



# Call to action: equity, diversity, and inclusion in emergency medicine resident physician selection

Robert Primavesi<sup>1</sup> · Catherine Patocka<sup>2</sup> · Adam Burcheri<sup>3</sup> · Alexandre Coutin<sup>4</sup> · Alexandre Morizio Elhalwi<sup>1</sup> · Amir Ali<sup>5</sup> · Anjali Pandya<sup>2</sup> · Austin Gagne<sup>1</sup> · Bobby Johnston<sup>2</sup> · Brent Thoma<sup>6</sup> · Constance LeBlanc<sup>7</sup> · Frédéric Fovet<sup>8</sup> · John Gallinger<sup>9</sup> · Juan Mohadeb<sup>10</sup> · Mirna Ragheb<sup>10</sup> · Sandy Dong<sup>11</sup> · Sheila Smith<sup>6</sup> · Taofiq Oyedokun<sup>6</sup> · Tate Newmarch<sup>5</sup> · Vanessa Knight<sup>1</sup> · Tamara McColl<sup>10</sup>

Received: 13 May 2023 / Accepted: 17 May 2023

© The Author(s), under exclusive licence to Canadian Association of Emergency Physicians (CAEP)/ Association Canadienne de Médecine d'Urgence (ACMU) 2023

## Abstract

**Objectives** This call to action seeks to improve emergency care in Canada for equity-deserving communities, enabled by equitable representation among emergency physicians nationally. Specifically, this work describes current resident selection processes and makes recommendations to enhance the equity, diversity, and inclusion (EDI) of resident physician selection in Canadian emergency medicine (EM) residency programs.

**Methods** A diverse panel of EM residency program directors, attending and resident physicians, medical students, and community representatives met monthly from September 2021 to May 2022 via videoconference to coordinate a scoping literature review, two surveys, and structured interviews. This work informed the development of recommendations for incorporating EDI into Canadian EM resident physician selection. At the 2022 Canadian Association of Emergency Physicians (CAEP) Academic Symposium, these recommendations were presented to symposium attendees composed of national EM community leaders, members, and learners. Attendees were divided into small working groups to discuss the recommendations and address three conversation-facilitating questions.

**Results** Symposium feedback informed a final set of eight recommendations to promote EDI practices during the resident selection process that address recruitment, retention, mitigating inequities and biases, and education. Each recommendation is accompanied by specific, actionable sub-items to guide programs toward a more equitable selection process. The small working groups also described perceived barriers to the implementation of these recommendations and outlined strategies for success that are incorporated into the recommendations.

**Conclusion** We call on Canadian EM training programs to implement these eight recommendations to strengthen EDI practices in EM resident physician selection and, in doing so, help to improve the care that patients from equity-deserving groups receive in Canada's emergency departments (EDs).

**Keywords** Emergency medicine · Resident selection · Application · Interview · Equity · Diversity · Inclusion · Justice

---

Robert Primavesi and Catherine Patocka contributed equally.

✉ Robert Primavesi  
robert.primavesi@mcgill.ca

<sup>1</sup> Montreal General Hospital, McGill University, Montreal, QC, Canada

<sup>2</sup> University of Calgary, Calgary, AB, Canada

<sup>3</sup> Concordia University, Montreal, QC, Canada

<sup>4</sup> University of Ottawa, Ottawa, ON, Canada

<sup>5</sup> University of Toronto, Toronto, ON, Canada

<sup>6</sup> University of Saskatchewan, Saskatoon, SK, Canada

<sup>7</sup> Dalhousie University, Halifax, NS, Canada

<sup>8</sup> Thompson Rivers University, Kamloops, BC, Canada

<sup>9</sup> Canadian Resident Matching Service (CaRMS), Ottawa, ON, Canada

<sup>10</sup> University of Manitoba, Winnipeg, MB, Canada

<sup>11</sup> University of Alberta, Edmonton, AB, Canada



## Abstrait

**Objectifs** Cet appel à l'action vise à améliorer les soins d'urgence au Canada pour les collectivités méritant l'équité, grâce à une représentation équitable parmi les médecins d'urgence à l'échelle nationale. Plus précisément, ce travail décrit les processus actuels de sélection des médecins résidents et formule des recommandations pour améliorer l'équité, la diversité et l'inclusion (EDI) de la sélection des médecins résidents dans les programmes de résidence en médecine d'urgence (SE) du Canada.

**Méthodes** Un groupe diversifié de directeurs du programme de résidence en GU, de médecins résidents, d'étudiants en médecine et de représentants communautaires se sont réunis mensuellement de septembre 2021 à mai 2022 par vidéoconférence pour coordonner une analyse documentaire, deux sondages et des entrevues structurées. Ces travaux ont orienté l'élaboration de recommandations pour l'intégration de l'IDE dans la sélection des médecins résidents en SE au Canada. À l'occasion du Symposium universitaire 2022 de l'Association canadienne des médecins d'urgence (ACMU), ces recommandations ont été présentées aux participants au symposium composé de dirigeants, de membres et d'apprenants de la communauté nationale de la GU. Les participants ont été divisés en petits groupes de travail pour discuter des recommandations et aborder trois questions facilitant la conversation.

**Résultats** Les commentaires recueillis lors du symposium ont servi à formuler une dernière série de huit recommandations visant à promouvoir les pratiques de l'IDE au cours du processus de sélection des résidents qui traitent du recrutement, du maintien en poste, de l'atténuation des inégalités et des préjugés, et de l'éducation. Chaque recommandation est accompagnée de sous-éléments précis et réalisables pour orienter les programmes vers un processus de sélection plus équitable. Les petits groupes de travail ont également décrit les obstacles perçus à la mise en œuvre de ces recommandations et décrit les stratégies de réussite qui sont intégrées aux recommandations.

**Conclusion** Nous demandons aux programmes canadiens de formation en GU de mettre en œuvre ces huit recommandations afin de renforcer les pratiques d'IDE dans la sélection des médecins résidents en GU et, ce faisant, d'aider à améliorer les soins que les patients des groupes méritant l'équité reçoivent dans les services d'urgence du Canada.

**Mots clés** Médecine d'urgence · Sélection des résidents · Demande · Entrevue · Équité · Diversité · Inclusion · Justice

## Introduction

Emergency medicine (EM) is a unique specialty that never turns a patient away. Consequently, the emergency department (ED) is often the only accessible location of care for many underserved and vulnerable patient populations [1]. Members of equity-deserving groups<sup>1</sup> are disproportionately represented in underserved populations [1]. Patients who receive care from providers with a similar background have better outcomes [2]. Therefore, it is imperative to address EM's leaky pipeline<sup>2</sup>.

Although residency selection is poorly described [3], the process is generally thought to be merit based, wherein applicants are awarded positions based on an assessment of their abilities and the strength of their application. In recent years, the validity of how we establish merit has been

questioned, with many suggesting that it is value-laden and under-scrutinized [4]. Admissions teams often award candidates for easy-to-measure items like research productivity, scholarship, and awards while ignoring other evidence of measurable effort, hard work, and demonstration of good character [5]. Critics have called for stakeholders to adopt a definition of merit that places importance on a diverse physician workforce and incorporates the concept of distance traveled<sup>3</sup> [4], and more transparent selection processes. [5]

There is also evidence that residency selection practices substantially contribute to the lack of equitable representation in the medical workforce [3, 6]. Implicit and explicit biases are barriers to an equitable interview and selection process [5]. Many residency programs and EM practice groups continue to include "group fit"<sup>4</sup> as an element of the interview process. "Group fit", thought to be important for organizational effectiveness, must be balanced with the

<sup>1</sup> Equity-deserving groups are communities that experience significant collective barriers in participating in society. This could include attitudinal, historic, social, and environmental barriers based on age, ethnicity, disability, economic status, gender, nationality, race, sexual orientation, and transgender status.

<sup>2</sup> Leaky pipeline is the phrase commonly used to describe the progressive loss of capable individuals from academic careers in medicine.

<sup>3</sup> Distance traveled refers to where someone started to where they finish, overcoming a lack of resources, family structure or support, and discrimination of any kind, that is more likely to be a better predictor of lifetime/career success than absolute achievement.

<sup>4</sup> Group fit is the compatibility between individuals and their workgroups.

needs of their patient groups. A shift in identity and culture is requisite to include and retain members of equity-deserving groups in the trainee pipeline [7]. To address this challenge, equity, diversity, and inclusion<sup>5</sup> (EDI) practices must be considered in the recruitment, selection, and retention of EM residents.

This article highlights eight recommendations for EDI practices in each of these aspects of residency selection. A list of definitions for terms used in this article are listed as footnotes 1 to 7.

## Methods

### Formation of the research panel

EDI principles, in particular the principle of “nothing about us without us” was carefully considered when forming our panel. Age, race, gender, disability, sexual orientation, experience, EM training program, and key residency selection stakeholders were all considered when selecting members of our panel.

### Literature review

A scoping literature review, in accordance with PRISMA-ScR guidelines, was undertaken to inform the recommendations generated by this research panel. A literature search was performed in MEDLINE, EMBASE, and Web of Science databases on December 1st, 2021, with the assistance of a research librarian. Search terms included cultural diversity, EDI, gender equity, homophobia, prejudice, racism, sexism, discrimination, xenophobia, Indigenous peoples, minority groups, education, residency, admission criteria. The search yielded 5241 citations, which were imported to Covidence systematic review software (Veritas Health Innovation, Melbourne, Australia. Available at [www.covidence.org](http://www.covidence.org)). Structured inclusion and exclusion criteria were established prior to screening. Two panel members screened title, abstract, and full-text eligibility. A total of 522 articles were included in the scoping review. Preliminary data from 271 articles that were fully extracted, were analyzed thematically, organized into a document as themes with supportive elements and formulated as preliminary recommendations. The search strategy is summarized in Fig. 1.

<sup>5</sup> Equity, diversity, and inclusion is a term used to describe policies and programs that promote the representation and participation of different groups of individuals, including people of different ages, races and ethnicities, abilities and disabilities, genders, religions, cultures, and sexual orientations.

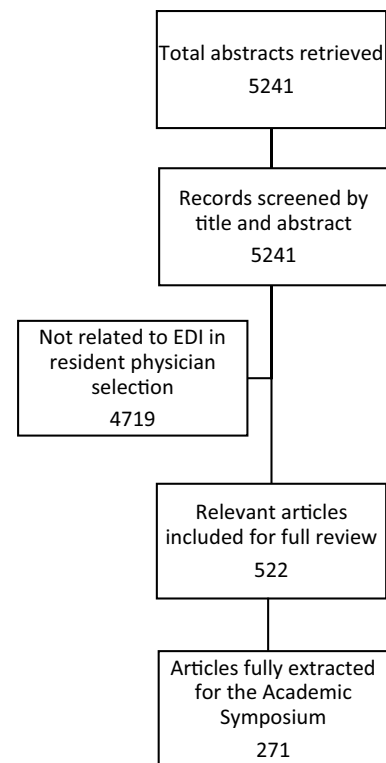


Fig. 1 Scoping review process

### Program director and resident surveys

Two anonymous surveys were created for distribution between December 2021 and March 2022 to all Canadian EM program directors (PDs) and a convenience sample of EM residents selected in the CaRMS 2021 cycle for the start of the 2022 academic year (PGY-3 College of Family Physicians of Canada (CFPC) residents matched in fall 2020, PGY-1 Royal College of Physicians and Surgeons of Canada (RCPSC) residents matched in winter 2021). Survey questions were informed by the diversity and input from all panel members (Appendix A and B). Final survey questions were uploaded to Microsoft Forms™ (Microsoft Corporation, Redmond, WA, USA).

All CFPC-EM PDs and RCPSC were sent a pre-notification email 2 weeks before the survey was administered. Using the modified Dillman method, all PDs received an email invitation with a link to participate, followed by two reminder emails at 3-week intervals. PDs were asked to distribute the resident survey to their CFPC-EM PGY-3 and RCPSC PGY-1 residents.

The goal of these surveys was to understand how, and to what extent, principles of EDI are currently considered in Canadian EM residency recruitment and selection as perceived by PDs and residents. Questions in the PD survey addressed resident demographics, status of diversity in their

program, overall EDI policies and procedures, candidate recruitment, composition of the selection committee, selection process, interviews, and applicant ranking. Questions in the resident survey addressed similar themes and included personal experiences and accommodation for persons with disabilities. Demographic data were separated from the survey to ensure anonymity. Overall, 46 residents and 20 of 34 PDs completed the survey.

### Semi-structured interviews

Using themes from the literature search and data from the surveys, each panel member was asked to provide three questions for PDs to fill in gaps of information. Responses were grouped by theme: status of diversity in the program, EDI policies and procedures, recruitment, selection committee, selection process, candidate ranking. From these themes, ten questions were extracted and used for the PD structured interviews. Four panel members performed eight 30-min interviews split equally across RCPSC-EM and CFPC-EM PDs, at which point we felt that sufficient information was obtained to enable transferability of findings across the Canadian EM landscape. Interviews were conducted and transcribed by Zoom (Zoom Video Communications, San Jose, CA, USA). Four different panel members conducted a thematic analysis of the transcripts. The raw data were distilled into nine themes: absence of data quantifying the EDI gap, EDI in the CaRMS process, EDI gaps in programs, improving EDI in the selection process, overcoming barriers to application in EM, self-disclosure of candidates from equity-deserving groups, “social fit”, the CaRMS match process, meritocracy.

### Recommendation development

Panel members considered the information from the surveys and the themes identified in both the literature review and structured interviews to identify three high-yield recommendations that should be addressed in the next 5 years. These were organized and consolidated into eight recommendations. All panel members were allowed to refine the recommendations prior to presentation at the 2022 CAEP Academic Symposium.

### Soliciting feedback on recommendations

Prior to the Academic Symposium, the recommendations were sent to all pre-registered attendees along with a survey. The goal of the survey was to determine which recommendations needed amendment or clarification so that most time would be spent on the most controversial recommendations. Attendees were asked to rank each recommendation as “no

discussion necessary,” “minor discussion necessary,” or “we should discuss.”

At the Academic Symposium in Quebec City on May 25, 2022, attendees were divided into 6 small working groups of 11–12 participants. Each small group was given one recommendation to discuss. Five of the eight recommendations were discussed, with two groups addressing recommendation #4 (biases). In each group, one panel member facilitated the discussion, and one attendee reported back to the large group. To structure the discussion, each small group was given three conversation-facilitating questions asking if the recommendation needed clarification or edits, if they could identify any barriers to its implementation, and if they could identify a metric to quantify the recommendation’s successful implementation.

One of the panel members (AB) recorded the large group reporting session, collected each group’s worksheet, and further refined the recommendations. This document was sent out to the panel for a last edit. The finalized Academic Symposium recommendations are presented in Table 1.

### Summary of recommendations, barriers, and strategies for success

#### Overall process

**Recommendation 1:** Define and track EDI-related outcomes within each program.

While some residency programs have implemented EDI practices for an equitable resident selection process, data are rarely collected at every step. Using historical and ongoing data with evidence-based measures of success [8], progress in EDI-related outcomes can be quantified. Quantifying EDI-related outcomes safely and transparently will allow formal evaluation of trends at specific checkpoints on a pre-determined timeline and allow for targeted mitigation strategies at all parts of the pipeline. See Table 1 for metrics. This recommendation allows for a clear and structured trajectory of EDI goals moving forward.

#### Pre-application process

**Recommendation 2:** Use specific, actionable, targeted, and measurable methods to recruit equity-deserving students into EM.

Under-represented minority<sup>6</sup> (URM) and non-URM medical students consider markedly different factors when applying to residency programs across all specialties [9]. Specifically, female and URM medical students were less likely

<sup>6</sup> Under-represented minority is a group whose percentage of the population is lower than their percentage of the population in the country.

**Table 1** Recommendations with action items**Overall process**

Define and track EDI-related outcomes within each program

- Quantify representation of applicants from equity-deserving communities to EM programs across the continuum of the Canadian Resident Matching Service (CaRMS) process, candidates invited to interview, ranked candidates, and matched candidates, on a historical and ongoing basis, in a safe and transparent manner
- Aim to recruit and retain a resident population that matches the diversity of the medical student population and the overall CaRMS applicant pool
- Place deliberate and mindful emphasis on matching trainees within EM from historically underrepresented groups
- Set a dedicated timeline to define and track these outcomes, i.e., 5 years, and create checkpoints throughout this timeline to reflect on progress

**Pre-application process**

Use specific, actionable, targeted, and measurable methods to recruit equity-deserving students into EM

- Promote an EDI-centered practice so that medical students observe, reflect, and embrace EDI principles as part of a common EM culture
- Create mentoring and outreach programs for medical students to diversify the resident body. Include remuneration for involved emergency physicians who are members of equity-deserving groups to avoid the “minority tax.” Minority tax is defined as the burden of time and resources placed on minority persons to represent and advocate for their communities
- Highlight the importance of diversity and inclusion for programs that are already racially/ethnically diverse by consensually posting the photos and biographies of residents and faculty members. Incorporating biographical information offers the opportunity for residents to share their interests in EDI as well as community health
- Invite applicants to specify their personal pronouns during CaRMS interviews, and how they should be addressed by program members, including a phonetic pronunciation of their name
- Mitigate applicants’ fear of self-disclosure by inquiring about applicants’ needs for accommodations to help them succeed in the program. Self-disclosure must be done safely and transparently and must meet the needs of candidates as well as those of the program. Emphasis should be placed on EDI targets and not quotas to ease reluctance
- Retain the interest of students from equity-deserving groups throughout the application process, invitation to interview, and CaRMS ranking, to minimize attrition at each step

Include a value statement on EDI within each program’s Canadian Resident Matching Service (CaRMS) profile

- Explicitly address the impact of systemic oppression resulting from racism, sexism, heterosexism, transphobia, ableism, and ageism on applicants from equity-deserving groups, as well as the intersectionality thereof. Include measures taken to curtail their adverse impact on the selection process
- Provide avenues of support for applicants enduring discrimination that remain independent of the processes by which their applications are evaluated

**Application/interview review**

Identify and mitigate conscious and unconscious biases

- Ensure that CaRMS file reviewers, interviewers, and selection committee members represent a diversity of social identities that resemble the communities that their institution serves. Factors that make up social identity include age, differences in ability, racialization, ethnicity, indigeneity, religious affiliation, gender identity and expression, sex recorded at birth, sexual and romantic orientation, and socioeconomic status
- Require anti-bias training for all CaRMS file reviewers, interviewers, and selection committee members
- Use structured, standard interview questions that are culturally informed and behaviorally based with accompanying narrative anchors
  - Culturally informed assessments* account for differences in students’ cultural identities by being flexible and adaptive enough to allow students the opportunity to bring their own cultural references and fluencies into demonstrations of achievement
  - Behavior-based interviewing* allows candidates the opportunity to demonstrate their potential for succeeding by providing specific examples of how they handled similar situations based on their past experiences
  - Narrative evaluation* is a descriptive form of performance measurement that can be used as an alternative or supplement to numerical grading
- Establish selection criteria and processes that counteract discriminatory biases, including avoidance of ‘group fit’ that selects for similarities rather than differences
- Elicit and provide reasonable accommodations for the needs of applicants with different abilities
- Make the selection process transparent to candidates, residents, and faculty members

Enhance equity as an essential strategy to redefine meritocracy

- Utilize a holistic file review that extends evaluative criteria and de-emphasizes standardized examination scores and other traditional metrics
- Implement a national assessment rubric that rewards lived experience (e.g., community engagement) and recognizes the value of “distance travelled” (i.e., barriers overcome) while fostering comfort and safety in disclosure. This rubric should be developed with appropriate representation from equity-deserving groups

**Table 1** (continued)**Feedback**

Facilitate feedback

- Conduct post-interview surveys to track applicants' perceptions of the program's inclusivity. Survey participation should be offered to all interviewees, be optional, and be done without risk for repercussion
- Allow and encourage applicants to submit anonymous feedback regarding methods for better inclusion of equity-deserving applicants

**Residency education**

Develop a resident EDI curriculum that is a compulsory part of training

- Implement pedagogical frameworks in postgraduate medical education and continuing medical education that include
    - Structural competency*, which emphasizes how societal structures contribute to disparate health outcomes
    - Critical consciousness*, which allows the learner to acknowledge the social and political nature of health care, the influences of power and privilege in the delivery of care, and how health care providers can combat assumptions that perpetuate oppression when caring for marginalized patients
- Recognize disability and demonstrate support for learners with differences in ability
- Disclose how programs conceptualize disability while acknowledging structural barriers and promoting supports that foster autonomy. This includes creating a safer space for disclosure of disability
  - Resource postgraduate education offices and university programs about the physical and educational needs of individual residents to allow effective, efficient, and accessible educational programming for those who choose to disclose their disability
  - Develop awareness around disability, including that there are alternative models to conceptualize it. For example, the social model of disability states that what makes someone differently abled is not their condition, but rather the attitudes and structures of society, and focuses on removing barriers. Applicants and residents with disabilities should be involved in this process

to show interest in EM, even when controlling for factors that predict a career in EM [10]. Using specific, targeted, and measurable methods of recruitment is critical to garner career interest in EM. This interest, combined with EDI conscious selection practices would likely increase the diversity of applicants and matriculants. In the United States, EM programs that implemented at least two recruitment practices recommended by the 2008 Council of Emergency Residency Directors (CORD) panel on EM resident diversity were more likely to have a diverse resident population [11]. This recommendation allows for concrete methods of recruitment that would ultimately lead to a diverse EM workforce that is ready to serve its diverse populations.

**Recommendation 3:** Include a value statement on EDI within each program's CaRMS profile.

Explicitly recognizing the systemic oppression experienced by equity-deserving applicants signals a program's commitment to inclusion. This recognition should be coupled with disclosure of specific measures used to counteract such experiences. For the 2022 match cycle, CaRMS reviewed all program descriptions across all specialties for EDI concepts. Only three EM CaRMS program descriptions contained an EDI statement. While objective information is provided on the CaRMS and university websites, transparency in other factors may be better appreciated by diverse applicants [12]. These factors may include EDI practices that offer support for applicants facing continued discrimination; support that is necessarily independent of the evaluation processes. This recommendation allows the opportunity for equity-deserving applicants to learn about professional safety within programs.

**Application/interview review**

**Recommendation 4:** Identify and mitigate conscious and unconscious biases.

Bias takes on many forms and can be either conscious or unconscious. Charting a course for mitigation strategies throughout the application and interview process is essential to counteracting bias. Bias is bidirectional; it can impact a program's impression of an applicant and an applicant's perceptions of a program [6]. Mitigating biases through EDI practices may increase medical student interest in programs and allow programs to select strong, diverse applicants. A diverse group of interviewers, file reviewers, and selection committee members who reflect applicant and community diversity, and who receive anti-bias training, is key. Furthermore, a structured, standardized, and transparent interview process better predicts future performance and reduces bias [13]. This recommendation allows for celebration of unique applicant experiences and counteracts discriminatory practices by mitigating bias.

**Recommendation 5:** Enhance equity as an essential strategy to redefine meritocracy.

Measures of merit must consider equality of access, opportunity, lived hardship, and outcome for equity-deserving groups. Redefining meritocracy using an equity lens *could* level the playing field by accounting for metaphorical distance traveled and curtail false merit based on preference rather than effort [4]. Programs should recognize that a new approach to merit may be more challenging to capture. Rather than skimming through an application searching for easily identifiable metrics (e.g., number of research



publications), assigning merit based on measurable effort, hard work, and demonstration of good character requires careful holistic file review [14]. This recommendation allows programs to regard applicants as whole people and weigh the barriers they have overcome as merit.

## Feedback

### **Recommendation 6:** Facilitate feedback.

Progress can only be made with constant re-evaluation that stems from critical discussion. Structures that allow residents to participate in conversations around EDI-related topics are crucial to increasing equity in the resident selection process. When residents were given the opportunity to join the conversation on equitable resident diversity, “[talking] about race and racism” was “life-affirming” [15]. Opening the floor to a diversity of learners and stakeholders leads to rich discussion needed to design targeted mitigation strategies. These discussions should be structured, allowing for guided feedback and fostering of safer spaces [15]. Feedback from applicants should be unevaluated to minimize power dynamics around residency application. This can be done safely through anonymous and optional post-interview surveys. This recommendation allows for resident evaluation of best EDI practices and improvement of EDI methods, in the spirit of inclusion.

## Residency education

### **Recommendation 7:** Develop a resident EDI curriculum that is a compulsory part of training.

Fostering a critical consciousness for all postgraduate learners is vital for the translation of EDI principles into practice. The evidence for lack of curricular focus on EDI topics in EM residency is vast and well-defined [16]. This curricular gap enables the perpetuation of uninformed physicians who are inadequately equipped to provide equitable care. A diverse resident population coupled with formal EDI policy, resources, curriculum, and faculty development opportunities would ultimately lead to culturally competent care on a larger scale [16]. This recommendation supports the development of cultural safety<sup>7</sup> by physicians who are well-equipped to serve the diverse populations they encounter.

### **Recommendation 8:** Recognize disability and demonstrate support for learners with differences in ability.

Implementing EDI practices within postgraduate medical education will increase resident diversity, though programs

should take steps to ensure accommodation and support of all learners after the match. Recognizing disability is the first step in promoting equal access for differently-abled applicants. In a US study, 12 of 32 (38%) postgraduate medical education institution handbooks included a specific disability policy and language that encouraged disclosure [17]. Encouraging disclosure shows that programs are ready to accommodate residents’ specific needs, thereby increasing accessibility; developing awareness and informing universities of their needs are equally important. In a study of family medicine residency programs, 42.3% of respondents said faculty development focused on residents with disabilities was not available and 32.4% said they did not know if it was available [18]. Promoting disclosure without active support in dismantling structural barriers is not equitable. This recommendation promotes professional safety for differently-abled applicants while fostering an equal-access environment that facilitates autonomy.

## Conclusion

We present eight recommendations to include EDI practices throughout the resident selection process, spanning pre-application to post-match residency education, with each recommendation accompanied by specific actions to facilitate its implementation. This is the first study to undertake such a robust process to develop best practice in resident selection through an EDI lens. The recommendations and actionable sub-items serve as a guide to recruit, retain, and support a diverse population of resident physicians that reflects EM’s diverse patient populations. As we redefine “meritocracy” in the resident selection process, a more equitable, diverse, and inclusive EM physician workforce will help curtail health disparities from which equity-deserving populations historically suffer. EDI practices in the resident selection process will yield more equitable acute care for all.

**Supplementary Information** The online version contains supplementary material available at <https://doi.org/10.1007/s43678-023-00528-9>.

**Funding** None.

## Declarations

**Conflict of interest** On behalf of all authors, the corresponding author states that there is no conflict of interest.

## References

1. Bazargan M, Smith JL, Cobb S, et al. Emergency Department utilization among underserved African American older adults in South Los Angeles. *Int J Environ Res Public Health*. 2019;16(7):1175. <https://doi.org/10.3390/ijerph16071175>. (Published 2019).

<sup>7</sup> Cultural safety is an outcome based on respectful engagement that recognizes and strives to address power imbalances inherent in the healthcare system. It results in an environment free of racism and discrimination, where people feel safe when receiving health care.

2. Institute of Medicine (US). Committee on understanding and eliminating racial and ethnic disparities in health care. In: Smedley BD, Stith AY, Nelson AR, editors. *Unequal treatment: confronting racial and ethnic disparities in health care*. Washington (DC): National Academies Press (US); 2003.
3. Gennissen LM, Stegers-Jager KM, de Graaf J, Fluit CRMG, de Hoog M. Unraveling the medical residency selection game. *Adv Health Sci Educ Theory Pract*. 2021;26(1):237–52. <https://doi.org/10.1007/s10459-020-09982-x>.
4. Boylan M, Grant RE. Diversity and professional excellence. *J Natl Med Assoc*. 2004;96(10):1354–62.
5. Paterson QS, Hartmann R, Woods R, Martin LJ, Thoma B. A transparent and defensible process for applicant selection within a Canadian emergency medicine residency program. *Can J Emerg Med*. 2020;22(2):215–23.
6. Balhara KS, Weygandt PL, Ehmann MR, Regan L. Navigating bias on interview day: strategies for charting an inclusive and equitable course. *J Grad Med Educ*. 2021;13(4):466–70.
7. Emery CR, Boatright D, Culbreath K. Stat! An action plan for replacing the broken system of recruitment and retention of underrepresented minorities in medicine. *NAM Perspectives*. Discussion Paper, National Academy of Medicine, Washington, DC. 2018. <https://doi.org/10.31478/201809a>.
8. Sullivan LW. *Missing persons: Minorities in the health professions, a report of the Sullivan Commission on Diversity in the Healthcare Workforce*. 2004.
9. Agawu A, Fahl C, Alexis D, Diaz T, Harris D, Harris MC, Aysola J, Cronholm PF, Higginbotham EJ. The influence of gender and underrepresented minority status on medical student ranking of residency programs. *J Natl Med Assoc*. 2019;111(6):665–73.
10. Burkhardt J, DesJardins S, Gruppen L. Diversity in emergency medicine: are we supporting a career interest in emergency medicine for everyone? *Ann Emerg Med*. 2019;74(6):742–50.
11. Boatright D, Tunson J, Caruso E, Angerhofer C, Baker B, King R, Bakes K, Oberfoell S, Lowenstein S, Druck J. The impact of the 2008 council of emergency residency directors (CORD) panel on emergency medicine resident diversity. *J Emerg Med*. 2016;51(5):576–83.
12. Nham E, Kumar R, McAlpine K, Seabrook C, Valle M, Menard I, Watterson J, Roberts M. Development, implementation, and uptake of a novel Canadian Resident Matching Service (CaRMS) residency recruitment committee strategy in the era of COVID-19. *Can Urol Assoc J*. 2022;16:206–11.
13. Hughes RH, Kleinschmidt S, Sheng AY. Using structured interviews to reduce bias in emergency medicine residency recruitment: worth a second look. *AEM Education and Training*. 2021;5(Suppl 1):S130–4.
14. Barceló NE, Shadravan S, Wells CR, et al. Reimagining merit and representation: promoting equity and reducing bias in GME through holistic review. *Acad Psychiatry*. 2021;45(1):34–42. <https://doi.org/10.1007/s40596-020-01327-5>.
15. Gustafson SM, Gellein T, Pithia N, Ranadive A. Diversity in recruitment: providing structure to meaningful discussion. *Acad Pediatr*. 2018;18(5): e1.
16. Primavesi R, Burcheri A, Bigham BL, Coutin A, Lien K, Koh J, Kruse M, MacCormick H, Odorizzi S, Ng V, Poirier V. Education about sexual and gender minorities within Canadian emergency medicine residency programs. *Can J Emerg Med*. 2022;24(2):135–43.
17. Meeks LM, Taylor N, Case B, et al. The unexamined diversity: disability policies and practices in US graduate medical education programs. *J Grad Med Educ*. 2020;12(5):615–9. <https://doi.org/10.4300/JGME-D-19-00940.1>.
18. Meeks LM, Case B, Joshi H, Graves L, Harper DM. Prevalence, plans, and perceptions: disability in family medicine residencies. *Fam Med*. 2021;53(5):338–46. <https://doi.org/10.22454/FamMed.2021.616867>.

Springer Nature or its licensor (e.g. a society or other partner) holds exclusive rights to this article under a publishing agreement with the author(s) or other rightsholder(s); author self-archiving of the accepted manuscript version of this article is solely governed by the terms of such publishing agreement and applicable law.