Academy Reports on 2013 Examination Performance

2013 marked a year of growth for the item banks for each of the Academy's certification programs, as a new item writing process got underway. All three programs saw successes in 2013. On the whole, the examinations offered by the Academy are performing their role of distinguishing between candidates who demonstrate proficiency with the knowledge required of those who are certified from those who do not.

A total of 1,816 applicants applied to the Academy of Clinical Research Professionals (the Academy) for certification as a clinical research coordinator, clinical research associate, or a physician investigator. Of the 1,837 that were found eligible to test, 1,547 individuals tested at numerous computer-based testing (CBT) locations in more than 37 countries. During 2013, a total of 1,113 individuals were granted initial certification bringing the total number of individuals currently certified by the Academy to 13,534, and to 29,850 certified over the past 21 years.

The following statistics are for each Certification programs administered in 2013:

Certified Clinical Research Coordinator (CCRC)
Total Number of applicants: 1194
Total Number of eligible candidates: 1117 *(not all eligible candidates actually test)*
Total Number of test takers: 1054

2013 Certified Clinical Research Coordinator (CCRC) Program		
Form Number	8730030901	87300301001
Total # Candidates Tested on Form	487	567
% of Candidates Passing	67.8%	78.3%
Total Scored Items on Exam	100	100
Total Scaled Score Possible	800	800
Scaled Passing Point	600	600
Scaled Mean Score of Candidates	625	649
Range of Scaled Scores	342 – 761	359 – 786
KR-20 Reliability Coefficient	0.89	0.88
Standard Error or Measurement	3.87	3.79

Certified Clinical Research Associate (CCRA)

Total Number of applicants: 505

Total Number of eligible candidates: 471 *(not all eligible candidates actually test)*

Total Number of test takers: 437

2013 Certified Clinical Research Associate (CCRA) Program		
Form Number	8730060901	87300601001
Total #Candidates Tested on Form	229	208
% of Candidates Passing	60.7%	65.9%
Total Scored Items on Exam	100	100
Total Scaled Score Possible	800	800
Scaled Passing Point	600	600
Scaled Mean Score of Candidates	613	620
Range of Scaled Scores	343 – 767	329 – 774
KR-20 Reliability Coefficient	0.90	0.90
Standard Error or Measurement	3.98	3.94

Certified Physician Investigator (CPI)

Total Number of applicants: 68

Total Number of eligible candidates: 58

Total Number of test takers: 56

2013 Certified Physician Investigator (CPI) Program	
Form Number	8730090601
Total #Candidates Tested on Form	56
% of Candidates Passing	62.5%
Total Scored Items on Exam	100
Total Scaled Score Possible	800
Scaled Passing Point	600
Scaled Mean Score of Candidates	602
Range of Scaled Scores	400 – 731
KR-20 Reliability Coefficient	0.84
Standard Error or Measurement	3.89

Each designation's exams are overseen by a Global Exam Committee made up of currently certified clinical research professionals who work with a professional testing agency to develop each exam. The exams for each program (CCRC, CCRA, CPI) go through several review steps by each Global Exam Committee before being released for administration. In addition, the passing standard is set by a diverse panel of currently certified clinical research professionals.

Currently, there are 122 active Subject Matter Experts (SMEs). SMEs are Academy certificants who participate in special training in how to write multiple choice test questions. Training is offered each year at ACRP's Global Conference and via a web-based training. Every draft test question must be linked to a topic area found on the Detailed Content Outline (DCO) for a specific designation, as the Outlines are specific to each job role. Each question must also be referenced directly to a specific section of the ICH Guidelines E2A, E6, E8 or E9. In 2013, 281 draft items were submitted and reviewed. On average, fifty-three percent of draft items are approved for addition to the item pool as pre-test items. In 2013, the Academy used a beta testing process to bring draft items to the exam more quickly that saw 627 individuals participate. The Academy has set minimum performance standards for pre-test items which help determine whether the item advances to be included as a scored item on a future exam, must be revised and then pre-tested again, or archived.

In 2013, 768 certified clinical research professionals directly impacted the development of the Academy's certification exams.

Explanation of Terms
Total Scored Items on Exam: the current examination length is 125 questions. However, 25 of those are pre-test questions. The pre-test questions are being evaluated for possible inclusion in an exam at a later date. Information on how candidates perform on those questions is being collected without the question affecting a candidate's score.

Total Scaled Score Possible: This is the highest score possible and represents a perfect score. The Academy uses a scaled score. Scaled scoring is a common practice among certification programs with multiple forms of the exam.

Scaled Passing Point: This is the score a candidate must receive in order to pass the examination. The passing score is a scaled score of 600. The score of 600 correlates to the number of questions a candidate must answer correctly, based on which form of the exam the candidate is taking. That number can differ from form to form. The number of questions that must be answered correctly is determined by evaluating the overall difficulty level of the exam. The more difficult the exam, the fewer questions a candidate would have to answer correctly in order to be assessed as having mastered the content. The Academy uses the Modified Angoff method to establish the passing point. The exam is not scored on a "curve" and there is not predetermined number or percentage of candidate that will pass. The passing score is set for each form of the exam.

Scaled Mean Score: This is the average score of all candidates who took a specific form of the exam during 2012. A passing score is 600. The Academy uses criterion-referenced scoring. This means that the passing point is set for the first exam and does not change between exam administrations. The exam is not scored on a curve. This means it does not matter how many candidates test or what the make-up of the testing group is. The Academy does not pre-determine the number of people it will certify in a given year – performance, and therefore passing the exam, is up to the candidate.

Range of Scores: This shows the range of candidate scores between the lowest scoring candidate and the highest. The Academy's exams demonstrate is a fairly typical range for a professional certification program. No one has scored a 200, which would indicate the candidate guessed at all the questions and no one has scored a perfect score either. This indicates that the difficulty level of the exam is generally appropriate for the candidate population at large.

KR-20 Reliability Coefficient: This is one of the most important program statistics. It indicates the reliability and consistency of the exam, or how well the exam distinguishes between candidates who have mastered the content and those who have not yet mastered the content covered. Professional certification programs strive for KR-20 results of 0.80 or higher. The statistics for the Academy's exams indicate a high level of reliability and mean that the exam is quite dependable for assessing a candidate's mastery of the information tested.

Standard Error of Measurement: The standard error of measurement yields an estimate of the average amount of error associated with a test score received on an Academy exam. A large standard of error indicates a significant amount of error can exist in the score received. The small standard of error for the Academy exams suggest that the Academy exams are a precise measure of the knowledge and skill required to carry out the role-specific duties of a clinical research coordinator, a clinical research associate and a physician investigator.