



UCNS Certification Examination Development Process

UCNS certification examinations are developed by an examination committee comprised of subject matter experts (SMEs) who have been trained in the principles of item writing. In addition to subspecialty content expertise, the UCNS strives for diversity on all committees relating to practice type and/or academic institution, geographic location, ethnicity, gender identity, etc. A typical test development cycle is one year, and test scoring typically takes 8-10 weeks following administration of an examination.

Content Outline Definition and Approval. The first blueprint/content outline for each subspecialty certification examination is developed and proposed by experts of the respective subspecialty's sponsoring organization(s). Proposed examination content outlines are reviewed by the subspecialty's examination committee of ten subject matter experts (SME) who have been identified and nominated by the subspecialty sponsoring organization(s). The examination committee thoroughly reviews the content outline to ensure that it represents the scope of knowledge and proper weighting of content areas based on importance and relevance of the subspecialty practice areas. Upon approval by the examination committee, the outline is advanced to the Certification Council for a final review and approval. The approved content outline becomes the guide for item development to ensure the examination properly reflects the topics to be covered and the percentage of items devoted to each topical area of the examination. The examination blueprints are reviewed by the examination committees on a regular basis to ensure currency of practice.

Item Development. Examination committee members are trained in item writing, reviewing, and editing. Using Bloom's taxonomy, each item is written to fall into one of the three categories of recall, problem solving, or interpretation. SMEs are given item writing assignments and they enter items into the relevant content areas within the item bank in accordance with the specified weighting of each content area.

Item Review. Items undergo an initial editorial review in the bank. Items that need revision are then rewritten by the SMEs. Revised items undergo another editorial review prior to the examination committee's final review and approval of the final 200 examination questions.

Assembly of Approved Items. All UCNS certification examinations consist of 200 multiple-choice questions. The final approved 200-question examination is assembled and formatted in the testing platform.

Standard Setting. UCNS uses a criterion-referenced standard-setting procedure to determine the cut score or passing point of the examination. Criterion-referenced testing is based on the concept that candidates should be measured against the skill and knowledge represented in each test question. The level of acceptable performance is based on the knowledge and skills needed to perform effectively in the field of practice. The standard-setting meeting is held with staff, examination committee members,

and a psychometrician to conduct a final review of items and complete the standard setting procedure. The first standard setting procedure takes place as part of the development of a subspecialty's first certification examination. After administration of the first certification examination, the process is repeated after each fifth examination administration.

Exam Administration. All UCNS certification examinations are administered online with live virtual proctoring to ensure a secure testing environment. Measures are in place to authenticate exam candidates and administer the examination in a secure manner.

Item and Test Analysis. Following administration of each examination a psychometric analysis is completed on each test item to ensure quality and validity. Items that do not perform statistically well on the examination are identified and flagged by the psychometrician and then reviewed by the examination committee Chairs to determine if the flagged items should be deleted from the final examination scoring.

Scoring and Reporting. After the item and test analysis are completed, the psychometrician completes the scoring of the examination and provides a comprehensive written report with item statistics and outcomes. A meeting is held with the psychometrician, examination committee, and staff to review the full report. The examination committee uses the exam report data to determine which items may need to be replaced before the next examination administration. Approximately eight to 10 weeks post-examination, the final scoring and statistical review are completed, and staff prepares and sends the results notification letters to all examinees.