

A job analysis was performed in 2023 for the National Center for Competency Testing's (NCCT) National Certified ECG Technician (NCET) examination. The purpose of the job analysis is to describe the job activities of the ECG technician in sufficient detail to provide a basis for the development of a professional, job-related certification examination.

The National Center for Competency Testing (NCCT) facilitated the selection of a Job Analysis Committee (JAC) to conduct the activities necessary to identify the responsibilities of a Certified ECG Technician (NCET), and to develop the detailed test plan. The diversity of this group was reflective of the ECG technician's job. All JAC members demonstrated expertise in the duties and activities associated with this profession.

The study involved the development of a job analysis survey, distribution of the survey to current ECG technicians, and an analysis of the responses. The detailed test plan for the Certified ECG Technician was developed on the basis of these data. The JAC was responsible for the following six tasks:

1. Developing a definition of an ECG Technician
2. Identifying tasks for the survey instrument
3. Determining the appropriate rating scales
4. Determining the relevant demographic questions
5. Pilot testing the survey instrument
6. Finalizing the detailed test plan based on the survey data

The survey was sent to 4,282 individuals who maintain or have maintained the NCET credential in the past 5 years. Of these, 179 (4.2%) individuals submitted usable responses. Of those who responded, 98.0% indicated that the survey instrument either adequately or completely addressed the important elements of an ECG Technician's job.

After the survey data were analyzed, the results were reviewed with the JAC and decision rules were established. These rules were used to determine which tasks and knowledge were appropriate for assessment, and therefore, inclusion in the final detailed test plan. Application of the decision rules resulted in the retention of all 36 of the original 36 tasks and 13 of the original 14 knowledge statements.

The JAC determined that each multiple-choice test will be comprised of 100 scored items and 25 unscored, pretest items. Of those 100 scored items, 92 (92%) will be 4-option multiple-choice items and 8 (8%) will be alternative items (e.g., multi-select, drag-and-drop, hotspot). The resulting detailed test plan will be used as the basis for examination development until the next job analysis. NCCT's Board of Testing reviewed the new detailed test plan on April 11, 2023 and unanimously approved of its use for future test forms.