region. Of the 946 individuals who opened the survey invitation, 220 (23.3%) completed the survey.

Examination specifications were developed during a one-day, web-based meeting on July 20, 2018. With PSI facilitating, the CEP reviewed the survey results; finalized the tasks, skills, and knowledge that would comprise the next TCO; and finalized the item allocations for the examination. Item allocations were determined through content weighting (mean importance of the skill and knowledge statements) and CEP discussion of the results.

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Results
The resultant examination specifications include 17 knowledge areas and 12 skills across the following four competency areas (content domain level):

1. Assessment and Diagnosis
2. Planning and Implementation
3. Evaluation and Modification
4. Patient and Community Education
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