Intentional Action: Inclusive Recruitment Practices to Increase UIM Representation in Fellowships

Lahia Yemane, MD *(she/her)*
Associate Program Director, Pediatrics Residency
Assistant Dean for Diversity in GME, Office of Diversity in Medical Education
Stanford School of Medicine

@LahiaYemaneMD

Disclosures

- Nothing to disclose.

Learning Objectives

Review	Discuss	Describe
Define commonly used terms related to inclusive recruitment practices	Discuss the myth of UIM scarcity as it relates to recruitment	Describe evidence-based strategies to increase recruitment of UIM trainees

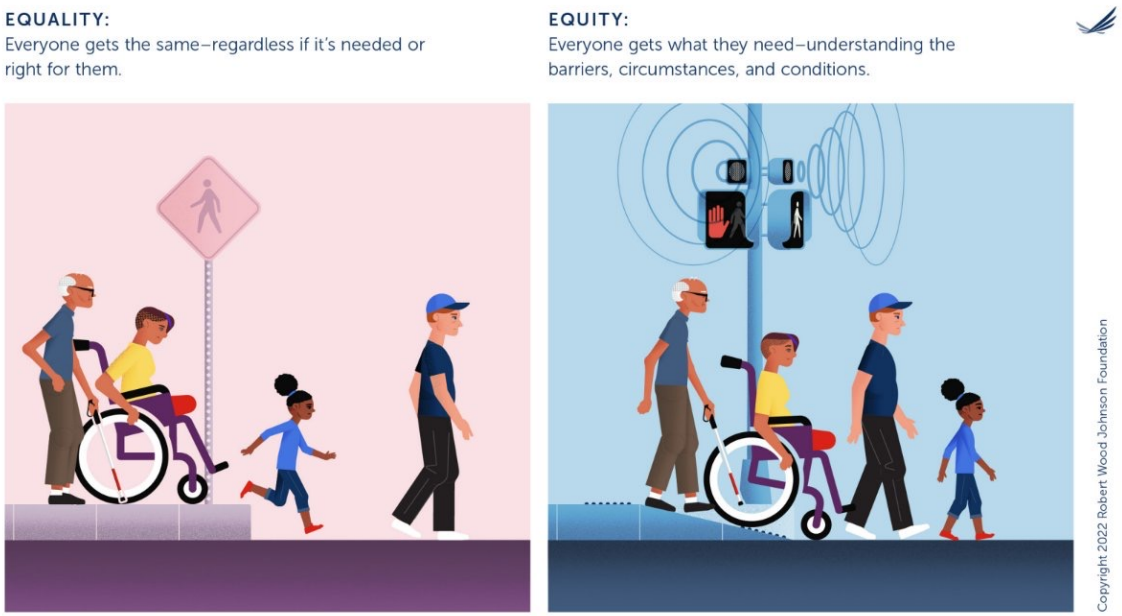
ACGME Requirement

I.C. The program, in partnership with its Sponsoring Institution, must engage in practices that focus on mission-driven, ongoing, systematic recruitment and retention of a diverse and inclusive workforce of residents, fellows (if present), faculty members, senior administrative staff members, and other relevant members of its academic community. (Core)

Background and Intent: It is expected that the Sponsoring Institution has, and programs implement, policies and procedures related to recruitment and retention of minorities underrepresented in medicine and medical leadership in accordance with the Sponsoring Institution's mission and aims. The program's annual evaluation must include an assessment of the program's efforts to recruit and retain a diverse workforce, as noted in V.C.1.c).(5).(c).

Definitions

- **Diversity:** being composed of different elements
- **Inclusion:** intentional practices and policies that create engagement to ensure that people with different identities feel valued and welcomed (sense of belonging)
- **Equity:** *creating opportunities* for equal access and success

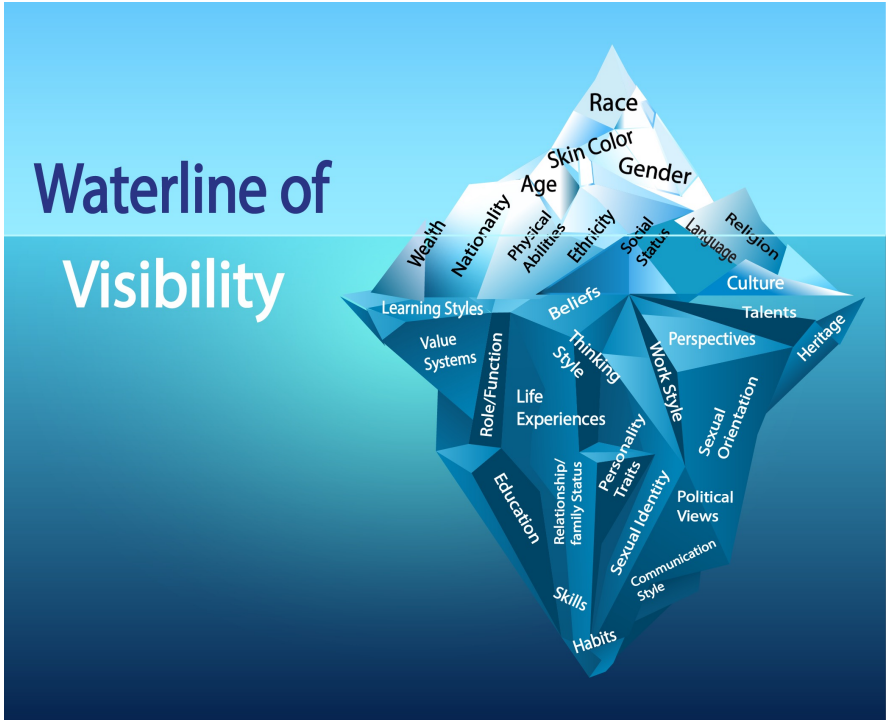



Diversity is a fact.
Equity is a choice.
Inclusion is an action.
Belonging is an outcome.
— Arthur Chan

Diversity

- Race and ethnicity
- Gender
- Sexual orientation
- Disability
- 1st generation college grad
- Low-income
- Rural
- Distance traveled

- *look at personal statements, CV, intro MSPE, LORs



https://www.rhrinternational.com/thought-leadership/blog/creating-sustainable-diversity-inclusion-and-belonging-organizations

Definition: Underrepresented in Medicine (UIM)

- AAMC: **"Underrepresented in medicine means those racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population."**
  - Black or African American
  - Hispanic, Latino, or Spanish Origin
  - American Indian or Alaska Native
  - Native Hawaiian or Pacific Islander

- a shift in focus from a fixed aggregation → continually evolving. The definition accommodates including and removing underrepresented groups based on changing demographics of society and the profession,
- a shift in focus from a national perspective to a regional or local perspective on underrepresentation, and
- stimulate data collection and reporting on the broad range of racial and ethnic self-descriptions.

https://www.aamc.org/what-we-do/equity-diversity-inclusion/underrepresented-in-medicine

Definition: Racism

- *Racism is a **system** of structuring opportunity and assigning value based on the social interpretation of how one looks (which is what we call "race"), that unfairly disadvantages some individuals and communities, unfairly advantages other individuals and communities, and saps the strength of the whole society through the waste of human resources* [Camara Jones, MD, MPH, PhD]

Myth: UIM Scarcity

"Academic medicine perpetuates the myth that racially marginalized, qualified candidates are inherently "scarce" and in need of "recruitment," all the while participating directly in manufacturing the conditions that make our field inhospitable to marginalized candidates"

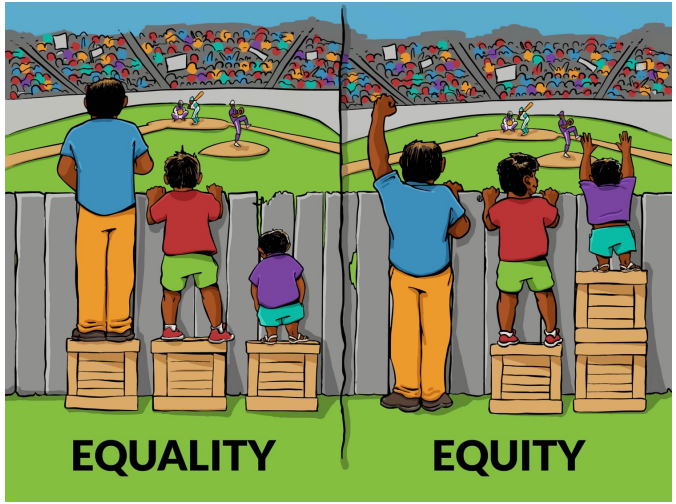


Acknowledge that UIM candidates are small in # due to structures of their exclusion from medicine (not pathologizing race, but rather racism)

Barceló NE, Shadravan S. Race, Metaphor, and Myth in Academic Medicine. Acad Psychiatry (2020).

Myth: UIM Scarcity

- Intent: focus on interventions
- Impact: perpetuating racial hierarchy (i.e., inherent shortness)
  - lack of acknowledgment of the structural processes that rob groups of their height
  - the disingenuousness of offering boxes to people standing in ditches



interactioninstitute.org and madewithangus.com



Barceló NE, Shadravan S. Race, Metaphor, and Myth in Academic Medicine. Acad Psychiatry (2020).

Trends in Race/Ethnicity of Pediatric Residents and Fellows: 2007-2019

TABLE 1 Trends in Total and URiM Pediatric Residents and Subspecialty Fellows From 2007 to 2019

	2007			2019			2007–2019
	Total	URiM, %	95% CI	Total	URiM, %	95% CI	*P* for Trend
Pediatric residents	7964	16.0	15.2–16.9	8950	16.5	15.8–17.3	.98
All subspecialty fellows	2684	14.2	12.9–15.6	3966	13.4	12.4–14.6	.002
Adolescent medicine	61	23.0	13.1–35.5	86	30.2	20.8–41.1	.13
Child abuse[a]	0	0.0	NA	37	13.5	4.5–28.8	.077
Developmental-behavioral	61	11.5	4.7–22.2	109	17.4	10.8–25.9	.31
Neonatal-perinatal medicine	521	18.8	15.5–22.4	760	14.2	11.8–16.9	<.001
Cardiology	306	8.2	5.4–11.8	436	11.7	8.8–15.1	.67
Critical care medicine	334	13.2	9.7–17.3	504	11.5	8.9–14.6	.006
Emergency medicine	248	12.5	8.7–17.3	408	12.0	9.0–15.6	.25
Endocrinology	201	11.0	7.0–16.1	236	20.3	15.4–26.1	.002
Gastroenterology	187	12.3	8.0–17.9	303	11.6	8.2–15.7	.76
Hematology or oncology	336	14.3	10.7–18.5	491	9.6	7.1–12.5	.093
Infectious diseases	147	23.1	16.6–30.8	180	11.7	7.4–17.3	<.001
Nephrology	99	14.1	7.9–22.6	110	15.5	9.3–23.6	.11
Pulmonology	113	12.4	6.9–19.9	161	18.6	12.9–25.5	.009
Rheumatology	58	13.8	6.2–25.4	98	15.3	8.8–24.0	.24
Sports medicine	12	0.0	0–26.5	25	12.0	2.6–31.2	.52

NA, not applicable.

[a] 2011–2012 = first year reporting.

Montez K, et al. Trends in Race/Ethnicity of Pediatric Residents and Fellows: 2007–2019. Pediatrics (2021)

What Can We Do About It?

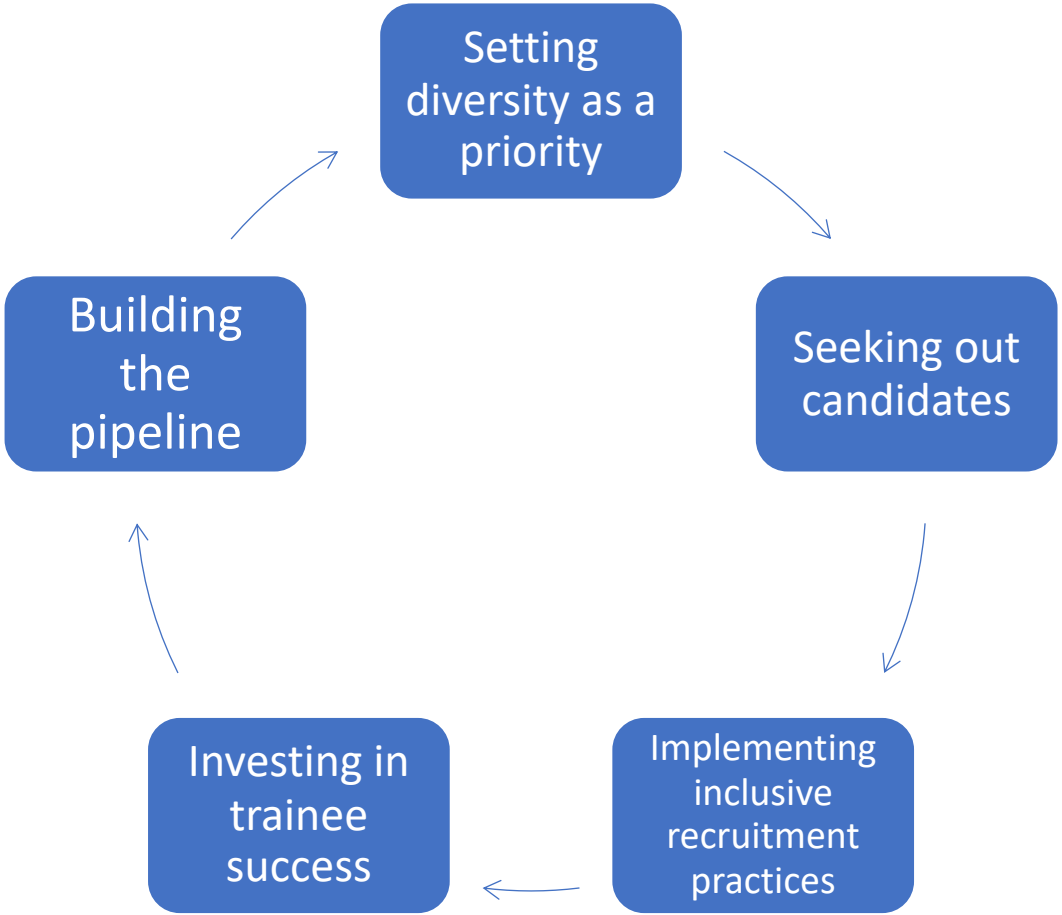
- Interrogate the **systems and structures** that perpetuate a continued lack of diversity in our workforce
  - Gatekeepers/access (this is us!!)
  - Antiquated definitions of “excellence”

- Systems and structures have greater impact on outcomes than changing hearts and minds
  - Outlast individuals
  - Shape behavior change

Reframing “We Don’t Have Control”

- What Do You Control?
  - How your recruitment materials are written
  - Interactions with applicants
  - Who you invite to conduct interviews and how you train your interviewers
  - The type of interviews you conduct and where interviews take place
  - The tools you use to assess applicants
  - The criteria you use to screen
  - Who you invite to interview
  - Who you decide to rank and in what order

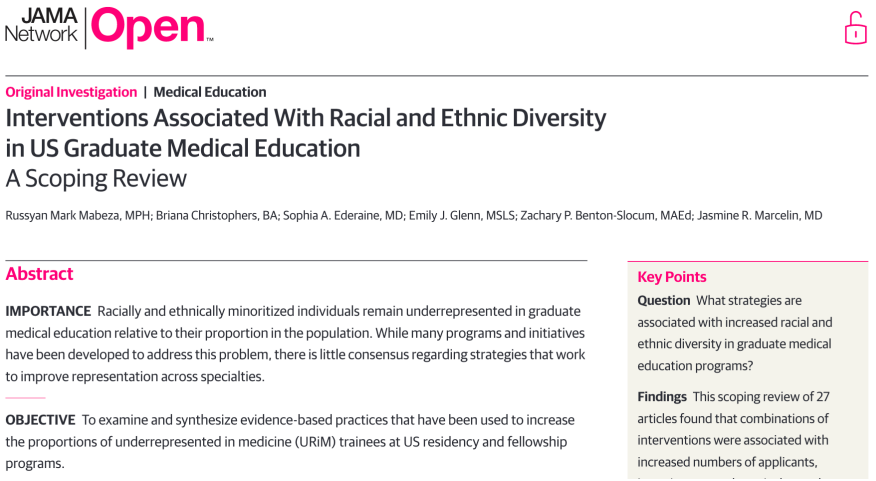
AAMC Holistic Review. https://www.aamc.org/services/member-capacity-building/holistic-review



Gonzaga AMR, et al. A Framework for Inclusive Graduate Medical Education Recruitment Strategies: Meeting the ACGME Standard for a Diverse and Inclusive Workforce. Acad Med (2020).

What is the Evidence?

- Scoping Review
  - Articles from 2011-2022
  - 27 articles (2 fellowship: cardiology)
- Broad categories
  - Recruitment
  - Application review
  - Interview process
- Most common interventions
  - Holistic review
  - Decreased emphasis on Step 1
  - Explicit institutional messaging on diversity



JAMA Network Open

Original Investigation | Medical Education

Interventions Associated With Racial and Ethnic Diversity in US Graduate Medical Education

A Scoping Review

Russyan Mark Mabeza, MPH; Briana Christophers, BA; Sophia A. Ederaine, MD; Emily J. Glenn, MSLS; Zachary P. Benton-Slocum, MAEd; Jasmine R. Marcelin, MD

Abstract

IMPORTANCE Racially and ethnically minoritized individuals remain underrepresented in graduate medical education relative to their proportion in the population. While many programs and initiatives have been developed to address this problem, there is little consensus regarding strategies that work to improve representation across specialties.

OBJECTIVE To examine and synthesize evidence-based practices that have been used to increase the proportions of underrepresented in medicine (URiM) trainees at US residency and fellowship programs.

Key Points

Question What strategies are associated with increased racial and ethnic diversity in graduate medical education programs?

Findings This scoping review of 27 articles found that combinations of interventions were associated with increased numbers of applicants,

Figure 2. Interventions for Recruitment of Underrepresented in Medicine (URiM) Trainees in Graduate Medical Education



Mabeza RM, et al. JAMA Network Open (2023)

Setting Diversity as a Priority

- Priority requires intentional action: activities/metrics + resources
- Who are your partners and/or stakeholders that impact mission, values, culture?
  - Department
  - Hospital
  - GME, Diversity Offices
  - Medical School (similar LCME Standards 10+ yrs.)
- Naming it as a priority on websites, during interview day, etc.
  - Showcasing breadth across department and institution
  - Don’t name it, if you don’t have anything to back it up (i.e., empty words)

- **Challenge: Is diversity part of your mission/values? Are you working with any above partners for collaboration or resources?**

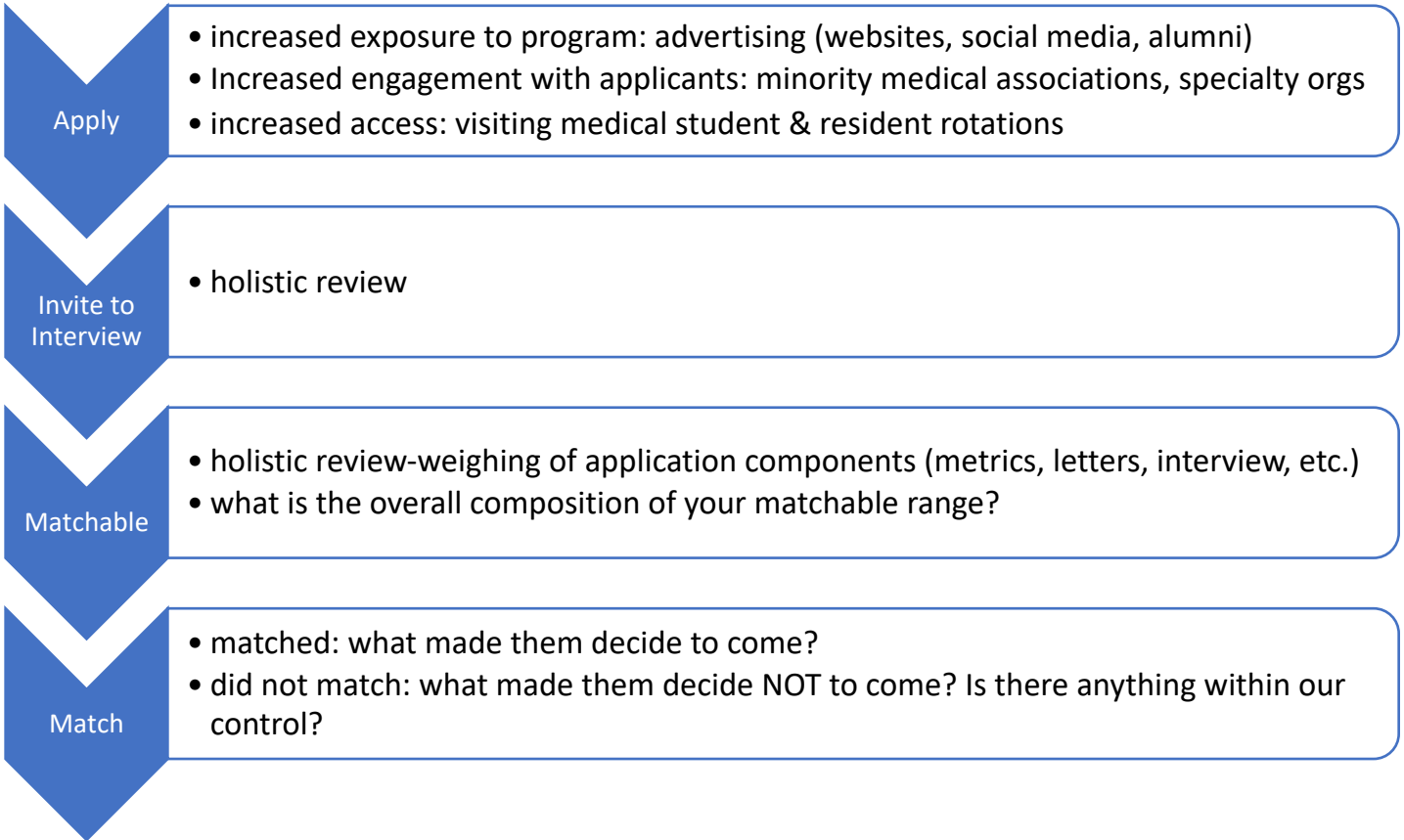
Data: You Don’t Know, What You Don’t Track

- Aggregating groups as UIM can give you blind spots to specific groups → more granular, the better (local/regional demos and as the definition evolves)

- Metrics to trend (and target interventions):
  - % of applicants
  - % of invites
  - % of interviews
  - % of matches
  - Where are applicants coming from? Regions, schools

- **Challenge: Are you tracking any of this data? If so, what?**

Granularity = Targeted Interventions



Messaging Matters

- Perception is reality. Highlighting,
  - Diverse patient population
  - Diverse clinical experiences
  - Opportunities for health equity, advocacy, community work
  - What are your unique strengths as a dept, program, etc.

- Website and/or social media presence (including interview day)
  - People look at pictures!
  - Statement on commitment to DEI, encouraging diverse applicants to apply
  - Links to DEI programs or offices across the SoM + University

Seeking Out Candidates

- Recruitment happens 365 days/year!
- Conferences
  - Minority medical associations (ex, SNMA, LMSA)
  - Medical specialty organizations, DEI committees
- Increased access/exposure to program
  - rotation opportunities (UIM funded residency rotation: Stanford, Nationwide, Hopkins)
  - social media, informational sessions
- Networks of your UIM faculty, trainees, alumni

- **Challenge: What are you doing to engage with prospective applicants?**

Implementing Inclusive Recruitment Practices: Holistic Review

- Defined by the AAMC: **flexible, individualized** way of assessing an applicant's capabilities, by which **balanced** consideration is given to experiences, attributes, competencies, and academic or scholarly metrics, and when considered in combination, how the individual might contribute value to the **institution's mission**.

- Acknowledges that diversity is essential for excellence

- **MYTH: holistic review = lowering standards**
- **contrary, it BROADENS what defines "excellent" candidate**

AAMC Holistic Review. https://www.aamc.org/services/member-capacity-building/holistic-review

Holistic Review

- Elements (E-A-C-M):
  - **Experiences**: research, leadership, life experiences, community service (*considering context in which these took place)
  - **Attributes**: skills, abilities, personal qualities (ex, intellectual curiosity), languages spoken, demographics
  - **Competencies**: applies knowledge, skills, abilities. Ex, ACGME milestones (MK, PBLI, PC, Professionalism, etc.)
  - **Metrics**: MSPE, exams, publications
    - Step 1 transition to P/F (starting 2022)

- **Challenge: What EACMs are you using? Is it balanced? Is this aligned with your mission?**

Bias/Disparities in Selection Metrics

- More studies coming out on language used in:
  - Evaluations
  - LORs
  - Milestones

Table 2

Examples of Challenges to Instrumental Equity

Assessment	Intended use of assessment information	Instrumental use of assessment information	Inequity resulting from assessment	Consequence of inequity
USMLE Step 1 licensing examination scores	Determination of minimal competence for licensure to practice medicine, to ensure safety of the public	Sorting applicants for residency training into groups who will or will not be invited for interviews	Students from backgrounds underrepresented in medicine are at risk for lower scores due to structural factors throughout their education	UIM students do not match into top residency programs
Clerkship grades	Quantitative ratings and qualitative comments from team members ensure that students have achieved expected competence and inform future learning	Ranking students and sorting students to determine who will receive the highest grades	Bias in quantitative and qualitative ratings favors students who are White; bias exacerbated when faculty providing ratings may comprise a less diverse group than the student population	UIM students are less likely to be elected to the AOA honor medical society
Examinations of medical knowledge during clerkships	Assurance that all medical students achieve the expected minimum medical knowledge across varied clerkship sites and settings	Numerical data serve as easy, "objective" metrics that can be weighted heavily alongside clinical performance data to rank or sort students into groups for purposes of grade assignments	Medical knowledge contributes more to or drives clinical grade assignments rather than other competencies essential for high-quality patient care	UIM students earn fewer honors in core clerkships
Milestone ratings of resident performance	Monitor and support all residents' developmental trajectory	Quantitative milestone ratings enable ranking of residents	Women residents receive lower milestone ratings than men in certain domains that are traditionally valued as "male" characteristics	Women residents are less likely to be selected for chief resident positions or faculty appointments

Abbreviations: UIM, underrepresented in medicine; AOA, Alpha Omega Alpha Honor Society.

Lucey CR, et al. Medical Education's Wicked Problem: Achieving Equity in Assessment for Medical Learners. Acad Med (2020).

Case Study:

- Expanded screening with lowered Step score cutoff applied to all applicants
- Experience/attribute score= mission-driven
- UIM applications reviewed: increased from 14.1% to 20.4%
- UIM applicants interviewed: increased from 16% to 24.5%

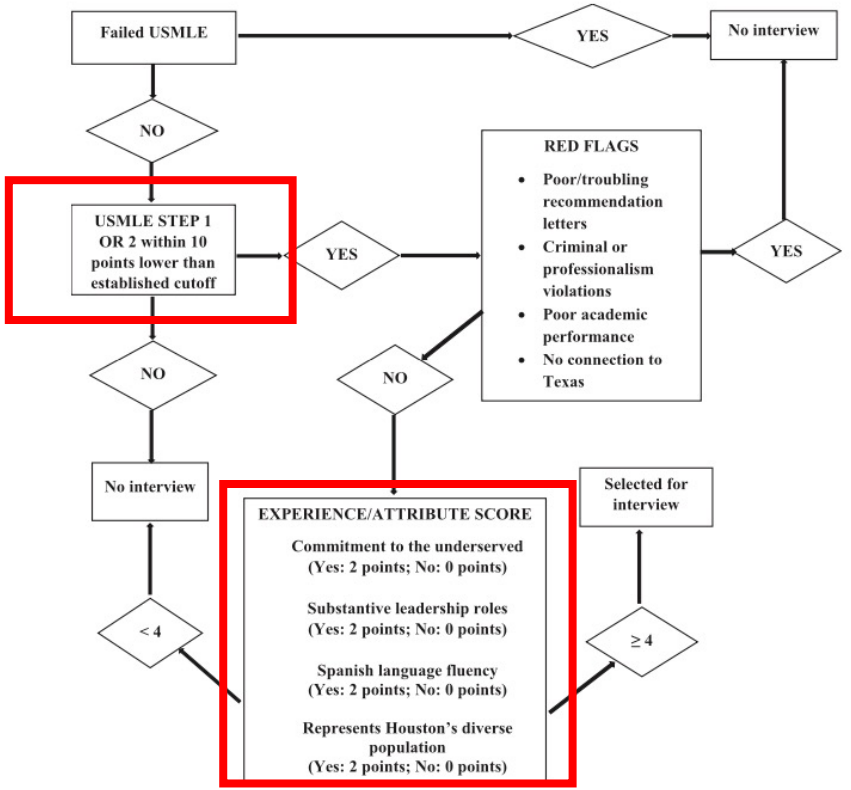


Figure 1 Flow diagram of the holistic review process incorporating metrics, experiences, and attributes in the screening and selection of categorical internal medicine residency applicants for interviews at the John P. and Kathrine G. McGovern Medical School in academic year 2017–2018.

Aibana O, et al. Bridging the Gap: Holistic Review to Increase Diversity in Graduate Medical Education. Acad Med. (2019).

Selection Process + Committees

- Aim to have a diversity of members that review and interview applicants
  - Considerations:
    - Near peers, other healthcare professionals or non-clinical staff
    - Encourage UIM trainees, faculty, alumni to participate and/or meet with candidates (*and valued)

- All members receive training,
  - unconscious bias (including virtual considerations): AAMC video
  - program commitment and efforts in DEI/anti-racism
  - how to review files and interview processes (standardized rubrics)
    - blinding photos during screening

- **Challenge: Who makes up your committee? Does your committee receive any training?**

Interview Process

- What is the goal of the interview?
- Number of interviewers per applicant

RESEARCH IN PEDIATRIC EDUCATION

Can Behavior-Based Interviews Reduce Bias in Fellowship Applicant Assessment?

Melissa L. Langhan, MD, MHS; Michael P. Goldman, MD; Gunjan Tiyyagura, MD, MHS

From the Departments of Pediatrics and Emergency Medicine, Section of Pediatric Emergency Medicine, Yale University School of Medicine, New Haven, Conn
The authors have no conflict of interest to disclose.
Address correspondence to Melissa Langhan, MD, MHS, Section of Pediatric Emergency Medicine, Yale University, 100 York St, Suite 1D, New Haven, CT 06510 (e-mail: Melissa.Langhan@yale.edu).
Received for publication March 29, 2021; accepted December 13, 2021.

- Structured interview questions (behavior-based that align with your mission)
- Blinding interviewers (considerations: MSPE/grades, USMLE scores, LORs, just personal statement & CV)
- Beware of “fit”
  - Can be a slippery slope for unconscious bias to creep into assessments of applicants
  - Can lead to more homogeneity
  - Should be mission-driven

Interview Invitation + Day

- Interview invitation should ask applicants,
  - names matter:
    - Pronunciation apps
  - pronouns
  - if applicants needs any accommodations

- Try to have UIM applicants interview with at least 1 UIM interviewer
- Social: informal receptions, second look events

Concepts and Experiences of Black Applicants during Interviews.

Concept	Verbal Example	Nonverbal Example	Implication
Microaggression	A faculty member asks a Black applicant, "Did you play any sports in college?" after seeing that the applicant attended an Ivy League university.	Despite the Black applicant repeatedly being the first applicant to raise their hand, other applicants are called on first to ask questions each time.	The applicant feels their academic potential has been invalidated and dismissed.
Stereotype threat	When an interviewer mentions, "affirmative action facilitates recruitment of faculty from groups that are underrepresented in medicine," the Black applicant struggles to promote their own accomplishments.	During a slideshow, photographs of Black faculty members are featured only on the diversity and inclusion page. The Black applicant now feels less comfortable discussing interests in technology.	The Black applicant recognizes stereotypes portrayed (reliance on affirmative action, interests in diversity and inclusion); this causes the applicant to perform less well during the interview day.
Tokenism	During an interview, a faculty member states, "We are specifically looking for diversity. We don't want our team to be just a bunch of White males."	The Black applicant is given pamphlets about the diversity and inclusion office in interview-day folders. Other applicants don't receive the same information.	The Black applicant is made to feel like a metric instead of a colleague.
Imposter syndrome	The interviewer inadvertently mentions the accomplishments of another applicant, who is in fact just as qualified as the Black applicant. The Black applicant immediately feels as if they don't belong.	A successful Black applicant grows nervous looking at the awards and certificates hanging on an interviewer's office wall.	A competitive Black applicant doubts their qualifications for the interview and opportunity. Subsequently, the applicant comes off as nervous and insecure during the interview.
Homophily	During an interview, the applicants comment and connect on similar hobbies and lived experiences that the Black applicant does not share.	During the interview lunch, the Black applicant notices that the White faculty spend more time with the White applicants. The two Black applicants eat together.	The Black applicant anticipates a potential barrier to socializing with others in the program.

Ellis J, et al. Interviewed while Black. N Engl J Med (2020)

Benefits and Limitations of Virtual Recruitment: Perspectives From Subspeciality Directors

Tara L. Petersen, MD, MSEd,[a,*] Jennifer C. King, PharmD, MD,[b,*] Jill J. Fussell, MD,[c] Hayley A. Gans, MD,[d] Linda A. Waggoner-Fountain, MD, MACM,[e] Danny Castro, DO, MEd,[f] Michael L. Green, MD,[g] Melinda F. Hamilton, MD, MSEd,[h] Karen Marcdante, MD,[a,i] Richard Mink, MD, MACM,[j] Katie R. Nielsen, MD, MPH,[k] David A. Turner, MD,[l] Christopher M. Watson, MD, MPH,[m] Adrian D. Zurca, MD, MEd,[n] Donald L. Boyer, MD, MSEd[o]

	Benefits	Drawbacks
Time	• Program: more efficient interview day, increased faculty availability, increased interview capacity • Applicant: less time away from rotations	• Fewer informal interactions with faculty and fellows
Travel	• Cost-savings • Perception of more diverse applicant pool • Decrease carbon footprint	• Interview at programs less interested in &/or increase cancellations • Not visit city: may impact less well-known cities
Virtual Format	• Flexibility of interviewing (more engagement with faculty) • Create more online presence	• Less dynamic experience • Harder to assess nonverbal cues & communication

Peterson T, et al. Pediatrics (2022)

Ophthalmology: Optional In-person Visits

- Option to hold in-person open houses within a 4 week-period **after program has submitted rank list** (applicant has not)

- Guiding principles
  - Optional for program and applicant
  - Maximum of 4 hours in length
    - Tours of facilities, city, social event with program (residents, faculty)

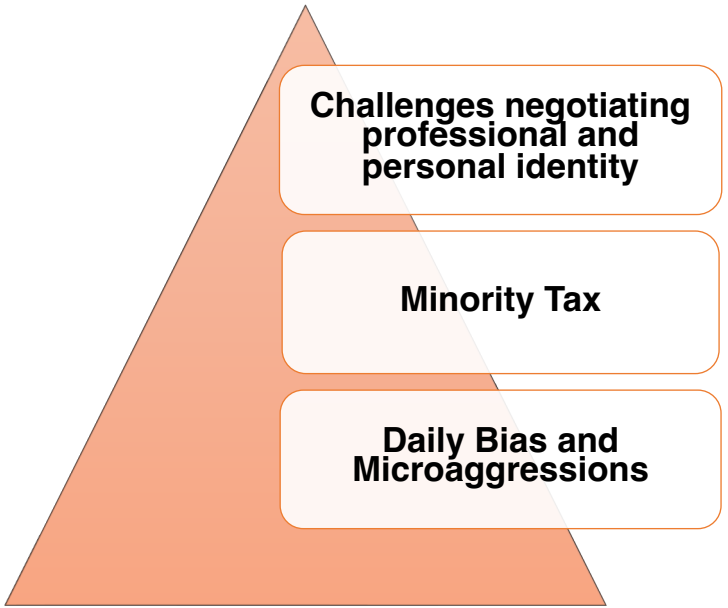
Building the Pipeline

- Goes back to “Setting Diversity as a Priority” as a long-term, strategic goal with partners
  - Medical School, Residency (UIM med students, residents)
  - University (UIM pre-med orgs)
  - Hospitals/Offices of Diversity or Community Engagement (local schools)
  - Office of Faculty Development (pre-faculty)
- Pathway programs and tracking metrics over time (ex, participated in prior programming and then applied to your program in future)

- **Challenge: Are you engaged with any pathway programs?**

Recruitment Alone is Insufficient: Investing in Trainee Success

- Applicants want to see how you will support them once they come: support means different things to different people → don't assume, ask!
- How you deal with instances of discrimination? Do your trainees and/or faculty get training on being an upstander?
- Community building, professional development, mentorship
- **Challenge: How are you creating an inclusive learning environment?**



Osseo-Asare A, et al. Minority Resident Physicians' Views on the Role of Race/Ethnicity in Their Training Experiences in the Workplace. JAMA Netw Open (2018)

Table. Duke Cardiovascular Fellowship Diversity Quality Improvement Initiative

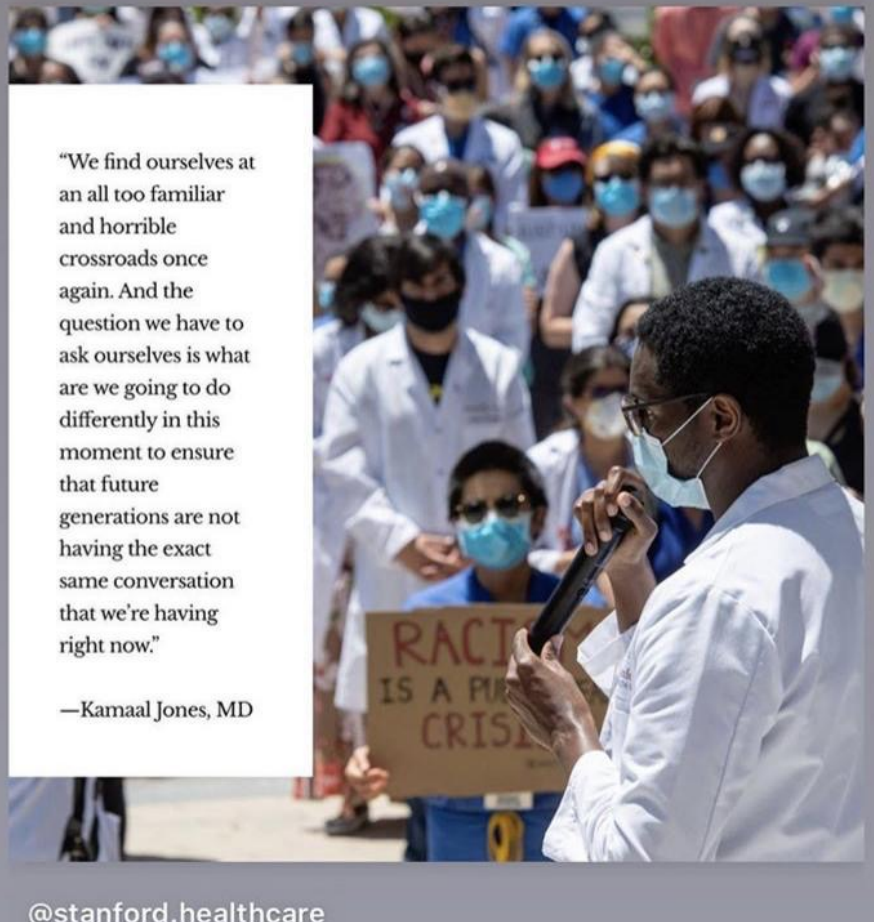
Overall goals	Strategies	Specific actions
Create an environment committed to change	Establish institutional commitment	• Increased commitment by Department of Medicine and Division of Cardiology leadership to increase diversity within the fellowship • Formation of diversity and inclusion in recruitment TF to examine barriers to successful recruitment of women and UREG applicants and to plan strategies for changing recruitment strategies
	Diversity and inclusion TF analysis and directives	• Performed detailed SWOT analysis and data gathering • Solicited feedback from highly ranked applicants who did not match at Duke in prior years • Recommended best practices
	Fellowship program leadership changes	• Woman PD appointed • PD underwent implicit bias mitigation training • Journal Club held to educate general cardiology fellows on implicit bias (hosted by A.L.C. and PD) • PD served as leadership council member of both the American College of Cardiology Training Council and Diversity and Inclusion TF and leader of division diversity and inclusion TF • 4 Associate PDs appointed (50% women; 25% UREGs)
	FRC changes	• Restructured to be more inclusive: all faculty welcome but had to attend FRC meetings and interview • Ensured at least 33% of the FRC were women faculty and at least 20% were UREGs
Deployment of interventions	Recruitment: application review changes	• Removed US Medical Licensing Examination score criteria • Blinded applicant reviewers to applicant picture • Established criteria for diverse applicant pool with goal for increased proportion of applicants interviewed to be women and UREGs (aimed for at least 25% each) • Ensured each applicant considered for an interview had 3 independent application reviewers • In addition, all UREG applications were independently reviewed by all UREG members of the Fellowship Recruitment Committee
	Recruitment: interview day changes	• Scheduled current women and UREG fellows to attend preinterview dinners to meet with women and UREG applicants • Solicited information from applicants about area of clinical and research interests and list of faculty they would like to meet • Highlighted the diversity of institutional leadership and success of women and UREG cardiology faculty • Paired women applicants with at least 1 women interviewer and another interviewer in area of interest or potential mentor • Paired UREG applicants with at least 1 UREG interviewer and another interviewer in area of interest or potential mentor • PD interviewed all applicants • Collaborated with Department of Medicine Minority Recruitment and Retention Committee to identify trainee development opportunities and resources at Duke in education, research, and mentorship and handed out brochure during interview • Scheduled end of interview day informal receptions with fellowship leadership, women fellows, and women and UREG applicants to discuss any remaining questions
	Recruitment: applicant ranking changes	• Discussed top candidates with both general FRC and specifically women and UREG faculty and fellows to ensure inclusivity and diversity in our highly ranked applicants
Evaluation and continued improvement	Postmatch interventions	• Promoted our successes throughout the institution with regard to increased recruitment of women and UREG applicants • Ensured strong mentorship for women and UREG fellows who matched at our institution • Held division journal clubs to disseminate information on the benefits of diversity in medicine • Continued to obtain feedback from applicants who were ranked to match but did not as to reasons they did not select our program • Fostered relationships with Duke School of Medicine students and Internal Medicine residents to mentor and develop a pipeline of excellent & diverse applicants • Collaborated with SOM initiatives to improve diversity in faculty recruitment

Abbreviations: FRC, Fellowship Recruitment Committee; PD, program director; SOM, School of Medicine; SWOT, Strength, Weakness, Opportunity, and Threat; TF, task force; UREG, underrepresented racial and ethnic groups.

Rymer J, et al. JAMA Network Open (2021)

Take Home Message

- UIM candidates are small in # due to **structures of their exclusion** from medicine (not pathologizing race, but rather racism)
- Be intentional. Actions speak louder than words.
- We are the gatekeepers! Focus on structural barriers to recruitment + inclusion













Gratitude

@LahiaYemaneMD lyemane@stanford.edu

Resources

- AAMC Holistic Review Resources:
  - https://www.aamc.org/services/member-capacity-building/holistic-review
- AAMC Video: Implicit Bias in Virtual Interviews:
  - https://vimeo.com/443088643
- Allegories on Race and Racism (Camara Jones):
  - https://www.youtube.com/watch?v=GNhcY6fTyBM
- Legos and the 4 I's of Oppression:
  - https://youtu.be/3WWyVRo4Uas