

How Can Best Practices in Recruitment and Selection Improve Diversity in Surgery?

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Improving the representation of various demographics (ie, race, ethnicity, sex, age, religion, disability, sexual orientation, economic status) is receiving increasing interest within the surgical community, especially among recent reports that certain subgroups who join surgical training programs are less likely to complete training.¹ Diversity is an important characteristic for any organization. For example, research indicates that team diversity plays a large role in the decisions teams make in high-stakes situations.² Studies examining diversity in the workplace have also shown that for every 1% increase in sex or racial diversity, a company's revenue increases by 3% and 9%, respectively.³ Finally, diverse physicians and organizations better represent, and thus better serve, patient communities with diverse needs.

One of the solutions to ensuring a diverse workforce within surgery begins at the entry point—selection. Currently, the decision of who will become a surgeon belongs to residency programs. This screening process involves review of applicant United States Medical Licensing Exam (USMLE) scores, medical student performance evaluations, letters of recommendation, and personal statements. Those who have been identified as promising from this process are then invited to an on-site interview.

Unfortunately, the residency screening process has received criticism as a result of concerns that it lacks incremental validity, is unreliable, and inefficient.^{4,5} There are also 2 specific areas of concern with respect to diversity and inclusion efforts: The first is the use of screening tools. Traditional tests of general mental ability and tests of specific cognitive abilities (eg, numerical, verbal, or spatial ability) have raised concerns regarding fairness, since these types of tests can result in substantial racial differences in test performance, which are not matched in job performance.⁶ As such, the use of cognitive-based assessments, such as the USMLE, as a primary screening tool may be at odds with any efforts to enhance diversity.⁵

Another issue involves the predominance, and weight given to, evaluations from the interview process. Reviews have shown that the majority of on-site interviews in surgery are unstructured⁵ and include a disproportionate amount of inappropriate questions about applicant marital status, family plans, ethnicity, and religion.⁷ Unstructured interviews also have increased likelihood of interviewer subjectivity such as the “just like me” bias (i.e., an interviewer's propensity to favor

candidates with similar looks and experiences to themselves). Thus, this screening method, which is given the most weight in making final rank decisions, likely limits potential to enhance diversity. By implementing unstructured interviews, decision makers may be creating a homogenous working environment of surgeons with similar profiles and personalities to their own.

The question arises, then, how can we modify our current selection system to support diversity efforts within surgery? As shown in Table 1, there are a number of evidence-based solutions. The first suggestion involves incorporating screening tools that level the playing field for all applicant groups. As noted earlier, cognitive-based tests that appear neutral can have a discriminatory effect on certain protected groups.⁶ The United Kingdom (UK) has recognized the discriminatory powers of typical cognitive-based tests, and has developed the UK Clinical Aptitude Test, which is being used as a primary screening tool and has been shown to predict performance in medical training and beyond, while also widening access to a wide range of demographic groups.⁸ Other screening tools, such as situational judgment tests, which confront applicants with descriptions of standardized realistic situations and ask them to select the most appropriate response, have also been shown to be as strong a predictor of performance as cognitive-based assessments, but without the discriminatory potential.⁹

Other suggestions include reconsidering the role of personal statements and letters of reference, as these are not completed under standardized conditions, highly subjective, and are used by decision-makers in too many inconsistent ways to inform high-stakes assessment decisions.¹⁰ In addition, a review of selection methods used in medical education suggests that these screening tools are costly to review, demonstrate low reliability and validity, and may go against efforts to widen access to certain populations, as they may reflect applicant's unequal access to coaching, resources, and individuals of elite status within the profession.¹⁰

Becoming familiar with how initial screening decisions are made through the electronic residency application system can also inform diversity efforts. Programs must ensure that use of USMLE cut scores, international medical graduate requirements, and other inclusion/exclusion criteria are fair, evidence-based, and appropriately used.

Selecting an inclusive interviewing team is also critical. Programs should consider strategically choosing individuals who will bring diverse outlooks and who are respectful of different cultures and characteristics to interview candidates. Have a clear and open conversation with team members before beginning the interview process to ensure that all faculty interviewers are on the same page with the goals and strategies of the interview process. In addition, efforts should be put in place to prepare interviewers with answers for questions diverse candidates may ask (protocols for maternity leave, etc).

Finally, faculty should be trained on the basics of conducting structured interviews, ensuring all questions are related to the position, asked similarly of all applicants, and that they are using rating tools in the same manner. Programs should also teach interviewers

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A.G. provides advice on selection methodology through SurgWise Consulting. For submission as a Letter to the Editor to *Annals of Surgery*.

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ISSN: 0003-4932/16/XXXX-0001

DOI: 10.1097/SLA.0000000000002496

TABLE 1. Recommendations for Modifying Current Selection Processes to Increase Diversity

1. Incorporate screening tools that level the playing field for all groups.
2. Reconsider the role of personal statements and letters of reference.
3. Become familiar with how your program is making initial screening decisions.
4. Select an inclusive interviewing team.
5. Incorporate structured interviews.

about common biases and interviewer mistakes, and equip them with skills to identify and overcome such biases.

Of course, diversity and inclusion efforts should not begin and end with hiring decisions. Organizations will have a difficult time retaining and benefitting from that diversity if individual and collective differences are not embraced throughout a surgeon's lifecycle. Thus, additional measures are necessary as well, such as broader recruitment efforts, enhancing the diversity of leadership, implementing mentoring programs, and other strategic endeavors to show that your program is a viable place to be for all individuals. Diversity is more than a moral imperative, it is a necessity. Selection systems can help achieve these aims by adopting processes that select in trainees by their achievements and potential, incorporate methods that are reliable and valid, and minimize barriers to applicants of different backgrounds.

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