



## Establishing the Standard

*A look at how the standard of competence determining  
the passing score is defined*

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CBNC examinees are tested against a standard of knowledge which delineates the benchmark of core level competence required to become certified. The standard is established through what is known as a *Modified Angoff* approach, the most commonly used criterion-referenced methodology. This approach involves surveying a large sample of practitioners to assure diversity of gender, ethnicity, geographic region, medical specialty and practice setting by means of a practice analysis survey instrument, then gathering a group of 15-20 content experts to evaluate the responses and define basic competence in the field. Using this definition, these content experts then evaluate the difficulty of each examination question.

This process typically is completed ten days to two weeks after the first examination administration so that the content experts will have actual response data with which to validate their judgments about the relative difficulty of the questions for professionals with base-line competence in nuclear cardiology. The content experts' judgments are statistically analyzed and a proposed passing score is derived. The final decision about the standard usually is made by the certification board of directors or examination committee after reviewing the passing score analyses and other applicable data.

CBNC sponsors practice analyses every five years to ensure that the standard of knowledge remains current. The process takes approximately eight months from selection of the panel of experts representing the diversity of practice, to the development of the survey instrument, to analysis of the survey responses, to determination of the exam specifications. These final specifications include not only content areas in appropriate percentages (e.g., the examination content outline) but also define the cognitive level (i.e., recall, application, analysis and synthesis) at which the knowledge should be held. CBNC's most recent practice analysis took place in 2011.