

THE BEHAVIORAL INTERVIEW, A METHOD TO EVALUATE ACGME COMPETENCIES IN RESIDENT
SELECTION: A PILOT PROJECT

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Abstract

Background- Interviews are a key part of the recruiting process in resident selection. Most programs use an unstructured resume-based interview. In 1999, the ACGME endorsed six competencies including behaviors as well as knowledge. Studies of interviews in the business community which use structured, behavioral interviews show more validity in future job success when essential job related behaviors are required. The premise of the behavioral interview is that *past behavior is predictive of future behavior*. For this reason we introduced in the 2003-2004 recruiting season a behavioral interview to assess four ACGME competencies in the resident candidate- Professionalism, Patient Care, Communication Skills and System Based Practice. Provided in this report is a description of the process used to create the interview questions, the rating system, how it was introduced to candidates and faculty and its acceptance in the recruiting process for anesthesiology residents.

Keywords: resident selection, educational measurement, internship and residency, interviews, career choice, personnel selection

Introduction:

The objective of residency selection is to identify candidates with knowledge, skills and behaviors that will lead to success in residency and professional life. Selection criteria often focus on academic achievement as evidenced by USMLE scores, grades, class rank and AOA status.¹ These factors, although important, may not always predict success in the anesthesiology residency.^{1,2} Others have described additional factors used in the ranking of candidates in Anesthesiology, including those obtained at interview. These factors have also shown little correlation to success in the first year of the residency.³ Residents are evaluated for success in all six ACGME competencies throughout training. Although success in residency is determined by success in these behaviors, we have not formally assessed these qualities in the selection process. We wished to develop a new interview process to evaluate specific competencies or behaviors which we would then follow throughout training. We consulted members of the Owen Graduate School of Management at Vanderbilt University (MBA consultants) to help us develop a behavioral interview for resident applicants based on the method used in the business community. We chose to assess four of the ACGME competencies- Professionalism, Patient Care, Communication Skills and System Based Practice. We were conscious of the effect this might have on the faculty-applicant interaction, which is important for recruiting. We present here a proof of concept paper, describing introduction of this interview method and acceptance by faculty and applicants.

The behavioral interview was introduced in the 1980's by industrial psychologist, Dr Tom Janz.⁴ The premise of the behavioral interview is that *past behavior is predictive of future behavior*. Job specific behaviors are identified and then applicants asked about past situations to see if correct behaviors will be identified. Universities, colleges and recruiting companies prepare applicants for this style of interview.⁵ The validity of this interview method has been studied and assessed in regards to future job performance.^{6,7} These studies show that the structured interview format based on actual experience yield personnel with better future job performance in positions that require managerial skills. Traditional interviews using the resume driven approach are less predictive of job

success when critical behaviors are required.⁸ Although this interviewing method is used and studied in the business community, it has not been described in medicine.

Development of the behavioral interview for anesthesiology applicants: We first looked at four ACGME competencies or behaviors- Professionalism, Patient Care, Communication Skills and System Based Practice. The components of each competency, as endorsed by the ACGME in 1999, are detailed on the ACGME Outcomes Project outline.⁹ A sub group from the Admissions Committee working with the School of Management consultants created questions that would have the candidates detail actual situations where these behaviors might be seen(Appendix). The candidate could then be evaluated on actual behavior and outcomes.

Introduction of the behavioral interview to faculty: Our original interview day included two faculty interviews. These were unstructured and the responses to questions centered on application materials and were quantified as to candidate's manner, appearance, communication skills and interest in the specialty. To introduce the new method, the twelve members of our Admissions Committee met with our MBA consultants and were trained to use the behavioral interview in one training session. This one- hour Powerpoint training session included a survey of the philosophy of the method, a review of ACGME competencies being assessed and examples of good and great answers. The behavioral questions were given to them to review. Initially, after the interview day, the two faculty interviewers met with one of the authors for a consensus meeting to review the interview scores and discuss opinions on the answers to the questions.

Introduction to the candidates: Resident candidates were advised of the use of the behavioral interview when invited to interview at Vanderbilt and a description of the process was explained on the interview day.

Rating the candidates: Each of the one hundred and six candidates were interviewed by members of the Admission Committee in two 30 minute interviews. In an effort to focus attention on these

behavioral traits and to prevent bias, faculty interviewers were blinded to candidates' academic achievement. They only reviewed the candidate's personal statement, letters of recommendation and curriculum vitae prior to the interview. Candidates are expected to give a specific and detailed response to the questions including behaviors and outcome. Interviewers asked one to three questions per competency. Both interviews assessed answers in the competency of Professionalism and Communication Skills. One interviewer asked the candidate questions related to Patient Care and the other System Based Practice. Each interview therefore asked questions in three competency areas. The interviewer determined if the response demonstrated behaviors consistent with the ACGME competency in this desired area. Responses were scored on a scale from 1 to 5. (Table 1) The behavioral interview scores constituted 25% of the candidate's total score. Also scored were the personal statements and the letters of recommendation. These variables comprised 50% of the candidates score. The remaining 50% was generated from academic parameters- the USMLE part one and two, transcripts, additional degrees or honors, research activity and Dean's letter.

Acceptance of faculty: Initial doubts mentioned were that the structured interview would be perceived as awkward and would eliminate the conversational flow of the resume driven interview. Also, candidates might object to being evaluated in an obvious manner. During the interview season and at the final meeting the faculty gave feedback on the interview system. All 12 members found the system easy to use and score using the comprehensive framework for evaluation. There was a learning curve in how to introduce the questions to the candidates and probe for behaviors and outcome. Interviewers found that they used certain questions more than others. Many felt that additional positive information was elicited from most candidates which gave rise to spirited discussion. It was reassuring that the candidate would excel in these areas as they had handled similar situations with convincing actions and outcomes. Faculty reported that significant important information was obtained by asking about past behaviors which would not have been determined by the traditional approach. An example of this was a candidate who identified his participation in an unethical part time job. The candidates who scored low on the interviews (an infrequent occurrence) did so for failure to demonstrate convincingly an acceptable behavior. Drawbacks mentioned were

that the questions left little time for free conversation with the candidate and to answer their questions. All suggested that with some modification, the system should be used in the new season. Modifications to be included are the elimination of the System Based Practice questions as few candidates answered these questions with confidence. In addition we would plan to reduce the overall number of behavioral questions to ensure more time for resume based questions, conversation and answering questions from the candidates.

Acceptance from candidates: A formal survey (Zoomerang.com) was sent out on Match Day to all resident candidates and 60% responded. (Table 2) Responses were anonymous. Questions were asked about the interview process and especially about the faculty interaction which the structured interview altered. The candidates commented that they did not find this behavioral technique more difficult than the traditional interview. They felt adequately prepared. The technique did not interfere with faculty interaction. They still felt a comfortable atmosphere and that faculty conveyed passion for the program and an interest in the candidate. Positive comments included that they enjoyed knowing that these qualities were important to our program. Those candidates who rated the faculty interaction as fair or poor, noted dissatisfaction with the time available to ask faculty questions and limitation of free flowing conversation.

Discussion:

The behavioral interview was introduced as a pilot project to examine four of the ACGME competencies in resident candidates. These competencies, as well as those related to academic knowledge, will be followed and evaluated throughout training. The behavioral interview was well received by faculty and candidates. With modification it will be used in subsequent recruiting seasons. We believe that systematic evaluation of ACGME competencies as early as the selection process will enable selection of residents not only academically excellent but also excelling in behaviors compatible with long-term ACGME educational objectives. Future development of this technique will include testing validity of the method by long term assessment of the residents in training. Based on the candidate feedback received, we will continue to study and refine the interview process, for example allowing more time for candidates' questions and conversation with

faculty. By selecting candidates with a track record of strength in behaviors relating to core competencies, we hope to recruit residents who are more likely to achieve success during training.

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Table 1 - Grading System

Grading System	
• 5-Superior	Demonstrates exceptional and natural grasp of competency and behaviors. Could teach or mentor.
• 4- Above Average	Displays all of the components of the competency and relevant behaviors.
• 3- Average	Displays most of the components of the competency and relevant behaviors.
• 2- Below Average	Displays some aspects of the competency.
• 1- Unacceptable	Clearly fails to demonstrate competency. None of the relevant behaviors were observed.

Table 2- Candidate Survey

	Poor	fair	good	excellent
1. Overall quality of faculty interaction:	0	2%	39%	50%
2. Faculty asked questions effectively:	0	11%	38%	51%
3. Faculty communicated passion for the program:	0	13%	47%	40%
4. Faculty showed interest in me:	7%	15%	38%	40%
5. Faculty established a comfortable environment:	13%	6%	39%	43%
6. I felt prepared for the interview:	9%	13%	45%	33%

Appendix

Professionalism

Behaviors

- Demonstrates a commitment to ethical principles and altruism.
- Demonstrates a sense of personal accountability to patients, society and the profession.
- Demonstrates sensitivity to cultural, age, gender and disability issues.
- Committed to excellence and professional development.
- Demonstrates reliability and manages time and resources well.

Questions to elicit behavior history:

1. Tell me about a time you made a significant mistake and had to admit it to your supervisor or peers.
2. Tell me about a time you disagreed with how an ethical situation was being handled.
3. Tell me about the major challenges you have faced in your job or at school over the last year.
4. Describe a situation in which someone confided in you and you felt you had to break that confidence.
5. Give an example of a time you had to deliver bad news to someone.
6. What do you consider your strengths? Weaknesses?

Interpersonal and Communication Skills

Behaviors

- Demonstrates the ability to organize and communicate effectively through written, oral, nonverbal and explanatory skills.
- Listens well to other opinions.
- Builds effective relationships with people.

Questions to elicit behavior history:

1. Tell me about a time you had to disagree with another person in order to make a positive outcome.

2. Tell me about an incident involving someone you had to work with who was very difficult.
3. Give me an example of a time when you had a difficult communication problem.
4. Tell me about a time you had to build a relationship with someone you didn't like.
5. Tell me about a time when, at first, you did not understand an issue but you finally understood by actively listening.

Patient Care

Behaviors

- Demonstrates compassion and respect for patients and families.
- Makes informed decisions and uses good judgment.
- Comfortable with information technology.
- Works well within a team.

Questions to elicit behavior history:

1. Describe a relationship with a patient that had a significant effect on you.
2. Tell me about a time you had to make an important decision but lacked critical information.
3. Tell me about a time you had to create a team.
4. Tell me about a time you had to educate a patient and family in some aspect of medicine.

Systems Based Practice

Behaviors

- Demonstrates an awareness of and responsiveness to the larger context and system of health care.
- Understands the interaction between their practices and the health care system.
- Demonstrates a respect for cost effective health care and resource allocation that does not compromise patient care.

Questions to elicit behavior history:

1. What do you think is the biggest challenge or problem in health care today?

2. If you were the President, how would you solve the problem of the high cost of health care?
3. How do you see the delivery of health care evolving in the next 10 years?