

Diversity, Equity, Inclusion, and Justice

Diversity, Equity, and Inclusion Efforts in Graduate Medical Education: Identifying Opportunities for Collaborative Learning

Adena E. Rosenblatt¹, MD, PhD
 Margaret C. Lo, MD
 Lauren S. Fane, BS
 Daniel L. Dent, MD
 Karen E. George, MD, MPH

ABSTRACT

Background Physician-patient racial and cultural concordance is essential to address health care disparities. Yet, limited literature on diversity, equity, and inclusion (DEI) outcomes in graduate medical education (GME) suggests the need for high-yield DEI resources.

Objectives To describe and identify DEI efforts by US residency program director (PD) associations and areas for collaboration among the GME community.

Methods Through bimonthly teleconferences and 5 iterative revisions from June to September 2022, the DEI workgroup of the US Organization of PD Associations developed a 17-question needs assessment survey to investigate DEI activities across residency PD associations, which was delivered twice electronically from September to November 2022 to 30 specialty PD association representatives.

Results Survey response rate was 73% (22 of 30). Specialties track resident demographics more than PD demographics (11 of 22, 50% vs 7 of 22, 32%). Tracked demographics vary and include race, gender, and sexual orientation. Most PD associations have DEI committees (16 of 22, 73%) implementing various initiatives, the most common of which was providing resources to ensure diverse representation (11 of 16, 69%). Most specialties provide residency recruitment resources (14 of 22, 64%) and funding for visiting rotations or mentorship for underrepresented trainees (12 of 22, 54%). Resources for pipeline programs (7 of 22, 32%) and retention of diverse residents (7 of 22, 32%) were less common. Faculty development training focused more on teaching DEI to residents (14 of 22, 64%) than on teaching health disparities (7 of 22, 32%).

Conclusions Our study demonstrates substantial DEI interventions among specialty PD associations. Yet, educational gaps exist in specific DEI content, faculty development, and curricular dissemination.

Introduction

Physician-patient racial and cultural concordance increases patient satisfaction, improves outcomes, and reduces health care costs.¹⁻⁵ In 2019, the Accreditation Council for Graduate Medical Education (ACGME) introduced diversity accreditation standards.⁶ In 2021, the Coalition for Physician Accountability (COPA) Undergraduate Medical Education-Graduate Medical Education Review Committee (UGRC) published specific recommendations to increase equity in the transition from medical school to residency.⁷

No standard guidance currently exists for implementation of these ACGME requirements or COPA

recommendations. DEI initiatives have largely fallen on individual specialty program director (PD) organizations to develop national resources. As a consolidated group of specialty society PD associations for cross-communication and intercollaboration, the US Organization of Program Director Associations (OPDA)⁸ recognized the variability in formal program structures to improve DEI. Our DEI workgroup performed this exploratory study of DEI educational initiatives across residency specialties to describe the scope of resources and to identify gaps and areas for collaboration.

Methods

From June to September 2022, the OPDA DEI workgroup members met bimonthly over teleconference to define, discuss, and assess the GME needs and

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available resources for DEI training based on ACGME and COPA-UGRC standards. Workgroups were comprised of 6 PD specialty society leaders (3 medical, 3 surgical) and one Association of American Medical Colleges (AAMC) representative. After in-depth literature review and 5 iterative revisions of the survey questionnaire by the workgroup members, the final survey included 17 questions (mix of yes/no, multiple choice, and open text) on DEI topics prioritized by ACGME and COPA-UGRC. Five OPDA Executive Board members thereafter reviewed these questions for clarity and relevancy in consultation with an AAMC survey expert. The final survey compiled links to DEI resources (online supplementary data). The survey was electronically distributed twice from September to November 2022 to all 30 OPDA members, each representing a distinct medical or surgical specialty residency PD associations. Response percentages were calculated for each question. This study received review exemption from University of Chicago Medical Center Institutional Review Board.

Results

The response rate was 73%, with 22 of 30 PD representatives (see BOX) completing the survey. PD associations track resident demographics more than PD demographics (11 of 22, 50% vs 7 of 22, 32%). Most track race, gender, and geographic location. Few track sexual orientation and international medical graduate status (TABLE). The most common DEI implementation among PD associations is creation of DEI committees (16 of 22, 73%), with initiatives including resource development and dissemination (11 of 16, 69%), ensuring diverse representation (11 of 16, 69%), and research (10 of 16, 62%). Most specialties provide resources for underrepresented in medicine (UIM) students to aid with specialty recruiting (14 of 22, 64%), funding for visiting rotations or mentorship programs for UIM trainees (12 of 22, 54%), and resources on inclusion and belonging (11 of 22, 50%). One-third have resources for both recruitment and retention of diverse resident pools or have implemented pipeline programs for UIM students (TABLE). Most PD associations provide DEI curricular resources to training programs, such as addressing implicit bias, microaggressions, and allyship (13 of 22, 59%), teaching disparities in health outcomes (10 of 22, 45%), DEI in the workforce (11 of 22, 50%), and anti-racism in medicine (10 of 22, 45%). Some specialties provide faculty development training for teaching DEI concepts (14 of 22, 64%), but fewer provide training on improving health disparities (7 of 22, 32%). Many specialty PD associations provide robust resources

BOX Specialty Program Director Associations Survey Respondents

American Association of Directors of Psychiatry Residency Training (AADPRT)
 American Council of Educators in Plastic Surgery (ACEPS)
 Association of Academic Physiatrists (AAP)/Resident Program Directors Council
 Association of Anesthesiology Core Program Directors (AACPD)
 Association of Family Medicine Residency Directors (AFMRD)
 Association of Pediatric Surgery Training Program Directors (APSTPD)
 Association of Pediatrics Program Directors (APPD)
 Association of Professors of Dermatology (APD)
 Association of Professors of Human and Medical Genetics (APHMG)
 Association of Program Directors in Internal Medicine (APDIM)
 Association of Program Directors in Interventional Radiology (APDIR)
 Association of Program Directors in Surgery (APDS)
 Association of Program Directors in Vascular Surgery (APDVS)
 Association of University Professors of Ophthalmology (AUPO) Program Director Council (PDC)
 Council of Residency Directors in Emergency Medicine (CORD)
 Council on Resident Education in Obstetrics and Gynecology (CREOG)
 Pathology Residency Program Directors Society (PRODS)-Association of Pathology Chairs
 American College of Preventive Medicine (ACPM) Preventive Medicine Residency
 Directors of the Academic Council of Society of Nuclear Medicine and Molecular Imaging (SNMMI)
 Society of Academic Urologists (SAU)
 Surgical Critical Care Program Directors Society (SCCPDS)
 Thoracic Surgery Directors Association (TSDA)

for recruiting UIM residents, such as scholarships for away rotations, lists of programs providing support for visiting students,^{9,10} funding for national meeting attendance,^{11,12} recommendations for holistic review of residency applications,¹³ and DEI strategies for interview days.^{14,15} Few specialties (6 of 22, 27%) issued recommendations on DEI education beyond specialty-specific ACGME requirements (TABLE).

Discussion

Our study of DEI efforts within specialty PD associations reveal that most specialties are proactive in their DEI activities to meet ACGME and COPA standards. Many have DEI committees, application resources for UIM students/residents, and DEI teaching resources for trainees. Yet, considerable variation and duplication exist in these GME efforts, as well as

TABLE
Responses to OPDA's Exploratory Survey of Physician Specialties' DEI Initiatives

Does Your Specialty ...	Yes, n (%)	Total No.
Track trends in resident demographics with respect to diversity?	11 (50)	22
Race/ethnicity	11 (100)	11
Gender identity	9 (82)	11
Geographic location	6 (55)	11
Sexual orientation	3 (27)	11
Track trends in program director demographics with respect to diversity?	7 (32)	22
Race/ethnicity	5 (71)	7
Gender identity	5 (71)	7
Geographic location	4 (57)	7
Sexual orientation	1 (14)	7
IMG status	1 (14)	7
Have a committee devoted to DEI in your specialty's program director association?	16 (73)	22
If yes, what initiatives has your DEI committee undertaken?		
Ensuring diverse representation	11 (69)	16
Resource development and dissemination	11 (69)	16
Research	10 (62)	16
Curriculum development	8 (50)	16
Pipeline programs and community outreach	7 (44)	16
Other	16 (100)	16
Provide resources to UIM physicians to improve DEI through ... ?		
Recruitment	14 (64)	22
Inclusion and belonging	11 (50)	22
Retention	7 (32)	22
Pipeline programs	7 (32)	22
Provide funding for mentorship or visiting rotation awards for UIM students?	12 (54)	22
Make explicit efforts to improve equity in the transition of UIM medical students to residency?	10 (45)	22
Provide curricular resources to residency faculty to teach any of the following?		
Disparities in health outcomes	10 (45)	22
DEI in health care workforce	11 (50)	22
Implicit bias, microaggression, allyship	13 (59)	22
Anti-racism in medicine	10 (45)	22
Provide faculty development training for any of the following?		
Teach DEI to learners	14 (64)	22
Disparities in health outcomes	7 (32)	22
Provide additional guidance or recommendations on DEI education beyond specialty-specific ACGME program requirements?	6 (27)	22

Abbreviations: OPDA, Organization of Program Director Associations; DEI, diversity, equity, and inclusion; IMG, international medical graduate; UIM, underrepresented in medicine; ACGME, Accreditation Council for Graduate Medical Education.

critical gaps in faculty development and specific DEI content areas, which illuminate opportunities for collaborative learning within the GME community.

A surprising gap was that despite support for recruitment efforts, funds for visiting students and national meeting attendance, and recommendations for holistic review of residency applications and DEI

strategies for interview days, few PD associations have resources to promote resident retention and belonging post-matriculation.^{16,17} This may be key for initial resident recruitment and essential for enhancing workforce diversity. Also notable is the inconsistent tracking by specialty associations of resident and PD demographics to understand strategies and follow

trends in the specialty workforces. Without this information, understanding the downstream effects of various DEI efforts, such as mentorship and pipeline programs, will be difficult. Increased transparency regarding a specialty's DEI goals and outcomes may attract more diverse candidates to the specialty as well.

Specialty PD associations' recommendations for educational programs may be limited by the few studies published with educational outcomes of DEI curricula for residents.¹⁸ The majority are from the last 5 years, in internal medicine and family medicine, and involve large group sessions, small group discussions, simulation, asynchronous modules, journal clubs, field trips, or self-reflections. While some content is specialty-specific, our study found opportunities for sharing resources across specialties in general topics such as allyship with minority patients/peers, bias reduction, and microaggression. Many PD associations offer specialty-specific guidelines, toolkits, and curricular materials (online supplementary data). Noteworthy robust DEI resources are from the Alliance for Academic Internal Medicine, Association of Program Directors in Surgery, and American College of Obstetricians and Gynecologists. Some specialty resources are only accessible behind firewalls or memberships, which poses a barrier to collaborative GME learning.

While these educational tools exist for trainees, much less appears to be available for faculty development on DEI education, especially in health care disparities. This gap may stem from an expectation to self-educate. Generalizable faculty development resources such as ACGME's Equity Matters program^{19,20} may be helpful for faculty to gain skills for DEI-related teaching.

This survey study is limited, as the survey was not tested for validity evidence; thus, respondents may not have interpreted the questions as intended. In aggregating the answers, some DEI initiatives were found to fit into multiple categories, which may reduce confidence in the specific percentages. In addition, the surveyed specialty representatives may not be aware of all DEI initiatives across their specialty. This area is also fast moving, and the data lack developments since 2022. Additionally, surveying DEI initiatives implemented in a top-down direction from specialty PD associations does not capture innovative or effective initiatives implemented by individual residency programs nor does it investigate the impact or outcomes of these DEI interventions.

Many specialty PD organizations appear to be actively engaging in improving workforce diversity and DEI competencies; however, duplicate initiatives were noted in the survey, and a key next step for OPDA is to create a central repository of generalizable

DEI resources to share among all specialties. The online supplementary data is our first step toward this effort. In addition, considerable gaps exist such as educational materials on health disparities and equity-focused recruitment and retention strategies, which should lead to collaborative work across all specialties.

Conclusions

This survey study reveals substantial progress, in most specialties, to strengthen DEI within US GME. Educational gaps remain in specific DEI contents, faculty development, and curricular dissemination, which may benefit from national collaboration across specialties, to share best practices and study outcomes.

References

1. Ku L, Vichare A. The association of racial and ethnic concordance in primary care with patient satisfaction and experience of care. *J Gen Intern Med.* 2023;38(3): 727-732. doi:10.1007/s11606-022-07695-y
2. Jetty A, Jabbarpour Y, Pollack J, Huerto R, Woo S, Petterson S. Patient-physician racial concordance associated with improved healthcare use and lower healthcare expenditures in minority populations. *J Racial Ethn Health Disparities.* 2022;9(1):68-81. doi:10.1007/s40615-020-00930-4
3. Takeshita J, Wang S, Loren AW, et al. Association of racial/ethnic and gender concordance between patients and physicians with patient experience ratings. *JAMA Netw Open.* 2020;3(11):e2024583. doi:10.1001/jamanetworkopen.2020.24583
4. Hardeman RR, Medina EM, Boyd RW. Stolen breaths. *N Engl J Med.* 2023;383(3):197-199. doi:10.1056/nejmp2021072
5. Hardeman RR, Medina EM, Kozhimannil KB. Structural racism and supporting Black lives—the role of health professionals. *N Engl J Med.* 2016;375(22):2113-2115. doi:10.1056/nejmp1609535
6. Accreditation Council for Graduate Medical Education. ACGME Common Program Requirements (Residency). Accessed June 19, 2023. https://www.acgme.org/globalassets/pfassets/programrequirements/cprresidency_2022v3_tcc.pdf
7. The Coalition for Physician Accountability. The Coalition for Physician Accountability's Undergraduate Medical Education-Graduate Medical Education Review Committee (UGRC): recommendations for comprehensive improvement of the UME-GME transition. Accessed August 30, 2023. <https://physicianaccountability.org/wp-content/uploads/2021/08/UGRC-Coalition-Report-FINAL.pdf>

8. Council of Medical Specialty Societies. The Organization of Program Director Associations (OPDA). Accessed May 14, 2023. <https://cmss.org/opda/>
9. Council of Residency Directors in Emergency Medicine. DEI rotation scholarships. Accessed August 30, 2023. <https://www.cordem.org/resources/professional-development/diversity-program-listings/dei-rotation-scholarships/>
10. SIR Foundation. Grants for Education of Medical Students (GEMS) Program. Accessed August 30, 2023. <https://www.sirfoundation.org/get-funded/medical-student-research-education/gems-program/>
11. Arthur L. Garnes Society. PREPPED Plastic Surgery. Accessed August 3, 2024. <https://garnessociety.org/prepped/>
12. Rabb-Venable. Ophthalmology research program. Accessed August 30, 2023. <https://www.rabbvenable.com/>
13. Association of Professors of Gynecology and Obstetrics and The American College of Obstetricians and Gynecologists. Emerging tools for facilitating holistic review. Accessed August 30, 2023. https://cdn.ymaws.com/apgo.org/resource/resmgr/rrr/Holistic_Review_CAAM_FINAL.pdf
14. Virtual interview open mic 1. Vimeo. Published May 17, 2023. Accessed August 30, 2023. <https://vimeo.com/458739089/45ac787a9a>
15. American Academy of Ophthalmology. Diversity and inclusion education. Accessed August 30, 2023. <https://www.aao.org/diversity-and-inclusion-education>
16. Association of Program Directors in Surgery. APDS diversity and inclusion toolkit. Accessed August 30, 2023. <https://apds.org/program-directors/apds-diversity-and-inclusion-toolkit/>
17. Alliance for Academic Internal Medicine. Diversity, equity & inclusion. Accessed August 30, 2023. <https://www.im.org/resources/diversity-inclusion>
18. Chung AS, Cardell A, Desai S, et al. Educational outcomes of diversity curricula in graduate medical education. *J Grad Med Educ.* 2023;15(2):152-170. doi:10.4300/JGME-D-22-00497.1
19. Accreditation Council for Graduate Medical Education. What is ACGME Equity Matters? Published November 3, 2021. Accessed May 18, 2023. <https://www.acgme.org/newsroom/blog/2021/11/what-is-acgme-equity-matters/>
20. Accreditation Council for Graduate Medical Education. ACGME Equity Matters. Accessed October 7, 2023. <https://www.acgme.org/initiatives/diversity-equity-and-inclusion/ACGME-Equity-Matters/>



Adena E. Rosenblatt, MD, PhD, is Program Director, Dermatology Residency Program, Section of Dermatology, Department of Medicine and Pediatrics, University of Chicago, Chicago, Illinois, USA; **Margaret C. Lo, MD**, is Associate Program Director, Internal Medicine Residency Program, Department of Medicine, University of Florida College of Medicine, Malcom Randall VAMC, Gainesville, Florida, USA; **Lauren S. Fane, BS**, is a Medical Student, Case Western Reserve School of Medicine, Cleveland, Ohio, USA; **Daniel L. Dent, MD**, is Vice Chair for Education, Department of Surgery, University of Texas Health San Antonio, San Antonio, Texas, USA; and **Karen E. George, MD, MPH**, is Associate Dean for Students, Larner College of Medicine, University of Vermont, Burlington, Vermont, USA.

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Corresponding author: Adena E. Rosenblatt, MD, PhD, University of Chicago, Chicago, Illinois USA, arosenblatt@bsd.uchicago.edu

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