

Executive Summary

The purpose of this study was to identify the important tasks performed by asthma educators as a first step in the development of a job-related certification examination. The National Asthma Educator Certification Board (NAECB) requested the services of PSI Services (PSI) to design and conduct a study that would provide evidence to support the validity of a certification examination based on specifications derived from the study.

NAECB appointed a Job Analysis Committee (JAC) to conduct the activities necessary to identify responsibilities of asthma educators and develop the examination specifications. NAECB identified the need to ensure that the examination specifications were representative of asthma educators, and the diversity of the task force was reflective of the specialty areas practiced throughout the United States. All the members of the task force had demonstrated expertise in their respective areas of specialization.

The study involved development of a web-based job analysis survey, distribution of the survey to target practitioners, and an analysis of their responses. Exam specifications for the asthma educator examination were developed on the basis of this analysis.

The Job Analysis Committee met in September 2016 to initiate the following six tasks:

1. Develop a sampling plan
2. Identify tasks for the survey instrument
3. Identify content categories
4. Determine the rating scales
5. Determine the relevant demographic variables of interest
6. Integrate demographics, rating scales, and tasks into a survey instrument

Invitations to participate in the survey were mailed to 3,589 asthma educators with a link to the online job analysis study and a request to forward the invitation and link to others in the field. After adjusting for undeliverable addresses ($n = 571$), it was determined that approximately 9% of the sample provided usable responses ($n = 280$). The responses to the demographic questions indicated that there were sufficient numbers of respondents in relevant groups for subsequent analysis. Approximately 97% of the respondents felt that the job analysis study at least adequately addressed the responsibilities of asthma educators. In addition, respondents used all rating scales with an acceptable level of reliability.

During a second meeting of the Job Analysis Committee in April 2017, decision rules were adopted and used to determine which tasks were appropriate for assessment, and therefore for inclusion in the final Detailed Content Outline (DCO). Application of the decision rules and revision based on candidate comments resulted in 144 tasks. It was determined that a total of 150 multiple-choice items would be sufficient to assess these tasks.