

Developing Equitable Selection Processes

Improving Selection Processes through Holistic Review

Here are a few key resources on the topic of holistic review.

- Conrad, S. S., Addams, A. N. & Young, G. H. Holistic Review in Medical School Admissions and Selection. Acad Med 91, 1472–1474 (2016).
- Link to the AAMC webpage on holistic review, which has worksheets that programs can use to determine what criteria are important to them and the best way to measure those criteria in an unbiased way: <https://www.aamc.org/services/member-capacity-building/holistic-review>

Recommendations for Improving Selection Processes

The table below summarizes evidence-based recommendations for decreasing bias and increasing diversity in selection processes.

Recommendation	Rationale
Select Metrics	
Create a diverse committee	A diverse committee is more likely to identify where bias may exist in the current selection process.
Include broad, relevant criteria	Including a broad range of relevant and important experiences, competencies, attributes, and metrics that match the mission of your program will help ensure that candidate selection matches desired characteristics.
Define criteria & measurements	Clearly defining each criterion and how it will be measured ahead of time limits the ability of bias to influence decisions.
Only share relevant information	Information that is irrelevant to the decision may bias committee members or interviews. Photos, for example, have been shown to lead to bias. Therefore, carefully consider what information needs to be shared with those participating in decision-making processes.
Manage Interpersonal Interactions	
Involve diverse interviewers	Including a diverse group of interviewers helps mitigate the impact of individual bias as everyone will have different biases.
Standardize interviews	Creating a standardized interview process, including the questions and the rating process, limits the impact of bias.
Increase awareness of bias	Increasing individuals' awareness of their biases through workshops, the implicit association test, and other discussions allows individuals to consciously overcome their bias.
Assess bias before decisions	Teaching individuals to examine how their bias may be impacting them before they make decisions helps them consciously account for potential bias.

Confronting the Myth of Meritocracy

Here are key articles addressing the broad topic of meritocracy within medical education.

- Razack, S., Risør, T., Hodges, B. & Steinert, Y. Beyond the cultural myth of medical meritocracy. *Med Educ* 54, 46–53 (2020).
- Lucey, C. R., Hauer, K. E., Boatright, D. & Fernandez, A. Medical Education's Wicked Problem: Achieving Equity in Assessment for Medical Learners. *Acad Med* 95, S98–S108 (2020).

Validity & Reliability of Selection Metrics

The references below summarize the best available evidence on the validity and reliability of commonly used selection metrics for medical school, residency, and fellowship selection.

- Kenny, S., McInnes, M. & Singh, V. Associations between residency selection strategies and doctor performance: a meta-analysis. *Med Educ* 47, 790–800 (2013).
- Patterson, F. *et al.* How effective are selection methods in medical education? A systematic review. *Med Educ* 50, 36–60 (2016).
- Roberts, C. *et al.* Utility of selection methods for specialist medical training: A BEME (best evidence medical education) systematic review: BEME guide no. 45. *Med Teach* 40, 1–17 (2017).

Case Studies

Here is a collection of articles demonstrating how single institutions changed their selection process to increase diversity. I welcome additional suggestions.

Faculty

- Harris, T. B. *et al.* Advancing Holistic Review for Faculty Recruitment and Advancement. *Acad Med* 93, 1658–1662 (2018).
- Dossett, L. A., Mulholland, M. W., Newman, E. A. & Research, M. P. W. G. for F. L. Building High-Performing Teams in Academic Surgery. *Acad Med* **Publish Ahead of Print**, NA; (2019).

Fellowship

- Rymer, J. A. *et al.* Evaluation of Women and Underrepresented Racial and Ethnic Group Representation in a General Cardiology Fellowship After a Systematic Recruitment Initiative. *Jama Netw Open* 4, e2030832 (2021).
- Auseon, A. J., Jr, A. J. K. & Capers, Q. Successful Efforts to Increase Diversity in a Cardiology Fellowship Training Program. *J Graduate Medical Educ* 5, 481–485 (2013).

Residency

- Marbin, J. *et al.* Improving Diversity in Pediatric Residency Selection: Using an Equity Framework to Implement Holistic Review. *J Graduate Medical Educ* 2, 195–200 (2021).
- Bandiera, G. *et al.* Identifying and Promoting Best Practices in Residency Application and Selection in a Complex Academic Health Network. *Acad Med* 90, 1594–1601 (2015).
- Aibana, O., Swails, J. L., Flores, R. J. & Love, L. Bridging the Gap: Holistic Review to Increase Diversity in Graduate Medical Education. *Acad Med* 94, 1137–1141 (2019).

Medical School

- Capers, Q., Clinchot, D., McDougale, L. & Greenwald, A. G. Implicit Racial Bias in Medical School Admissions. *Acad Med* 92, 365–369 (2017).

Awards

- Teherani, A., Harleman, E., Hauer, K. E. & Lucey, C. Toward Creating Equity in Awards Received During Medical School: Strategic Changes at One Institution. *Acad Med* 95, 724–729 (2020).

Handout for the presentation “The Myth of Meritocracy: How our selection processes perpetuate inequity & steps we can take to rectify it” by Jennifer Spicer, MD, MPH; Email: Jennifer.Spicer@emory.edu