Abstract

Objectives: Applying the concept of the ACGME general competencies, it is possible to define the essential job objectives and competencies of a junior otolaryngology resident. The objective of this study is to incorporate commercially available tools of business in the identification of competencies specific to the junior otolaryngology resident and develop behavioral-based interview questions and techniques designed to identify these qualities in candidates for residency.

Study Design: Institution of a pilot program involving a focus group within an otolaryngology department, a professional development consultant, commercial business software for occupational analysis and personnel selection, and an interview technique training seminar for faculty and residents.

Methods: In coordination with a university-based professional development consultant, a formal job analysis was conducted to define the job objectives and competencies of a junior otolaryngology resident. These results were used to generate behavioral-based interview questions for use in the resident selection process. All interviewing faculty and residents were trained in behavioral-based interviewing.

Results: Occupational objectives for the junior resident position specific to a particular university department of otolaryngology were identified. Additionally, the essential skills, knowledge, and competencies were identified. Behavioral-based specific questions to the competencies were created and incorporated into the current resident selection interview.

Conclusions: Using tools of occupational analysis and personnel selection, a list of job objectives and competencies for the junior otolaryngology resident can be created. Using these results, behavioral-based interviewers may be implemented to perform traditional interviews with the ultimate goal of improving candidate selection.

Introduction

Multiple factors combine to challenge the modern otolaryngology training program, including resident attrition (failure to complete training) and increasing pressure to utilize limited resources efficiently. The resident selection process offers an opportunity to address these challenges through selection of the most qualified applicants who best-fit the training program and are most likely to complete training successfully. However, the traditional selection process relies on past academic data and traditional interviews which are not consistently valid and reliable predictors of success during residency. This study emerged from an effort within one academic training program to improve the resident selection process by using established, rigorous and reliable methods not in frequent use within medicine: job analysis and behavioral-based interviewing.

Job analysis techniques have as their goal the identification of job-specific objectives, as well as desirable and desirable skills and knowledge, and competencies that characterize a specific job and its effective performer. Job analysis has been used in business, and less frequently within medicine, for decades. Behavioral-based interviewing has demonstrated improved reliability and validity in comparison to traditional interviewing techniques in predicting job performance.

Methods

1. Job Analysis

With the aid of a university-based professional development consultant, we performed a job analysis for the role of junior otolaryngology resident using the WPS Work Profiling System (WPS, System Limited, UK). The Work Profiling System (WPS) requires that a group of people familiar with the job (usually 4-8) define the main purpose of the job and the top ten job objectives. The group then ranks (in terms of time and importance) various activities, skills, and knowledge necessary to achieve the main purpose and objectives they defined. WPS software then analyzes the information collected using psychometric principles and generates reports presenting the correct aspect of the job and the human attributes necessary to achieve them. We have defined these as the competencies of the junior otolaryngology resident. WPS also generated behavioral-based interview questions specific to these competencies.

2. Behavioral-Based Interviewing

A 3.5 hour training session was held to familiarize faculty and residents with behavioral-based interviewing principles and techniques. The consultant and the program director selected 4 competencies to be explored during residency selection in 2009. Behavioral-based interview questions specific to these competencies were used and applicants were scored on a scale of 1 to 5.

Results

WPS job analysis generated 10 competencies and specific behavioral-based interview questions designed to explore these competencies (Table 2.1). Applicant scores on these questions were evaluated during the department ranking meeting. These scores had high correlation with the applicant’s rank position (Pearson correlation coefficient for rank means and interview score was 0.80 (p<0.0001)). See figure below.

Discussion

Using commercially available software and the skills of a professional development consultant, a job analysis for the position of junior otolaryngology resident may be conducted to determine job-specific objectives, essential and desirable knowledge and skills, and competencies. Behavioral-based interview questions may be generated and implemented. This pilot program demonstrates that the above measures may be quickly and efficiently implemented to improve the process of resident selection.

Conclusion

The resident selection process may be improved quickly and efficiently by implementing job analysis and interview methods with improved reliability and validity compared to traditional selection processes. Long-term follow-up of our residents is necessary to verify the internal validity of this project.

References


