SPECIAL COMMUNICATION

Diversity in Family Medicine Research

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In conjunction with the North American Primary Care Research Group (NAPCRG) Annual Conference in 2023, leaders in the field of family medicine came together to discuss and produce a Family Medicine Research Agenda. While multiple areas were discussed, diversity, equity, and inclusion did not rise to the top as research priorities. This article discusses the 3 areas family medicine leaders see as necessary to produce high-quality research. The authors present ideas on how diversity, equity, and inclusion can be prioritized in each area. In the first area, "Grow the family medicine research workforce by expanding pathways and strengthening mentorship," the authors present existing models, with an emphasis on those pathway programs proven to increase scholarship and research, such as the Leadership Through Scholarship Fellowship sponsored by the Society of Teachers of Family Medicine (STFM) and the Building Research Capacity Program sponsored by the Association of Departments of Family Medicine (ADFM). In the second area, "Increase funding for family medicine research and advocate for enhanced health policy and support," the authors present ideas on greater utilization of NIH diversity supplements as well as institutional advocacy by family medicine chairs to create seed grants and provide opportunities for diverse faculty to engage in research. Chairs can also increase the diversity of the researcher pool by recruiting among local full-time clinicians, a more diverse group than most faculties. For the final area, "Build a national infrastructure for organizing and optimizing family medicine research opportunities," the authors present solutions including following demographic data surrounding authorship and reviewing for journals; having dedicated committees or editors focused on diversity, equity, and inclusion; and using demographic data from conference submissions to encourage those from underrepresented backgrounds to translate their presentations into a manuscript. These strategies can help equity, diversity, and inclusion become central to our research and be used as a national model for other specialties attempting to do the same. (J Am Board Fam Med 2024;00:000-000.)

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As a specialty, family medicine is the most demographically diverse and has taken significant steps to move forward in equity, diversity, and inclusion.^{1,2} The American Academy of Family Physicians (AAFP) Center for Diversity and Health Equity, the

Family Medicine Committee on Antiracism, and the Diversity, Equity, and Inclusion Milestones for graduate medical education programs are among those steps. 1,3-6 Recently, there has been an increasing number of residents who identify as underrepresented in medicine (URiM) entering family medicine residency programs.⁷⁻¹⁰ Underrepresented in medicine has been defined as those from the following racial and ethnic groups: American Indian or Alaska Native; Black or African American; Latino, Hispanic, or of Spanish Origin; Native Hawaiian or Pacific Islander; or Southeast Asian. In addition, veteran status, ability status, sexual orientation, and gender identities also are included as underrepresented regardless of race. Individual groups have specific challenges and advantages, but that discussion is beyond the scope of this article. The increase in

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URiM representation is supported, in part, by pathway programs such as The Doctors Back to School Program, The Ladder Program, Tour for Diversity in Medicine, and Saturday Academies, programs supported and founded by family physicians.^{7,11}

Despite more compositional diversity among family medicine leaders than other specialties, the research summit sponsored by ADFM at the NAPCRG Conference in 2023 had little discussion of diversity in the research agenda created at that summit. Family medicine missed an opportunity to widen the lead in diversity and inclusion by elevating the role of diversity in all the foci of the research summit: Mentorship and Pathways, Funding and Advocacy, and Infrastructure.

Strategically, conference organizers attempted to thread diversity, equity, and inclusion throughout the focus areas, but it did not rise as a top priority area after discussions in small groups. Some would argue that family medicine should not focus on diversity within research and that hiring quotas to attain research diversity is detrimental. However, family medicine researchers seek outcomes that are useful, applicable, and generalizable. Having diverse teams is an essential first step, without the use of quotas. As a specialty that has historically focused on community needs and supporting justice, family medicine is well-positioned to lead this charge. A major part of this work is producing science to show the efficacy of what we do.

Diversity in research teams can also help to heal the broken trust from mistakes of the past. It has been demonstrated that when the research team has representation from underrepresented groups, patients from the same groups experience greater participation in the studies. Like patient care, identity concordance with research subjects and with communities is a crucial component to finding new knowledge that benefits all communities served by family medicine.

Grow the Family Medicine Research Workforce by Expanding Pathways and Strengthening Mentorship

Faculty development programs offered by STFM, AAFP, ADFM, and others provide a variety of mentorship opportunities and often include a presentation of projects as an outcome of the program. In the case of STFM, there are 6 fellowships designed to advance the careers of family medicine department members: Behavioral Science/Family Systems

Educator Fellowship (BFEF), Emerging Leaders Fellowship (ELF), Medical Student Educators Development Institute, URM Mentoring Program (MUFAE), New Faculty Scholars (NFS), and Leadership through Scholarship Fellowship (LTSF). Most of these programs are open to those in the family medicine community, with some having specific calls for those who identify as URiM. While all these offerings benefit the participants, only LTSF is associated with knowledge creation in the literature, with over 49 manuscripts published since the start of the fellowship in 2019, and most authors identifying as URiM. Replication of this model could increase the number of underrepresented faculty in the research space. Other research fellowships, such as the Building Research Capacity Fellowship and National Research Service Award (NRSA) T32 Fellowship, train researchers in primary care but do not have data regarding URiM participation in these programs.

Currently, there are not enough URiM faculty to mentor the growing number of URiM new faculty or students in the identity concordance model; because of this, mentorship across differences becomes imperative. Those who do not identify as URiM should take responsibility for learning to mentor across differences. 14-17 A good place to start is reverse mentoring. 16 This method provides an opportunity for non-URiM researchers to learn from more those coming from URiM backgrounds. This perspective can help non-URiM researchers gain insight into what barriers URiM researchers may face, as this will be an unknown for some. Learning from our learners and patients is a defining principle of family medicine. In addition, privileges associated with gender and race can be shared across all identities to ensure that the URiM and other minoritized identities can access the resources to build a career in academic medicine and research.¹⁶ Mentoring across differences may occur in individual programs, departments, and organizations. Individual researchers can broaden their scope to include mentorship across differences. Established researchers can mentor, sponsor, and include researchers from a variety of identities and perspectives, thus increasing the diversity of research in family medicine.

An important source of diversity for family medicine research is found in clinical faculty. Early research showed that URiM faculty representation could be increased by recruiting faculty from local practicing physicians. Because this pool is more diverse than the faculty pool, recruiting clinical

faculty into research projects could increase the diversity of those research teams.

Increase Funding for Family Medicine Research and Advocate for Enhanced Health **Policy and Support**

In addition to providing mentorship to researchers at every step of the process, it is feasible for funders to promote diversity among research teams. Family medicine leaders can influence funders to examine team composition team and how financial support is being provided. This can be done by providing data on recipients. Some agencies, including the Wellcome Trust and United Kingdom Research and Innovation, are already publishing diversity data on both applicants and recipients of research grants. There is some evidence that these policies have helped increase the participation of URiM researchers.19

The 27 institutes and centers that make up the National Institutes of Health (NIH) all have robust diversity supplement funds available for current awardees to add researchers from diverse backgrounds to the individual grant. These supplements are in addition to the funds they have already been awarded, yet they are underutilized due to the lack of diversity among researchers. Family medicine researchers and department chairs can capitalize on existing faculty relationships to increase the diversity of the research teams simply by recruiting from the more diverse clinical team using the diversity supplements. These supplements, when used appropriately, can help to increase the diversity of the research teams without incurring additional costs to the teams or the institution. It can also provide mentorship and career guidance for URiM faculty who may be new to this space.

Family medicine leaders can also advocate for increased funding at a variety of levels. They can advocate for institutional seed grants to prioritize projects that recruit representative populations and that may incentivize early-career URiM researchers to apply. As national family medicine leaders advocate for more funding in primary care research, they can advocate for research teams with diverse perspectives that serve diverse communities. There is also an opportunity to advocate for funding to research the impact that diverse teams bring to research outcomes, as much of what exists is observational.

Build a National Infrastructure for Organizing and Optimizing Family Medicine **Research Opportunities**

Family medicine researchers can work to coordinate opportunities on a national scale to support research infrastructure. As leaders become more diverse, this facilitates increased opportunities for mentorship and collaboration. More than ever before, researchers can work across distances. This increases the availability and accessibility of diverse perspectives. Our specialty can lead the nation in support of women early in their careers and can eliminate the "motherhood penalty,"20 "women taxes,"21 and "minority woman taxes"22 imposed on women in family medicine.²³ This may help improve the current concerning statistic that less than 1/3 of chairs identify as women. Departments should support URiM faculty in the development of research careers through funding for participation in research fellowships. In addition, programs such as the ADFM Building Research Capacity infrastructure can be used to ensure that a focus on creating more diversity in research is made a priority.

Journals, conferences, and other acceptance committees should consider maintaining data on the rates of submission and acceptance from URiM authors. While complex, this is possible. Most submitters to conferences, such as STFM, NAPCRG, FMX, etc., are members of the sponsoring organization. Sponsoring organizations can share membership data with program committees after decisions have been made. Then, committees can examine and report on the data received and share widely, allowing the organization to see what they are doing and mobilize the membership, in addition to the acceptance committees to improve on reported outcomes.

For example, many major Family Medicine Journals (Annals of Family Medicine, Family Medicine, Evidence-Based Practice, Journal of the American Board of Family Medicine, FP Essentials, American Family Physician, Peerreviewed Reports in Medical Education Research) have diversity committees or an equity diversity and inclusion editor on their editorial staff. In 2020, the editors from family medicine journals simultaneously published a joint statement of a commitment to "actively examine the effects of racism on society and health and to take action to eliminate structural racism in our editorial processes."24 These individuals help ensure that the

research presented for publication speaks correctly about specific identities in research. The committees and editors can help elevate research conducted by underrepresented researchers and elevate research in communities that have been historically excluded from medicine. Initiatives are underway to learn if there is diverse representation among authors and reviewers; AFP and Family Medicine have initiated surveys of their authors and reviewers to provide self-reported demographics. Peer-reviewed reports in medical education research (PRiMER) has an invitation on their submission website for authors to selfidentify as underrepresented in medicine (URiM) and a mentoring offer if the submitters so desire. These are admirable first steps, and once the measurement is improved, these efforts should increase to ensure that research community diversity at least mirrors the diversity of the family medicine community. Some identities of color are considered "overrepresented"; the authors posit that they can lead efforts to increase the representation of groups traditionally underrepresented in medicine in the US.

Additional opportunities may exist using national or multinational collaboratives to coordinate research and provide mentorship opportunities, as mentioned previously. These collaboratives could increase access to population data from a variety of sources, creating more robust data sets. They could also coordinate access to the diversity supplement funding available as a part of NIH grants to support research conducted by such collaborative teams.²⁰⁻²³ As our specialty works to expand our research presence, equity, diversity, and inclusion are an integral part of the plan and on the research agenda. Family medicine as a specialty has already taken many important strides to improve diversity within the workforce, though now there must be a focus on the area of research. As many young researchers must use established labs, teams, and mentors, it is incumbent on the specialty to ensure that granting agencies, conferences, and journals ensure that research teams represent diverse perspectives and have diversity in the identities of presenters and authors.²⁵ We must focus on all strategic areas-mentorship pathways, funding and advocacy, and infrastructure to ensure that research teams are representative of the specialty and the US population. These efforts will propel family medicine research toward more innovation, ensure generalizability, and garner

the trust of potential participants, allowing for research to make a greater impact on health care systems and policy.

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References

- Xierali IM, Nivet MA, Gaglioti AH, Liaw WR, Bazemore AW. Increasing family medicine faculty diversity still lags population trends. J Am Board Fam Med 2017;30:100–3.
- 2. Xierali IM, Nivet MA, Rayburn WF. Diversity of department chairs in family medicine at US medical schools. J Am Board Fam Med 2022;35:152–7.
- 3. Laff M. AAFP takes leadership role with launch of center for diversity, health equity. Ann Fam Med 2017;15:389–90.
- 4. Ravenna PA, Wheat S, El Rayess F, et al. Diversity, equity, and inclusion milestones: creation of a tool to evaluate graduate medical education programs. J Grad Med Educ 2022;14:166–70.
- AAFP. The EveryONE Project Workforce Diversity. American Academy of Family Physicians. Accessed May 14, 2024. Available at: https://www.aafp.org/ family-physician/patient-care/the-everyone-project/ workforce-diversity.html.
- 6. Savoy M, Halsall V, members of the Family Medicine Committee on Antiracism. Advancing antiracism in family medicine. Ann Fam Med 2022;20:491–2.
- 7. Stoesser K, Frame KA, Sanyer O, et al. Increasing URiM family medicine residents at University of Utah Health. PRiMER 2021;5:42.
- 8. Wusu MH, Tepperberg S, Weinberg JM, Saper RB. Matching our mission: a strategic plan to create a diverse family medicine residency. Fam Med 2019;51:31–6.
- 9. Jabbarpour Y, Westfall J. Diversity in the family medicine workforce. Fam Med 2021;53:640–3.
- Rodríguez JE, Stoesser K. Transforming diversity of a family medicine residency program. N Engl J Med 2024;390:773–5.
- 11. Cariello PF, Figueroa E, Harris CM, et al. Future doctors from underrepresented in medicine communities at the University of Utah. PRiMER 2023;7:25.
- Sierra-Mercado D, Lázaro-Muñoz G. Enhance diversity among researchers to promote participant trust in precision medicine research. Am J Bioeth 2018;18:44–6.
- 13. Shen MJ, Peterson EB, Costas-Muñiz R, et al. The effects of race and racial concordance on patient-physician communication: a systematic review of the literature. J Racial Ethn Health Disparities 2018;5:117–40.

- 14. Foster KE, Johnson CN, Carvajal DN, et al. Dear white people. Ann Fam Med 2021;19:66–9.
- Campbell KM, Rodríguez JE. Mentoring underrepresented minority in medicine (URMM) students across racial, ethnic and institutional differences. J Natl Med Assoc 2018;110:421–3.
- Rodríguez JE, Tumin D, Campbell KM. Sharing the power of white privilege to catalyze positive change in academic medicine. J Racial Ethn Health Disparities 2021;8:539–42.
- 17. Rodríguez JE, Campbell KM, Washington JC. Dismantling anti-black racism in medicine. Am Fam Physician 2021;104:555–6.
- 18. Cora-Bramble D, Zhang K, Castillo-Page L. Minority faculty members' resilience and academic productivity: are they related? Acad Med 2010;85: 1492–8.
- 19. Nielsen MW, Bloch CW, Schiebinger L. Making gender diversity work for scientific discovery and innovation. Nat Hum Behav 2018;2:726–34.

- Wang SS, Ackerman S. The motherhood penalty: is it alive and well in 2020? J Am Coll Radiol 2020;17:688–9.
- Armijo PR, Silver JK, Larson AR, Asante P, Shillcutt S. Citizenship tasks and women physicians: additional woman tax in academic medicine? J Womens Health (Larchmt) 2020;30:935–43.
- Rodríguez JE, Wusu MH, Anim T, Allen KC, Washington JC. Abolish the minority woman tax! J Womens Health (Larchmt) 2020;30:914–5.
- 23. Barreto SG. We asked the experts: virtual interdisciplinary research teams—an opportunity for diversity and inclusivity in the pursuit of excellence. World J Surg 2023;47:2308–9.
- 24. Sexton SM, Richardson CR, Schrager SB, et al. Systemic racism and health disparities: a statement from editors of family medicine journals. Am Fam Physician 2021;103:10–1.
- 25. Asmal L, Lamp G, Tan EJ. Considerations for improving diversity, equity and inclusivity within research designs and teams. Psychiatry Res 2022;307:114295.