Recommendations for Improvement of Equity, Diversity, and Inclusion (EDI) in the CARMs Selection Process

Contributing Authors

Jana Taylor, Alanna Supersad, Elka Miller, Kiana Lebel, Joanne Zabihaylo, Phyllis Glanc, Andrea S. Doria, Paula Cashin, Tracey Hillier, Charlotte Yong-Hing

Equity, Diversity, and Inclusion Committees:

Oversight Committee
Encouraging Radiology Application Committee
Bias in Recruitment, Hiring, Promotion, Award Committee

Recommended Timeline for Implementation

Recognizing that improving EDI in the CARMs selection process is meant to be an ongoing process, there is no set timeline for implementation of these guidelines. A suggested approach instead is that the selection committee each year should take time before the CARMs file review begins to evaluate their process through the lens of EDI and implement changes where feasible on an ongoing basis. Similarly, at the end of each CARMs cycle, setting time aside to reflect on the process and what could be improved upon in the following year is recommended. Following approval by the CAR board in January of 2022, the document will be presented to the national program directors with the intent that programs will make a start to implement changes for the 2022 CARMs cycle.

In the last decade, many studies have shown that diversity in the workplace strengthens the profession and helps meet the needs of a diverse population. However, radiology has been identified as one of the medical specialties with the least gender and ethnic diversity. In 2019, women represented only 32% of Canadian radiologists despite representing 63% of current medical graduates. As of 2021, racial diversity data in Canadian radiology practice and CaRMS application is still lacking. According to multiple American studies, radiology is considered one of the least diverse fields of medicine with regards to the presence of visible minorities. Many residency training programs are now implementing diversity plans in their selection committees with the goal to promote a more equitable selection process.

To improve and promote equity, diversity and inclusion in the residency selection process, the CAR EDI committee recommends the following actions for all Canadian residency selection committees. These are not to be considered requirements, but rather as best practice guidelines. Realizing that each program has its unique structure and process in selecting appropriate applicants for their training programs, programs may choose to implement some or all these recommendations.

Each selection committee should also adhere to their own institutional and/or departmental commitments and procedures around EDI principles in their processes.

1. Implicit Bias Training for All Members of the Selection Committee

Unconscious or implicit bias is defined as inherent attitudes or stereotypes that affect our understanding, actions, and decisions toward a particular ethnicity, gender, or social group in an unconscious manner. These biases can be positive or negative. It is important to distinguish implicit or unconscious bias from conscious beliefs that certain demographic groups are inferior or less deserving of opportunities; these are examples of explicit, not implicit biases, such as racism, sexism, and homophobia.

It has been shown that physicians have the same level of implicit biases as laypersons. In the setting of a residency selection committee, a committee member may unknowingly hold negative or positive implicit biases about a potential candidate and these biases can influence decision making on the rank order of the candidate.

Implicit biases can be consciously overridden when there is a conscious mandate to do so, and there are several recommendations that the selection committee can implement to raise people's awareness of their unconscious biases and provide tools to adjust automatic patterns of thinking, with the goal of mitigating or eliminating discriminatory behaviors.

As an initial step, all selection committee members should complete a form of unconscious bias training.

Two easy to access and useful resources are Harvard's Implicit Association Test (IAT) which is useful to drive an understanding about intrinsic bias, and the free online seminar offered by The Association of American Medical Colleges (AAMC) which is a free resource. The specific AAMC seminar is titled *The Science of Unconscious Bias and What To Do About it in the Search and Recruitment Process* and provides useful information regarding unconscious bias for search committees in academic medicine.

Individual completion of training alone does not guarantee that equity will be applied as a guiding principle throughout the selection processes. A crucial next step is for the selection committee to meet as a group and discuss and reflect on implicit bias and its impact on the selection process. Where resources permit, an interactive implicit bias mitigation workshop moderated by a trained facilitator is recommended.

A final recommendation is to hold a debrief session of the selection committee following the completion of the selection process to reflect on the process and consider areas for improvement for the following year.

It is important that implicit bias awareness and mitigation training be ongoing and a part of the annual process for members of the selection committees rather than a "one-off" event.

2. Standardizing Application Metrics

A recommendation for consideration is to set a baseline threshold for academic evaluation, including situational judgment tests such as the CASPer test, for candidates to be selected for an interview. Once candidates above a specified threshold have been selected for interview, committee members will then be blinded to academic metrics.

Another recommendation is to standardize each application using numerical values for each parameter with set objective criteria. The use of a standardized rubric and scoring system for evaluation of application criteria such as letters of reference, research productivity, extracurricular activities, etc. is recommended for use by the selection committee to minimize potential personal biases of members of the committee.

3. The Use of Situational Judgement Tests in the Application Process

The use of situational judgment tests (SJT), such as the CASPer test, in the admissions process has been shown in some studies to have the potential to widen access to medical education for underrepresented medical groups. SJTs are constructed to test non-academic competencies such as communication, collaboration, and empathy.

Although SJTs were implemented with the intent to provide additional relevant data beyond academic evaluations, there have been concerns raised that some students from a more advantaged socioeconomic status may have access to additional coaching or preparatory material which may influence their CASPer scores.

Many programs find the CASPer test to provide useful objective data in the assessment of potential candidates. However, selection committees should be aware of the potential of some students having access to resources that would allow them to obtain a higher CASPer score than others that do not have the same opportunities. Cultural differences may also impact a candidate's CASPer score which should be taken into consideration.

4. Structured and Standardized Interviews

While the interview is a key component in the assessment of candidates, interviews, especially those that are unstructured, can result in bias by the members of the committee. The ability of a committee to objectively evaluate an applicant over the course of a few minutes, is limited under the best of circumstances.

To provide the most objective assessment possible in the interview setting, the following recommendations are provided:

The use of rating scales to evaluate an applicant's responses improves reliability, validity, and fairness of interview scores and increases an interviewers' ability to compare applicants who have been evaluated using a common scale. More detailed information on how to create rating

scales for the interview can be found in Best Practices for Conducting Residency Program Interviews, published by the Association of American Medical Colleges.

5. Standardizing the Virtual Interview Environment

Virtual interviews require the residency selection programs to be invited into the personal spaces of applicants. To combat a source of potential bias, it is suggested that committees provide recommendations for standardized backgrounds like a neutral-colored wall that is devoid of belongings. Standardizing the virtual interview environment is a straightforward process that may limit unintended bias on applicants.

6. Diversification of the Selection Committee

Where possible, the selection committee should try to ensure it is composed of members representative of a variety of backgrounds, which may require intentional restructuring of the committee. A more diverse committee will mitigate individual implicit biases and provide multiple perspectives in the selection process. At least one or more members of the committee should have experience or training in advancing EDI in medicine.

7. Use of Self-Identifying Diversity Data

Candidates are currently offered the option to self-identify in several areas related to EDI in their CaRMS application. Selection committees have the option of requesting access to this information through CaRMS and may find it a useful tool to ensure a diverse group of applications are selected for interviews.

References

Implicit Racial/Ethnic Bias Among Health Care Professionals and Its Influence on Health Care Outcomes: A Systematic Review. Am J Public Health. 2015 December; 105(12): e60–e76

Mitigating Bias in the Era of Virtual Residency and Fellowship Interviews. J Grad Med Educ (2020) 12 (6): 674–677

How Clinicians and Educators Can Mitigate Implicit Bias in Patient Care and Candidate Selection in Medical Education. ATS Scholar Vol 1, Iss 3, pp 211–217, 2020

Linear Modeling to Reduce Bias in Plastic Surgery Residency Selection Plastic and Reconstructive Surgery. March 2021 - Volume 147 - Issue 3 - p 538-544

Addressing the Diversity–Validity Dilemma Using Situational Judgment Tests. Academic Medicine. August 2019 - Volume 94 - Issue 8 - p 1197-1203

Matching Our Mission: A Strategic Plan to Create a Diverse Family Medicine Residency. Fam Med. 2019;51(1):31-36.

Improving Diversity in Pediatric Residency Selection: Using an Equity Framework to Implement Holistic Review. J Grad Med Educ (2021) 13 (2): 195–200.

Resources

Harvard Implicit Association Test

Take a Test (harvard.edu)
https://implicit.harvard.edu/implicit/takeatest.html

The Science of Unconscious Bias and What To Do About It in the Search and Recruitment Process. Association of American Medical Colleges Washington, D.C.

Unconscious Bias Resources for Health Professionals | AAMC
https://www.aamc.org/what-we-do/equity-diversity-inclusion/unconscious-bias-training

Best Practices for Conducting Residency Program Interviews. Association of American Medical Colleges Washington, D.C.

download (aamc.org)
https://www.aamc.org/media/44746/download