

Building High-Performing Teams in Academic Surgery: The Opportunities and Challenges of Inclusive Recruitment Strategies

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Abstract

Problem

In academic surgery, women and physicians from ethnic minority groups remain inadequately represented relative to their representation in the U.S. population and among medical students and surgical trainees. Although several initiatives have been aimed at developing the academic surgery pipeline or addressing issues related to faculty retention and promotion, little is known about how recruitment practices impact diversity in academic medicine. Moreover, national standards and ideal practices specific for effective recruitment in surgery have not been established.

Approach

A working group at the Department of Surgery at the University of Michigan implemented an inclusive search and selection process for all open faculty positions within the department in academic year 2017–2018. The strategy included mandatory training, a standing recruitment committee with diverse membership, broad promotion of positions, implementing a modified “Rooney rule,” panel interviews of candidates, standardized interview protocols, a standardized evaluation tool and scoring system, and written evaluations/ranking of candidates.

Outcomes

Implementation of this recruitment strategy resulted in several immediate

measurable benefits including increased diversity of the applicant pools and of new faculty hires. In addition to these positive effects, the department noted several knowledge gaps and faced challenges to implementing all elements of the strategy.

Next Steps

The authors share their framework, highlighting opportunities and challenges that are broadly generalizable and relevant for building high-performing teams in academic medicine. Work to set measurable metrics and address challenges for inclusive recruitment in surgery is ongoing. Such evaluation and refinement are important for sustainability and increasing effectiveness.

Problem

When tasked with solving complex problems, the highest-performing teams are those that benefit from deep diversity spanning abilities, background, thought, and identities.¹ Extrapolating these observations to academic medicine indicates that a diverse faculty produces advantages beyond achieving social justice and compliance goals. A diverse faculty is best positioned to solve complex medical and health care delivery problems, reduce health disparities, and train the next generation of physicians.^{2,3}

In academic surgery, women and physicians from ethnic minority groups

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remain underrepresented compared with men and majority groups at all ranks and in leadership roles.^{2,4} Although several initiatives have aimed to develop the academic surgery pipeline or address issues related to faculty retention and promotion, little is known about how intentional recruitment practices influence diversity efforts. Moreover, national standards and best practices specific for effective recruitment in surgery have not been established.

On the basis of our experiences with recruitment in surgery and extrapolating from known barriers described in human resources and academic medicine literature, we highlight two major barriers to inclusive recruiting in surgery: (1) the role of implicit bias in evaluating numerous critical, but subjective attributes, and (2) reliance on small trusted networks for developing the applicant pool.

Implicit bias

Social stereotypes and implicit bias are barriers to objective recruitment of academic faculty. The Implicit

Association Test (IAT) has consistently illustrated unconscious biases and the tendency to make general associations or categorize social identity groups.⁵ Recruiters looking at the curricula vitae (CVs) of applicants for faculty positions and tenure are more likely to perceive men as having adequate research and teaching experiences compared with female applicants.⁶ Female applicants are also more likely to receive cautionary comments related to readiness for tenure.⁶ Investigators have demonstrated similar results in a study of race, finding that fictitious resumes of African American candidates were rated negatively while those of Asian American candidates were rated more positively.⁷ Women and members of groups traditionally underrepresented in medicine who work in surgical and procedure-based disciplines may be particularly at risk for not being recruited or advanced because of implicit bias since assessment of technical skill remains almost exclusively subjective and is subject to assessment bias.⁸ In the absence of objective measures, hiring departments may use the reputation of training

programs as a proxy. If top programs have not employed inclusive recruitment strategies, then talented women and underrepresented minority surgeons excelling at lower-ranked programs may be at a disadvantage when program reputation is heavily valued.

Use of small trusted networks

The practice of hiring from small trusted networks also constrains effective recruitment of diverse faculty.⁵ Traditional networks connect faculty with similar experiences and backgrounds, which may limit opportunities for women and candidates from underrepresented groups. Networks are especially important in subspecialty fields with small candidate pools. The reliance on internal or opportunistic hiring is also relevant in trusted networks where perceived “fit” is considered paramount. Although many institutional regulations are designed to prohibit discrimination associated with opportunistic hires, departments may obtain waivers by describing a highly specialized clinical niche that justifies hiring preferred candidates.⁹

Approach

With the goal of building and maintaining the highest-performing teams in academic surgery, a working group in the Department of Surgery at the University of Michigan (including L.A.D., M.W.M., and E.A.N.) established an innovative multifaceted strategy to recruiting for the department during the 2017 academic year (Table 1). The group implemented several processes—typically reserved for recruitment at the division chief or department chair level—across all ranks, incorporating many best practices identified by the University of Michigan Medical School’s Office of Health Equity and Inclusion and its Department of Human Resources. The department implemented the new recruitment procedures in July 2017 as an innovative component of the broad departmental strategic plan to build diverse teams in an inclusive environment. The vision of the new recruitment practices was to find new sources of talent previously overlooked or excluded while maintaining faculty excellence.

During the 2017–2018 academic year, the department followed the new process for

Table 1

Comparison of Traditional Hiring Process With a New Multifaceted Inclusive Recruitment Process

Component of the hiring process	Traditional hiring	Inclusive recruitment practices
Participants	Department leaders and prospective division partners	Department leaders; prospective division partners; and standing department-wide recruitment committee with diverse representation of specialty, rank, gender, and race
Position justification	Combination of needs-based and opportunistic hires	Primarily needs based; opportunistic hires are highly scrutinized
Advertisement	Limited advertisement meeting university-based compliance policy	Broad and intentional advertisements including through nontraditional venues and to organizations focused on physicians from groups traditionally underrepresented in medicine
Applicant pool	No formal criterion or minimum standards	Requirements for diverse candidate pools
Interview	Individual “get to know you” interviews	Combination of individual “get to know you” interviews and mandatory group interview with standardized, behavior-based questions
Hiring decision	Department leaders	Department leaders based on recommendation by the recruitment committee
Advantages	<ul style="list-style-type: none"> • Faster • Perceived lower risk 	<ul style="list-style-type: none"> • Reaches broad applicant pool • More rigorous and objective
Disadvantages	<ul style="list-style-type: none"> • Increased risk of implicit bias • Subjective decision making • Overreliance on networks • Lack of diverse candidates • Lack of coordination/transparency 	<ul style="list-style-type: none"> • Costly • Slower

each of seven open positions, including junior and midcareer positions and one division chief. The required training and establishment of the committee occurred in the early fall of 2017, while on-campus interviews and candidate evaluations occurred in the late fall and winter of 2017–2018.

Key components of the new recruitment strategy included mandatory training, a standing recruitment committee with diverse membership, broad promotion of open positions, implementation of a modified “Rooney rule,” panel interviews of candidates, the use of a standardized interview protocol, the incorporation of a standardized evaluation tool and scoring system, and written evaluations and ranking of candidates.

Mandatory training

The department mandated department-wide participation in implicit bias

training and offered additional ongoing educational activities to understand and implement best practices for recruiting diverse groups. All faculty, staff, and residents were required to participate in the University of Michigan’s faculty recruitment workshop: “Strategies and Tactics for Recruiting to Increase Diversity and Excellence” (STRIDE). This workshop provided background about practices that make searches more successful in attracting diverse candidates. To facilitate participation, the department presented the workshop multiple times in various venues including a departmental grand rounds. In addition to the STRIDE workshop, members of the department recruitment committee (see below), section heads, and the chair completed the IAT¹⁰ and the online seminar “What You Don’t Know: The Science of Unconscious Bias and What To Do About It in the Search and Recruitment Process” offered by the Association of American Medical Colleges.

Department recruitment committee

The working group helped to establish a standing department recruitment committee with representation by faculty members of diverse backgrounds, academic rank, and subspecialty. Notably, the committee did not include any section chief or the department chair. The department chair selected the committee members on the basis of nominations. At least 50% of the committee's 20 members (one a resident) represented diversity of gender, race, and ethnicity. The department recruitment committee's role was to review relevant documents; provide guidance during searches; and attest that all faculty job descriptions, postings, and selections for the candidate pool met best practice requirements.

Promotion of open positions

The working group and department recruitment committee advertised positions widely, including deliberately posting openings on the job sites of societies representing underrepresented groups. Specifically, each position was posted to at least four nontraditional career employment sources (e.g., the Association of Women Surgeons, the Society of Black Academic Surgeons, the National Hispanic Medical Association) to reach a diverse applicant pool. Midcareer positions were also shared on Twitter to engage possible candidates who were not actively job seeking.

Implementation of a modified "Rooney rule"

The "Rooney rule," named after Dan Rooney, longtime owner of the Pittsburgh Steelers, required National Football League teams to interview at least one ethnic minority candidate for all head coaching positions. Modifications of this rule at the University of Michigan Department of Surgery were mandatory inclusion of at least two qualified candidates representing diversity in the applicant pool for each position and inviting at least one of these candidates to participate in an on-campus interview.

A mandatory group interview by the department recruitment committee

The department recruitment committee conducted a 60- to 90-minute group interview for all candidates invited to campus during their initial visit. For each group interview, at least 10 members of the committee were present and

alternated asking questions. Whenever possible, the same committee member asked the same question of candidates to further standardize the process. At the conclusion of each interview, the committee discussed the candidate in detail and completed a standardized evaluation tool (see below).

Use of standardized, behavior-based questions tailored to academic rank and role

During interviews, department recruitment committee members asked standard, behavior-based questions of each candidate on topics related to clinical practice ("What is your approach to surgical complications?"); education ("How would you describe your style as a surgical educator?"); research ("What is your most important scientific contribution?"); leadership ("Give us an example of when you were able to take the lead in changing a policy or practice"); and diversity, equity, and inclusion ("What do you see as the fundamental characteristics of an inclusive environment?").

Use of a standardized candidate evaluation tool and scoring system

As mentioned, after each interview the department recruitment committee completed a standardized evaluation of each applicant. This tool included questions on the rater's considered views of the candidate's application materials (i.e., CV, personal statement, letters of recommendation, scholarship). The tool also required each committee member to rate each candidate on nine attributes using a six-point scale and to provide a summative evaluation of the candidate.

Written summative evaluations and candidate rankings

At the conclusion of all on-campus interviews for a given position, the department recruitment committee provided the section chiefs and department chair with narrative summary evaluations of each candidate, as well as a ranking of all candidates. For all but one position, for which two candidates were rated equally, the committee provided a definitive rank order.

In addition to the eight specific processes implemented to improve diverse representation described above, the department recruitment committee has

assessed the overall strategy by soliciting qualitative comments from all candidates, hires, and committee participants.

Outcomes

Implementation of this strategy resulted in several immediate measurable benefits including increased diversity of the applicants and hires. Women constituted 55% of the recruits and 50% of the hires, while underrepresented minorities represented 15% of the recruits and 33% of the hires. (One of the seven positions was not filled and remains open.)

According to the interviews, participants viewed the experience as positive. Several recruits expressed the belief that the committee and the process itself signaled the department's commitment to creating an inclusive environment. Committee participants felt the experience had a positive impact on recruitment and hiring, and they highlighted areas in which best practice is simply unknown. The use of behavior-based questions often elicited deep and thoughtful answers from the candidates covering a broad series of topics and value areas. The section chiefs and department chair considered the use of standardized evaluation criteria, written summative evaluations, and candidate rankings accurate and thorough. In all cases, offers have aligned with the rankings of the committee.

In addition to these positive effects, the committee members uncovered several knowledge gaps and encountered challenges to implementing the strategies. Given the goal of 10 committee members participating in each group interview, arranging candidate interview dates was difficult. To mitigate this challenge, recruits from different divisions were hosted on the same day, but this accommodation required a hiring section or division to coordinate hosting dates with the committee. In the inaugural year, this process was not as timely as usual practice and could have led to potential delays in hiring highly sought-after candidates. Although some delays could be partially avoided by deciding on hosting dates well in advance, when positions open midyear, flexibility by all parties is required. Another concern is the possibility that serving on the committee could be viewed as a "minority tax" for women and minorities

from underrepresented groups. Involving committee participants with an academic interest in diversity, equity, and inclusion so that committee participation is synergistic with their overall academic goals might help mitigate this concern.

Next Steps

The department recruitment committee members observed several knowledge gaps related to objective evaluation of academic surgery faculty candidates, and these gaps are the focus of ongoing scientific inquiry. First, the committee considered clinical skill paramount, but this domain is not represented on the CVs that candidates provided to the committee. The reputation of the training programs served as the primary proxy for skill, though committee members acknowledged the potential flaws in this approach. Internal candidates had an advantage in this domain because the committee was familiar with their clinical abilities.

Second, even in nonclinical domains, members struggled to objectively weigh candidates' achievements. For example, although teaching awards were considered to indicate excellence in education, discerning the prestige of the various institutional awards was difficult and subjective. Similarly, comparing research achievements between basic/translational and health services/outcomes scientists was also complex without a standard measure of excellence.

Third, although candidates generally reported that their experience of the recruitment process was favorable,

some viewed the group interview as intimidating. A few candidates were visibly nervous, though nearly all applicants expressed that their actual experience was less intimidating than they first feared. Training for interviewers on how to evaluate the nervous or introverted candidate can mitigate this limitation of the group format. In the current academic year, the committee has provided candidates with an introduction letter before their visit that describes the purpose of the committee, the names and photos of its members, the format of the interview, and the topic areas to be covered.

Work to set measurable metrics and to address these challenges is ongoing. Such evaluation and refinement are important for sustainability and increasing effectiveness. This recruitment strategy is expected to intentionally eliminate underrepresentation over the next 10 years and prepare the Department of Surgery at the University of Michigan for the changing culture of the next generation of surgeons. Hiring of surgeons based not only on their accomplishments, but also on their unique potential to increase the diversity of the teams that they will join is a new way of approaching faculty recruitment. Inclusive recruitment processes provide opportunities to develop and evaluate practices that will have broad applicability and advance a diverse workforce in academic medicine.

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