DEVELOPMENT, IMPLEMENTATION AND RESULTS OF THE AMERICAN COLLEGE OF CARDIOLOGY’S IN-TRAINING EXAMINATION

Poster Contributions
Poster Hall B1
Saturday, March 14, 2015, 3:45 p.m.-4:30 p.m.

Session Title: Blood Pressure, Diabetes and Other Risk Factors
Abstract Category: 21. Prevention: Clinical
Presentation Number: 1140-101

Authors: Jeffrey T. Kuvin, Amanda Soto, Lauren Foster, John Dent, Andrew Kates, Donna Polk, Barry Rosenzweig, Julia Indik, Tufts Medical Center, Boston, MA, USA

Background: The American College of Cardiology (ACC), in collaboration with the National Board of Medical Examiners (NBME), developed the first standardized in-training examination (ITE) for cardiology fellows-in-training (FITs). The ITE tests knowledge across the six competencies and incorporates the newly developed ACC Curricular Milestones to provide feedback to FITs and program directors. The objective of this analysis is to report the initial ITE experience, including feasibility and reliability of test development and implementation, as well as the ability of this examination to provide useful feedback in key content areas.

Methods: The annual ACC ITE has been available to cardiovascular disease fellowship programs in the United States since 2011. Questions for this web-based, secure, multiple-choice examination were developed by a group of cardiovascular disease specialists and were analyzed by the NBME to ensure quality. Questions were equated and standardized to allow for comparability. Following the examination, trainees and program directors were provided an overall test score as well as scores within each section. Examinees were also provided with a list of ACC Curricular Milestones linked to questions answered incorrectly.

Results: The ITE has been administered 5,118 times to 3,388 FITs across 194 training programs. The ITE maintained a consistent format over the three administration years with a reliability coefficient (alpha) between 0.73 and 0.81 each year. Among the three years of cardiovascular fellowship training, there was consistency in the examination scores. Total test scores and scores within each of the content areas increased with each FIT year (statistically significant difference in each cohort’s average scale score across administration years). There was also significant improvement in examination scores across the fellowship years.

Conclusion: The ACC ITE is a powerful tool available to training programs to assess medical knowledge and is linked to the ACC Curricular Milestones. The ITE delivers robust feedback addressing individual knowledge gaps, thereby serving as a basis for improving focused learning and training curricula.