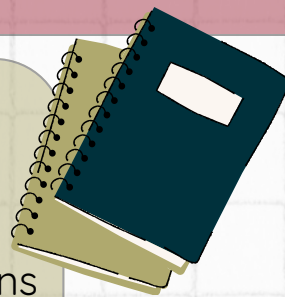


ABGC CGC Exam Development Process

Practice Analysis

A survey is given to all ABGC Diplomates. The survey asks questions related to current genetic counseling practice and areas of expertise. Answers from the survey inform development of the **Exam Content Outline**.



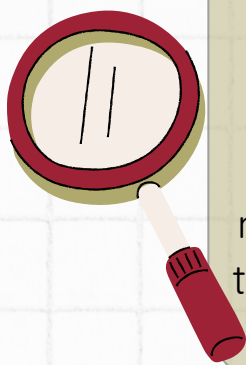
Every 5 years

Exam Content Outline (ECO)

The Practice Analysis Committee reviews survey responses, identifies themes in practice, categorizes the themes, and assigns weights to each depending on their frequency of use.

Item Writing

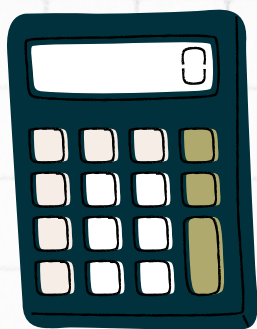
The Certification Exam Committee (CEC) identifies **Subject Matter Experts** to write questions (items) that fit themes from the ECO. The number of items written is based on the ECO and need for new questions as some get retired.



Every Year

Subject Matter Experts (SMEs)

Genetic counselors with experience and expertise in a specific subject matter represented on the exam.



Psychometrician:

Individual with a PhD in exam development and statistical analysis that guides all parts of the exam development process.

Every year

Item Review

The CEC reviews new items written by SMEs, and reviews items used on past exams. The CEC is made up of SMEs with item writing experience. Items are reviewed to ensure adherence to the ECO, as well as to reduce bias, edit question length, ensure answer choices meet criteria, and correct answers (keys) are appropriate.

Exam Compilation

The ABGC Board Exam is comprised of 170 questions that have passed through analysis and vetting on prior exams, and 30 items that are in review (do not count toward score). The 170 items may be used on multiple exams over many years, as long as they continue to perform appropriately, and fit the needs of the ECO. Two versions of the exam are created for each exam cycle (one for Aug, one for Feb).



Passing Point

When a Practice Analysis is completed, a Passing Point Committee (PPC), made up of SMEs, is convened to determine the baseline score of a minimally competent genetic counselor (MCGC). The PPC is made up of SMEs that take the exam and discuss the likelihood that a MCGC would answer the item correctly. The **psychometrician** translates their analysis into a passing point score, which is evaluated by the Board of Directors.

2X per year

Every 5 years

Exam Administration

The exam is administered by the test vendor. The test vendor also provides the psychometrician and exam development resources to ensure the exam meets the standards set by the National Commission for Certifying Agencies (NCCA).

TEST VENDOR



Psychometrician

Determines Process for All Exam Development Committees

Practice Analysis Committee
Certification Exam Committee
Item Writers
Passing Point Committee

Provides Statistical Analysis

Item Performance
Item Structure
Practice Analysis
Exam Content Outline Development
Passing Point Development

Maintains Standards Required by the NCCA

Administers Exam

Creates Practice Exam

Item Writer
writes items

CEC + Psychometrician
evaluates items

Psychometrician
compiles exam

Item writer is a genetic counselor with subject matter expertise and experience (SME)

CEC members are SMEs with item writing experience

The psychometrician has training and expertise in statistically sound certification exam development

ABGC Board of Directors (BOD)
Hires test vendor
Aids identification of SMEs
Reviews passing point

ABGC Executive Staff
Aids in exam development processes, liaises between vendor, candidates, diplomates, BOD, and committees

All positions within ABGC are volunteer positions. Calls for volunteers go out as needed throughout the year. If subject matter expertise on a committee is not fulfilled by the call for volunteers, additional individuals may be asked to volunteer to ensure that the makeup of the committee approximately reflects subject matters expertise in the genetic counseling profession.

Minimally Competent Genetic Counselor

Possesses the knowledge and skills necessary to practice genetic counseling as outlined by the ECO, with no additional knowledge or skills that are typically learned through experience (beyond clinical rotations) on the job or in a given professional specialty or locality.

NCCA - National Commission for Certifying Agencies:

The accrediting body of the Institute for Credentialing Excellence (ICE). The psychometrician must follow processes and guidelines of the NCCA to ensure validity of the board exam.

DID YOU KNOW



Since the genetic counseling profession doesn't change too dramatically every three years, much of the exam content remains the same. However, new questions are continually being developed.

To determine the passing point after new Practice Analysis/ECO are developed every 5 years, the psychometrician has to compare the Passing Point Committees' assessment with the scores on the first iteration of the exam to determine a statistically sound passing point. That passing point stays valid until another Practice Analysis is completed.

For this reason, test takers cannot receive instant scoring on the first iteration of the exam after the Practice Analysis is completed.

The ABGC Board is not able to adjust the passing score beyond two standard errors of the mean without risking validity of the exam through NCCA.

Items flagged due to unexpected performance on the exam get re-examined by the CEC. These items are often tweaked, rewritten, or tossed away. Items that are changed from their original, vetted version are re-vetted before inclusion in the final (scored) exam.

ABGC volunteers involved in exam development are trained in how to appropriately write exam questions and how to reduce bias in questions.

The requirement that programs have an 80% pass rate for their students over time is set by ACGC (not ABGC).

ABGC is committed to ensuring a psychometrically valid certification exam. We are interested in collaborating with key stakeholders to collect data around factors that contribute to variations in pass rates over time.