Diversity and Inclusion in Graduate Medical Education

William McDade, MD, PhD
Chief Diversity, Equity and Inclusion Officer
Accreditation Council for Graduate Medical Education
What Covid-19 taught us

Race Data for COVID-19 Patients Key to Assess Health Disparities

AMA and other leading physician groups are calling for access to race data in the context of COVID-19 testing, care access, and mortality data to identify health disparities.

It's No Surprise That COVID-19 Is Exposing Health Disparities

The coronavirus' impact on African Americans requires us to address an ongoing problem for U.S. communities.

The coronavirus is infecting and killing black Americans at an alarmingly high rate
Covid-19’s Disproportionate impact on minority individuals

Prevalence among US adults of selected risk factors and an overall Centers for Disease Control and Prevention (CDC) indicator for being at high risk for severe COVID-2019 illness, by race and ethnicity, 2014-2017

Job characteristics among US workers, by race and ethnicity, 2014-17

TM Selden and TA Berdahl Health Affairs 39, NO. 9 (2020): 1624–1632
Why now?
What can medicine do in response?

So if George had come to see you, instead of writing, "This is a 56-year-old male with a history of no-shows and noncompliance with his medications," consider whether the note should begin with this acknowledgement in your mind, "This is a 56-year-old African American man, recently violated, burdened by violence, managing unimaginable stressors, yet despite all of those barriers to him being here, he presents for one fair shot at his health today."
ACGME pledges to demand justice

It is our collective duty to advocate for all our patients, and to care equally and equitably for all our patients, even as we care about our patients. We must use the support and appreciation the public has provided us due to the heroic altruistic work we have seen in health care across our nation in response to the COVID-19 pandemic. We must leverage that heightened social standing to speak out on behalf of everyone, promote equity and fairness, and demand justice in all its forms, especially in the provision of health care to all who require it.
ACGME’s role

Eliminating health care disparities is consistent with the mission of the ACGME to improve health care and population health by assessing and enhancing the quality of resident physicians' education through advancements in accreditation and education.

Provide an assurance function to the public through accreditation.

Provide outreach and education to support the formative elements of change in the GME environment that leads to better health for the patients today and in the future.
ACGME foundational principles in DEI

• Society must view health care disparities as a deficiency in healthcare quality
• Health equity is a means to achieve elimination of healthcare disparities
• Increasing workforce diversity is a means to achieve health equity
• Inclusion is a tool to ensure that diversity is successful
ACGME action Steps

• ACGME formed an Office for Diversity Equity and Inclusion (DEI)
• Modified common program requirements to address DEI
• Changed its mission to address the formative piece that programs typically lack experience and expertise in DEI
• Changed its vision to explicitly add diversity and inclusion as a key element
• Developed new tools to assess programs and institutions for compliance
• Developing learning communities to continuously improve DEI practices
Evidence of Racial and Ethnic Disparities in Healthcare

584 pages detailing the extent of racial and ethnic differences in healthcare that are not otherwise attributable to known factors such as access to care

**Disparities consistently found across a wide range of disease areas and clinical services**

Disparities are found even when clinical factors, such as stage of disease presentation, co-morbidities, age, and severity of disease are taken into account

Disparities are **found across a range of clinical settings**, including public and private hospitals, teaching and non-teaching hospitals, etc.

Disparities in care are **associated with higher mortality** among minorities (e.g., Bach et al., 1999; Peterson et al., 1997; Bennett et al., 1995)
Empathy gap

We have become comfortable with disparities because they are not our problem.

We have become disconnected because we are not proximate to those who are suffering.

Vaclav Havel, Czech leader spoke of a willingness of the spirit to sometimes be in hopeless places and be a witness.

Bryan Stevenson, founder/executive director of the Equal Justice Initiative at AAMC Learn Serve Lead 2019
Inverse association between where physicians practice and where disease burden is greatest

Life expectancy differs greatly based on zip code

Geographic co-location of physicians and disease may positively affect health outcomes

Physician distribution is not homogeneous nor related to disease burden
Inverse association between where physicians practice and where disease burden is greatest

Life expectancy differs greatly based on zip code

Geographic co-location of physicians and disease may positively affect health outcomes

Physician distribution is not homogeneous nor related to disease burden

NYT 5 Sept 2020

Racial disparities in orthopedic care

Racial disparities in access to care exist in Medicare inpatients several cardiovascular, cancer and orthopedic procedures.

From 2012-2018, Black patients received 67,000 fewer orthopedic procedures than if the care had been equitably distributed.

In this same period, high-quality facilities performed 38,000 fewer orthopedic procedures for Black patients.

For the nearly 2 million Medicare patients who received knee replacements, all non-white groups were less likely to be treated at a High Performing hospital than white patients when compared to the overall breakdown of who is getting these surgeries at all.
Where you live matters

Odds of being a PCP shortage area were 67 percent higher for majority African American zip codes

As the degree of segregation increased, the odds of being a PCP shortage area increased for majority African American zip codes

Workforce Diversity matters to the elimination of health disparities

- Eliminating health care disparities is consistent with the mission of the ACGME to improve health care and population health by assessing and enhancing the quality of resident physicians' education through advancements in accreditation and education.

- ACGME envisions a health care system where the quadruple aim has been realized, aspiring to advance a transformed system of GME with global reach that is immersed in evidence-based, data-driven, clinical learning and care environments defined by excellence in clinical care, safety, cost effectiveness, professionalism, and diversity and inclusion.

- Educating physicians who are more likely to serve underserved patients and locate in minority communities increases health care access and improves trust, communication and outcomes for those most at risk for health disparities.

Adopted by ACGME Board of Directors September 2020
2019 MSQ Results: Do you plan to practice primarily in an underserved community?


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### 2020 GQ Results: Do you plan to practice primarily in an underserved community?

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<th>Undecided</th>
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Table I. Unadjusted Association Between Disadvantaged Population and Receipt of Care From White vs Black, Hispanic, and Asian Physicians, Medical Expenditure Panel Survey, 2010

<table>
<thead>
<tr>
<th>Patient Characteristic</th>
<th>Millions of Patients With a White Physician</th>
<th>Millions of Patients With a Black Physician</th>
<th>Unadjusted Odds Ratio (95% CI)&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Millions of Patients With a Hispanic Physician, No. (%)</th>
<th>Unadjusted Odds Ratio (95% CI)&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Millions of Patients With an Asian Physician, No. (%)</th>
<th>Unadjusted Odds Ratio (95% CI)&lt;sup&gt;c&lt;/sup&gt;</th>
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<td>All patients</td>
<td>62.2 (100.0)</td>
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<td>Non-Hispanic whites</td>
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<td>Minorities</td>
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<td>2.2 (65.3)</td>
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<td>0.1 (5.1)</td>
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<td>High/middle</td>
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<td>Low</td>
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<td>2.1 (34.5)</td>
<td>1.92 (1.44-2.55)</td>
<td>2.8 (29.1)</td>
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<td>Medicaid</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>None</td>
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<td>1 [Reference]</td>
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<td>Medicaid</td>
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<td>Any health insurance</td>
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<td>3.1 (95.2)</td>
<td>1 [Reference]</td>
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<td>1 [Reference]</td>
<td>9.3 (94.0)</td>
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<tr>
<td>Uninsured</td>
<td>3.5 (5.7)</td>
<td>0.1 (4.8)</td>
<td>0.83 (0.49-1.41)</td>
<td>0.6 (9.9)</td>
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<td>Non-English home language</td>
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<td>0.1 (3.2)</td>
<td>1.18 (0.51-2.69)</td>
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<td>17.83 (12.80-24.82)</td>
<td>1.9 (19.6)</td>
<td>8.69 (6.19-12.19)</td>
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</tbody>
</table>

<sup>a</sup> Odds of patients in a demographic group reporting a black physician relative to non-Hispanic white patients reporting a black physician.

<sup>b</sup> Odds of patients in a demographic group reporting a Hispanic physician.

<sup>c</sup> Odds of patients in a demographic group reporting an Asian physician relative to non-Hispanic white patients reporting an Asian physician.
Primary care physicians who treat Blacks and Whites

Cross-sectional analysis of a nationally representative sample of 150,391 visits by black and white Medicare beneficiaries to 87,893 physicians

Most visits by black patients were with a small group of physicians (80% of visits were accounted for by 22% of physicians) whereas these same physicians (19,492) only saw 22% of white patients; 68,311 physicians saw 78% of white patients, but only 20% of black patients.

Physicians treating black patients report greater difficulties in obtaining access for their patients to subspecialists, diagnostic imaging, and nonemergency hospital admission.

A black physician was 39.9 times more likely to see a black patient than was a white physician.
Increasing racial/ethnic diversity in the physician workforce

Isn’t forcing people to work where they don’t want to work

Isn’t limiting patient access to the best physicians

Isn’t forcing patients to only see doctors of their own race/ethnicity

Proximity is an important factor, but not the only factor

Physicians’ willingness to work in disadvantaged communities and to accept Medicare/Medicaid

Patient choice plays a role
What might be driving this preference?

- Trust, respect, communication, self-advocacy
- Intention to adhere to medical advice
- Patient satisfaction
- Improved clinical outcomes?
Vaccine hesitancy among minoritized individuals

Everyday racism can be tackled in the present.

Framing the conversation about distrust in Covid vaccines in terms of everyday racism rather than historical atrocities may increase underserved communities’ willingness to be vaccinated.

Concordance and Communication

Information seeking was higher among Black participants after they viewed messages from Black physicians.

Supports the important role that health professionals and other leaders in communities of color play in enhancing the acceptance of COVID-19 vaccination and other interventions.

Concordance across dimensions other than ethnicity may be more important for Latinx patients.

Ensuring that messages are accurate, available, and comprehensible is insufficient — recipients must also trust the messenger. Trust is most likely when information is delivered by a messenger who is known and has a positive relationship with the community.


Does Diversity Matter for Health?

Black subjects were more likely to talk with a black doctor about their health problems.

Black doctors are more likely to write additional notes about the subjects.

CV disease impact was significant, leading to a 19% reduction in the black-white male gap in cardiovascular mortality.

Diabetes, cholesterol screening and invasive testing were up 20%.

Flu shots were significantly more likely.

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M Alsan, O Garrick, and GC Graziani, NBER Working Paper No. 24787, June 2018, Revised September 2018

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Race matters in perinatal mortality

1.8 million hospital births in Florida between 1992 and 2015; Black newborn deaths are 3x greater than that of whites

Patient–physician concordance benefitted Black newborns with Black physicians by 53-56% compared to discordant care

No significant improvement in maternal mortality based on racial concordance

PNAS September 1, 2020 117 (35) 20975-20976
Race-conscious professionalism

Describes the process black professionals confront when attempting to navigate the competing demands of professionalism, racial obligations, and personal integrity.

Hispanic and black physicians tend to not leave minority communities once they settle in such areas, and when they move, they tend to move to areas similar to those that they are from.


Brown T et al. Does the under- or overrepresentation of minority physicians across geographical areas affect the location decisions of minority physicians? Health Serv Res 2009 44(4):1290-308

Does a biomedical faculty that resembles the population improve health care?

Minority medical scholars tend to study problems that impact minority communities (Ginther et al. 2011 Science 333:1015)

Racial congruence may play a role in recruitment of minorities in clinical trials (Fryer et al. (2016) Qualitative Health Research, 26(6), 830–841)

Minority faculty serve as role models, mentors and advocates for minority students in the educational process (Pololi LH, et al. (2013) Academic Medicine 88: 1308–1314 and many others)
The role as teacher dispels bias and racism

False stereotype disruption through humanizing the other
Demystifies white intellectual superiority
Mitigates stereotype threat\(^1\)
Disrupts imposter syndrome
Reinforces/restores confidence

Does this mean that the only solution to eliminate racial and ethnic health disparities is to increase diversity in the workforce?

Disparity in physician number is too wide not to educate all.

Patients are free to choose whomever they prefer.

All physicians should be comfortable in taking care of anyone.
Review of Common Program Requirements

Concurrent with the work of the Planning Committee, the Board was driving a review of its Common Program Requirements overall. This was mostly driven by Section VI and modification of the clinical and educational work hours, but included other areas of importance.

Three new program requirements in Sections I.C, V and VI.B.6 bear directly on areas identified by the Planning Committee.

Changes went into effect 1 July 2019.
ACGME is interested in improving the quality of resident education and a measure of this has been the first-time specialty certification exam pass rate.

Each specialty residency review committee had been able to set its own floor as to what constituted a successful first-time pass rate.

ACGME has now made the first-time pass rate the same for all specialties.

ACGME is now concerned with collection of longitudinal board certification data to examine ultimate pass rate compared to first-time pass rate with respect to quality of performance in practice.

URiM students have had lower median scores on standardized examinations for MCAT and USMLE Steps 1 and 2.
Modified program requirements regarding first-time board pass rates

Intended to reduce importance of USMLE Step 1 performance
Reduces the unintended consequences of the emphasis now placed on Step 1
Allows medical schools to stress their distinctive strengths as opposed to having a national curriculum
May improve ability to diversify specialties that have overemphasized the importance of USMLE Step 1 performance and currently have little diversity

Do we overemphasize standardized examination performance?

94-99% of physicians ultimately pass their board certifying examinations.

Considerable evidence correlates MCAT with USMLE Step 1 score, and USMLE Step 1 score with first-time board examination performance.

First-time passage has not been shown to correlate with stronger clinical performance.

No correlation between high quality practice outcomes for physicians trained in programs that selected trainees with higher standardized medical licensure scores. Using standardized test scores to determine who is the “best” clinician was not supported in this study.

Complication rates for graduates in practice best correlated with the complication rate of the residency program in which they trained. The effect persisted for 17 years post-residency.

Judging medical training programs by subsequent patient outcomes places the evaluation of medical training much closer to its purpose than do evaluations based on admission selectivity, board scores, or rankings by news magazines or leaders in the field.
New Common Program Requirement I.C.

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 workforce of residents, fellows (if present), faculty members, senior administrative staff members, and other relevant members of its academic community. (Core)
Who is the target of diversity?

Focused primarily on racial and ethnic underrepresented minority individuals but is inclusive of diversity across a broad range of categories including gender, orientation, religion, age, ability, national origin or ancestry, among others.

The mission of the ACGME is to improve health care and population health by assessing and advancing the quality of resident physicians' education through accreditation and education.

Focus is to provide a workforce that is consistent with accomplishing this mission.
AAMC’s Underrepresented in Medicine Definition (URiM)

• Before 2003: URM (Blacks, Mexican-Americans, Native Americans (American Indians, Alaska Natives, and Native Hawaiians), and mainland Puerto Ricans.

• The AAMC remains committed to ensuring access to medical education and medicine-related careers for individuals from these four historically underrepresented racial/ethnic groups.

• March 19, 2004, the AAMC Executive Committee adopted a clarification to its definition of "underrepresented in medicine" (URiM)

• "Underrepresented in medicine means those racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population."

• Shift in focus from a national perspective to a regional or local perspective on underrepresentation

• Shift from a fixed aggregation of four groups to a continually evolving underlying reality of demographics of society and the profession

• Data collection and reporting on a broader range of racial and ethnic self-descriptions
**The context of diversity**

The term ‘diversity’ is often used in connection with the passage of the U.S. Civil Rights Act of 1964, has been expanded to include an ever-growing list of identities—race, gender, and sexual orientation to physical appearance, belief systems, thought styles, socioeconomic status, and rural/urban geographic location, among others. This is a welcome extension of representation, but this added context has a downside: it threatens to make the ideals represented in this essay—equality of opportunity, freedom from discrimination, and recognition of the value of all human beings—threatening the future of blacks broadly in science. Racial minorities are scarce among blacks in science and engineering, and these minorities are not increasing in numbers. Therefore, it is not surprising that so many groups are interested in achieving diversity. With so many groups, it is difficult to define diversity and the goals for achieving diversity. There are two primary goals: increasing the number of blacks in science and engineering, and increasing the number of blacks in the workforce. These goals are necessary to achieve the goals of diversity. The number of blacks in science and engineering is increasing, but the number of blacks in the workforce is not. This is because blacks are not represented in the workforce. Therefore, it is necessary to increase the number of blacks in science and engineering, and this will require increasing the number of blacks in the workforce.
Black Men in White Coats

Documentary Calls Out Stereotypes, Issues Urgent Call-To-Action For A Black Male Physician Pipeline

Dr. Dale Okorodudu, UT Southwestern
## Total number of active residents 2019-20

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Core Programs</th>
<th>Overall specialty and subspecialty</th>
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<td>White non-Hispanic</td>
<td>56,077 (47.7%)</td>
<td>68,835 (47.5%)</td>
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<tr>
<td>Asian/Pacific Islander</td>
<td>22,752 (19.4%)</td>
<td>29,256 (20.2%)</td>
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<td>Hispanic</td>
<td>7,291 (6.2%)</td>
<td>8,891 (6.1%)</td>
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<td>Black Non-Hispanic</td>
<td>6,153 (5.2%)</td>
<td>7,376 (5.1%)</td>
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<tr>
<td>Native American/Alaska Native</td>
<td>356 (0.3%)</td>
<td>428 (0.3%)</td>
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<td>Other</td>
<td>7,430 (6.3%)</td>
<td>9,846 (6.8%)</td>
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<td>Unknown</td>
<td>17,437 (14.8%)</td>
<td>20,356 (14.0%)</td>
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<td><strong>Total</strong></td>
<td><strong>117,496</strong></td>
<td><strong>144,988</strong></td>
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## Number of active residents 2019 by school type

**Table 6. Race and Hispanic Ethnic Origin of Resident Physicians on Duty December 31, 2019, by Type of Medical School From Which They Graduated**

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<thead>
<tr>
<th>Race b</th>
<th>US and Canadian allopathic</th>
<th>US osteopathic</th>
<th>Non-US</th>
<th>Total</th>
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<tr>
<td>Black</td>
<td>5193 (64.8) [6.0]</td>
<td>533 (6.7) [2.4]</td>
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<td>American Indian/Alaska Native</td>
<td>152 (80.0) [0.2]</td>
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<td>19 (10.0) [0.06]</td>
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<td>White</td>
<td>52 660 (68.4) [60.9]</td>
<td>14 329 (18.6) [65.2]</td>
<td>9975 (13.0) [30.9]</td>
<td>76 964 [54.7]</td>
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<td>Asian</td>
<td>19 387 (51.7) [22.4]</td>
<td>4423 (11.8) [20.1]</td>
<td>13 667 (36.5) [42.4]</td>
<td>37 477 [26.6]</td>
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<td>Native Hawaiian/Pacific Islander</td>
<td>56 (55.4) [0.06]</td>
<td>18 (17.8) [0.08]</td>
<td>27 (26.7) [0.08]</td>
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<td>Multiracial</td>
<td>3107 (65.5) [6.0]</td>
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<td>5286 (40.2) [16.4]</td>
<td>13 135 [9.3]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnic origin b</th>
<th>US and Canadian allopathic</th>
<th>US osteopathic</th>
<th>Non-US</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>7177 (60.5) [8.3]</td>
<td>846 (7.1) [3.8]</td>
<td>3837 (32.4) [11.9]</td>
<td>11 860 [8.4]</td>
</tr>
<tr>
<td>Non-Hispanic</td>
<td>79 233 (61.5) [96.1]</td>
<td>21 126 (16.4) [88.1]</td>
<td>28 397 (22.1) [88.1]</td>
<td>128 756 [91.6]</td>
</tr>
<tr>
<td>Total c</td>
<td>86 410 (61.5) [91.7]</td>
<td>21 972 (15.6) [88.1]</td>
<td>32 234 (22.9) [88.1]</td>
<td>140 616</td>
</tr>
</tbody>
</table>

---

*Includes resident physicians on duty as of December 31, 2019, reported through the 2019 National GME Census. A total of 195 programs (1.6%) did not provide updated information on residents by March 1, 2020. For these nonresponding programs, resident physicians reported from the last received survey were moved into their next year in the program or graduated. Association of American Medical Colleges databases where available. “Multiracial” refers to residents who have self-identified as more than 1 race. A person of Hispanic ethnicity may be of any race. These total data apply to each subsection separately (ie, total for race and total for ethnic origin). c The 2019 National GME Census imported self-designated race/ethnicity from.*
White, Non-Hispanic by Specialty
2016-2017 Academic Year

- Internal medicine: 7166
- Family medicine: 5558
- Emergency medicine: 3954
- Surgery: 3634
- Pediatrics: 3048
- Anesthesiology: 2684
- Obstetrics and gynecology: 2751
- Radiology-diagnostic: 2032
- Psychiatry: 2320
- Orthopaedic surgery: 2235
- Pathology-anatomic and clinical: 1011
- Neurology: 993
- Otolaryngology: 859
- Dermatology: 822
- Ophthalmology: 760
- Urology: 741
- Internal medicine/Pediatrics: 693
- Neurological surgery: 687
- Plastic surgery: 662
- Plastic surgery - integrated: 395
- Radiation oncology: 370
- Preventive medicine: 177
- Plastic surgery: 173
- Child neurology: 157
- Vascular surgery - integrated: 136
- Thoracic surgery - integrated: 10
- Medical genetics and genomics: 34
- Nuclear medicine: 25
- Interventional radiology - integrated: 8
- Osteopathic neuromusculoskeletal: 8

Osteopathic neuromusculoskeletal: 100.0%
Interventional radiology - integrated: 61.5%
Orthopaedic surgery: 59.4%
Urology: 58.1%
Emergency medicine: 58.0%
Dermatology: 57.7%
Thoracic surgery - integrated: 57.1%
Otolaryngology: 55.2%
Plastic surgery: 54.7%
Radiology-diagnostic: 52.9%
Plastic surgery - integrated: 52.8%
Ophthalmology: 52.6%
Vascular surgery - integrated: 52.3%
Otolaryngology: 51.2%
Obstetrics and gynecology: 51.0%
Radiation oncology: 50.6%
Preventive medicine: 50.1%
Physical medicine and rehabilitation: 50.0%
Neurological surgery: 50.0%
Family medicine: 49.3%
Medical genetics and genomics: 47.9%
Surgery: 46.8%
Internal medicine/Pediatrics: 46.7%
Anesthesiology: 45.5%
Child neurology: 43.6%
Pathology-anatomic and clinical: 43.3%
Psychiatry: 41.3%
Neurology: 37.5%
Nuclear medicine: 33.8%
Pediatrics: 33.6%
Internal medicine: 27.2%
Asian and Pacific Islander by Specialty
2016-2017 Academic Year

Radiation oncology: 25.2%
Interventional radiology - integrated: 23.1%
Child neurology: 21.7%
Ophthalmology: 21.4%
Internal medicine: 21.1%
Pathology-anatomic and clinical: 20.9%
Neurology: 20.8%
Radiology-diagnostic: 20.3%
Nuclear medicine: 20.3%
Physical medicine and rehabilitation: 20.2%
Psychiatry: 19.8%
Plastic surgery: 18.0%
Family medicine: 17.6%
Anesthesiology: 17.6%
Vascular surgery - integrated: 17.3%
Preventive medicine: 17.3%
Thoracic surgery - integrated: 16.8%

Urology: 15.4%
Neurological surgery: 15.3%
Otolaryngology: 15.2%
Dermatology: 13.7%
Medical genetics and genomics: 12.7%
Plastic surgery - integrated: 12.4%
Surgery: 12.2%
Pediatrics: 12.2%
Internal medicine/Pediatrics: 10.7%
Emergency medicine: 10.2%
Obstetrics and gynecology: 9.5%
Orthopaedic surgery: 9.1%

Osteopathic neuromusculoskeletal: 0.0%

16.6%
Black, Non-Hispanic by Specialty
2016-2017 Academic Year

Preventive medicine 12.5%
Obstetrics and gynecology 7.4%
Family medicine 6.9%
Psychiatry 5.9%
Physical medicine and rehabilitation 5.5%
Plastic surgery 5.4%
Child neurology 5.3%
Anesthesiology 4.5%
Surgery 4.5%
Neurological surgery 4.4%
Internal medicine/Pediatrics 4.4%
Medical genetics and genomics 4.2%
Nuclear medicine 4.1%
Emergency medicine 4.1%
Internal medicine 3.9%
Pediatrics 3.9%
Dermatology 3.5%
Radiation oncology 3.2%
Radiology-diagnostic 3.2%
Orthopaedic surgery 3.1%
Urology 2.9%
Pathology-anatomic and clinical 2.9%
Plastic surgery - integrated 2.8%
Neurology 2.8%
Ophthalmology 2.4%
Vascular surgery - integrated 2.3%
Otolaryngology 1.9%
Thoracic surgery - integrated 0.6%
Interventional radiology - integrated 0.0%
Osteopathic neuromusculoskeletal… 0.0%

Internal medicine 1020%
Family medicine 780%
Obstetrics and gynecology 400%
Surgery 369%
Pediatrics 251%
Psychiatry 232%
Anesthesiology 282%
Emergency medicine 279%
Radiology-diagnostic 191%
Orthopaedic surgery 116%
Physical medicine and rehabilitation 73%
Neurology 70%
Pathology-anatomic and clinical 67%
Internal medicine/Pediatrics 65%
Neurological surgery 55%
Dermatology 50%
Preventive medicine 44%
Urology 37%
Ophthalmology 31%
Otolaryngology 30%
Radiation oncology 24%
Plastic surgery - integrated 21%
Child neurology 19%
Plastic surgery 17%
Vascular surgery - integrated 6%
Medical genetics and genomics 3%
Nuclear medicine 3%
Thoracic surgery - integrated 1%
Interventional radiology - integrated 0%
Osteopathic neuromusculoskeletal… 0%
Native American by Specialty
2016-2017 Academic Year

- Family medicine: 0.6%
- Internal medicine: 6.4%
- Surgery: 25%
- Psychiatry: 18%
- Anesthesiology: 17%
- Emergency medicine: 16%
- Obstetrics and gynecology: 13%
- Pediatrics: 13%
- Orthopedic surgery: 11%
- Radiology-diagnostic: 11%
- Neurology: 5%
- Physical medicine and rehabilitation: 5%
- Otolaryngology: 4%
- Plastic surgery-integrated: 4%
- Neurological surgery: 3%
- Dermatology: 2%
- General medicine/Pediatrics: 2%
- Pathology-anatomic and clinical: 2%
- Radiation oncology: 2%
- Ophthalmology: 1%
- Plastic surgery: 1%
- Preventive medicine: 1%
- Urology: 1%
- Vascular surgery-integrated: 1%
- Child neurology: 0%
- Interventional radiology: 0%
- Medical genetics and genomics: 0%
- Nuclear medicine: 0%
- Osteopathic neuromusculoskeletal: 0%
- Thoracic surgery-integrated: 0%

0.2%
Males by Specialty
2016-2017 Academic Year

Interventional radiology - integrated: 84.6%
Orthopaedic surgery: 82.8%
Neurological surgery: 81.5%
Thoracic surgery: 79.9%
Urology: 73.9%
Radiology-diagnostic: 73.5%
Thoracic surgery - integrated: 72.0%
Plastic surgery: 70.3%
Radiation oncology: 69.6%
Nuclear medicine: 66.2%
Anesthesiology: 64.0%
Emergency medicine: 63.9%
Otolaryngology: 63.9%
Transitional year: 63.3%
Vascular surgery - integrated: 62.7%
Physical medicine and rehabilitation: 60.2%
Surgery: 59.6%
Ophthalmology: 58.5%
Colon and rectal surgery: 57.9%
Plastic Surgery - Integrated: 56.6%
Preventive medicine: 54.7%
Internal medicine: 53.8%
Neurology: 53.6%
Pathology-anatomic and clinical: 49.3%
Psychiatry: 46.7%
Family medicine: 44.6%
Internal medicine/Pediatrics: 40.3%
Osteopathic neuromusculoskeletal...: 37.5%
Dermatology: 36.1%
Child neurology: 33.3%
Medical genetics and genomics: 32.4%
Allergy and immunology: 28.6%
Pediatrics: 24.9%
Obstetrics and gynecology: 16.9%

Pathology-anatomical and clinical: 5026
Neurology: 4870
Emergency medicine: 4398
Anesthesiology: 3974
Radiology-diagnostic: 3504
Orthopaedic surgery: 3115
Psychiatry: 2623
Otolaryngology: 2611
Neurology: 1364
Pathology-anatomic and clinical: 1151
Neurological surgery: 1121
Otolaryngology: 985
Urology: 943
Obstetrics and gynecology: 809
Ophthalmology: 846
Physical medicine and rehabilitation: 797
Transitional year: 703
Internal medicine/Pediatrics: 598
Radiation oncology: 521
Dermatology: 514
Plastic Surgery - Integrated: 423
Pediatrics: 272
Preventive medicine: 193
Thoracic surgery: 182
Vascular surgery - integrated: 163
Child neurology: 120
Thoracic surgery - integrated: 116
Allergy and immunology: 65
Colon and rectal surgery: 55
Nuclear medicine: 49
Medical genetics and genomics: 23
Interventional radiology - integrated: 11
Osteopathic neuromusculoskeletal...: 3

© 2021 ACGME
Females by Specialty
2016-2017 Academic Year

- Obstetrics and gynecology: 81.6%
- Allergy and immunology: 69.7%
- Medical genetics and genomics: 67.6%
- Child neurology: 66.7%
- Pediatrics: 66.6%
- Dermatology: 63.6%
- Osteopathic neuromusculoskeletal...: 62.5%
- Internal medicine/Pediatrics: 56.4%
- Family medicine: 54.2%
- Psychiatry: 49.7%
- Pathology-anatomic and clinical: 49.3%
- Preventive medicine: 45.6%
- Colon and rectal surgery: 42.1%
- Neurology: 41.4%
- Ophthalmology: 41.0%
- Plastic Surgery - Integrated: 40.5%
- Internal medicine: 39.9%
- Physical medicine and rehabilitation: 39.4%
- Surgery: 36.5%
- Vascular surgery - Integrated: 36.2%
- Anesthesiology: 34.6%
- Otolaryngology: 34.6%
- Emergency medicine: 34.2%
- Nuclear medicine: 33.8%
- Transitional year: 31.4%
- Radiation oncology: 29.9%
- Plastic surgery: 29.7%
- Thoracic surgery - Integrated: 26.1%
- Radiology-diagnostic: 26.0%
- Urology: 25.5%
- Thoracic surgery: 20.1%
- Neurological surgery: 17.4%
- Interventional radiology - Integrated: 15.4%
- Orthopaedic surgery: 14.0%
### Table 8. Racial and Ethnic Origin of Resident Physicians in ACGME-Accredited and in Combined Specialty Graduate Medical Education (GME) Programs on Duty December 31, 2019, by Specialty

<table>
<thead>
<tr>
<th>Specialty</th>
<th>No. of resident physicians&lt;sup&gt;a,b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Black</td>
</tr>
<tr>
<td>Family medicine</td>
<td>1038</td>
</tr>
<tr>
<td>Clinical informatics</td>
<td>0</td>
</tr>
<tr>
<td>Geriatric medicine</td>
<td>0</td>
</tr>
<tr>
<td>Sports medicine</td>
<td>14</td>
</tr>
<tr>
<td>Hospice and palliative medicine&lt;sup&gt;c&lt;/sup&gt;</td>
<td>10</td>
</tr>
<tr>
<td>Internal medicine</td>
<td>1737</td>
</tr>
<tr>
<td>Adult congenital heart disease</td>
<td>0</td>
</tr>
<tr>
<td>Advanced heart failure and transplant cardiology</td>
<td>2</td>
</tr>
<tr>
<td>Cardiovascular disease</td>
<td>160</td>
</tr>
<tr>
<td>Clinical cardiac electrophysiology</td>
<td>13</td>
</tr>
<tr>
<td>Clinical informatics</td>
<td>4</td>
</tr>
<tr>
<td>Critical care medicine</td>
<td>12</td>
</tr>
<tr>
<td>Endocrinology, diabetes, and metabolism</td>
<td>26</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>84</td>
</tr>
<tr>
<td>Geriatric medicine</td>
<td>16</td>
</tr>
<tr>
<td>Hematology</td>
<td>1</td>
</tr>
<tr>
<td>Hematology and medical oncology</td>
<td>70</td>
</tr>
<tr>
<td>Infectious disease</td>
<td>48</td>
</tr>
<tr>
<td>Interventional cardiology</td>
<td>13</td>
</tr>
<tr>
<td>Medical oncology</td>
<td>1</td>
</tr>
<tr>
<td>Nephrology</td>
<td>50</td>
</tr>
<tr>
<td>Pulmonary disease</td>
<td>5</td>
</tr>
<tr>
<td>Pulmonary disease and critical care medicine</td>
<td>68</td>
</tr>
<tr>
<td>Rheumatology</td>
<td>19</td>
</tr>
<tr>
<td>Transplant hepatology</td>
<td>2</td>
</tr>
<tr>
<td>Medical genetics and genomics</td>
<td>0</td>
</tr>
<tr>
<td>Medical biochemical genetics</td>
<td>1</td>
</tr>
<tr>
<td>Molecular genetic pathology</td>
<td>0</td>
</tr>
</tbody>
</table>
What programs can do to increase diversity

Increase diversity and provide an inclusive learning environment

View increasing diversity as a long-term strategy:

- Increase the number of diverse learners in pre-residency (Pathway programs)
- Work cooperatively with other programs in your institution or within your specialty to drive diverse individuals into the medical profession
- Recruit and try to increase your current numbers, but don’t compete against one another – emphasize cooperation not competition
- If you show active work in pathway programs, eventually showing tracking of participants, even if your residency numbers don’t increase for a number of years, your program will still achieve substantial compliance
Physician Pipeline—“Pathway” Problem

There are not enough URiMs that reach training in GME.
GME heretofore believed itself to be more of a recipient of the product than a driver of the fountainhead of the pipeline.
Can we turn a dribble into a gusher?
Opportunities for Partnership

Science Technology Engineering and Math → STEM and Medicine STEMM

Many community programs focus on early learners but don’t feel comfortable connecting with hospitals and academic medical centers in their communities - reach out to them.

Half of the programs ACGME accredits are not directly associated with a medical school – If these programs actively engage with STEMM programs, we can greatly enhance community partnerships.

AMCs have resources and can provide mentors and opportunities.

AMCs have also constructed barriers and can remove them to enhance access.
What is Systematic Retention?

A compliant program should demonstrate adequate support and mentorship for all trainees: Regularize Individualized Learning Plans.

Workforce plan should address the removal of barriers that impede successful advancement of trainees.

Retention descriptions in ADS Annual Update must include descriptions of how the clinical learning environment addresses inclusion of diverse candidates.

Objective numerical outcomes will be used to assess success of retention efforts.
What happens when you increase diversity in an environment unaccustomed to it?

Matriculation of residents from underrepresented groups requires social adaptation of the learning environment:

- Mitigating cultural underexposure or indifference
- Cessation of stereotypical projections
- Reduction of environmental elements that trigger imposter syndrome
- Effectively addressing uncivil behavior

Diversity education, implicit bias training and mandatory demonstration of competence often engender resistance and resentment in the environment. Work is needed in medical education to determine:

- Most effective training (who and how best) and settings (where and why)
- Persistence of training (when)
Naming racism in order to dismantle it

- Institutionalized/Structural
- Personally-mediated
- Internalized

https://www.youtube.com/watch?v=GNhcY6fTyBM
Structural Racism – Racism without Racists

Woven into society’s fabric

Demonstrates how past mistreatment drives current inequities

Focused much more on outcomes than on bad actors

Measured by outcomes like disparities

May appear as subtle, unconscious, unintended structures or normative values that are based upon privileges afforded primarily to the dominant culture – White privilege: Unasked for and unearned

Remedy requires a change in social structures
"The greatest trick the Devil ever pulled was convincing the world he didn’t exist…"

Keyser Söze, by way of Charles Baudelaire

Dr. Aletha Maybank @... 4h
Thread on @JAMA_current: (JAMA has complete editorial independence from AMA so this would not come to me or my team for review) The podcast/tweet are/ were wrong, absolutely appalling & at its very core is a demonstration of structural & institutional racism. I am furious. 1/

Structural Racism for Doctors—What Is It?
Educational Objective
To identify the key insights or developments described in this podcast

Many physicians are skeptical of structural racism, the idea that economic, educational, and other social systems preferentially disadvantage Black Americans and other communities of color. Mitchell Katz, MD, president and chief executive officer of NYC Health + Hospitals, the largest U.S. public health care system,

JAMA Podcast on Racism in Medicine Faces Backlash
webmd.com
Inclusive Clinical Learning Environment
Obtained AAMC GQ data from 2016 and 2017 from 27,504 graduates

Compared with white students, Asian, URM, and multiracial students reported higher rates of mistreatment (24.0%, 31.9%, 38.0%, and 32.9%) and discrimination based on race/ethnicity (3.8%, 15.7%, 23.3%, and 11.8%, respectively)

URM female medical students reported the highest prevalence of racial/ethnic discrimination

How common is, abuse and discrimination?

7409 residents (99.3% of the eligible residents) from all 262 surgical residency programs surveyed
31.9% reported discrimination based gender, 16.6% reported racial discrimination, 30.3% reported verbal or physical abuse (or both), and 10.3% reported sexual harassment.

65.1% of the women reported gender discrimination and 19.9% reported sexual harassment.

Patients and families were most frequent sources of gender discrimination (43.6% of residents) and racial discrimination (47.4%), whereas attending surgeons were the most frequent sources of sexual harassment (27.2%) and abuse (51.9%).

Hu and Ellis et al. NEJM (2019) DOI: 10.1056/NEJMsa1903759
Bias toward staff

- M4 pre-rounds on infant and is told by parent that she doesn’t want anyone who has gotten into medical school because of affirmative action touching her baby
- On resident work rounds, asked to stay in the hall while the rest of the team sees her patient
- On attending rounds, the attending simply reassigns the student citing we don’t want to anger the patient’s family and there are other patients you can see…

Dealing with Racist Patients

- Patients have a right to refuse care
  Autonomy
  EMTALA

- Physicians and other health care workers have employment rights that must be balanced with patients’ rights.

- Patients should be informed that hateful or racist speech is not allowed, and this should be institutional policy

6956 residents in 301 programs sampled, 1346 (23.7%) reported discrimination (race/ethnicity/religion)

Discrimination rates were higher in blacks (171 of 242 [70.7%]), Asians (442 of 963 [45.9%]), Latinx (122 of 482 [25.3%]), and other nonwhites (175 of 526 [33.3%]) compared with whites (435 of 3455 [12.6%]).

For Blacks:
Different standards of evaluation (92 of 240 [38.3%])
Denied opportunities (39 of 242 [16.1%])
Slurs and hurtful comments (60 of 242 [24.8%])
Mistaken nonphysician 62.4%, someone else 55.8%

A daily barrage of microaggressions and bias

Minority residents tasked as race/ethnicity ambassadors

Challenges negotiating professional and personal identity while seen as “other”

“Nice to see you are finally trying”

“Are you the first person in your family to be a doctor?”

“You speak English really well”

“Is that your real hair, can I touch it?”

“Your name is too difficult for me, do you have a nickname?”

“You have such a chip on your shoulder”

Entire world, in all aspects of your life

Rarely said with misguided love

Small daily insults and indignities perpetrated against marginalized people because of their being in that group

More than just annoyances

Not just spoken insults

Oluo, Ijeoma. *So you want to talk about race.* Hachette UK, 2019
Microaggressions

Cumulative reminder that you are less than

On their own, each microaggression does not seem like a big deal, but as a cumulative process, it has a definite impact on the quality of your life and relationships with others

Come from multiple people, and since each microaggression seems small:

- Exhausting to confront each source
- Appear hypersensitive
- Often done without awareness of causing harm

Oluo, Ijeoma. *So you want to talk about race*. Hachette UK, 2019
Microaggressions

Cause isolation, invalidation, unworthiness of respect

Inability to predict where and when they will occur leads to hypervigilance and keep you off balance, distracted and defensive

Find a way into every part of every day, constant reminders that you don’t belong

They steal your joy and can ruin your day

Hard to address in real life because the are hard to see

Small and can be easily explained away as a misunderstanding or mistake

Those subjected to microaggressions are more likely to exhibit depression

Olou, Ijeoma. So you want to talk about race. Hachette UK, 2019
Race and the Learning Environment

Students from racial and ethnic minorities experience more microaggressions that they attribute to their race.

Studies suggest that the higher prevalence of depression symptoms among this subgroup of students is likely driven by factors within the learning environment rather than individual traits.

Medical schools need to do more to improve the learning environment for nonwhite students.
Ability to focus wanes
Engagement with work suffers
Feelings of apathy and hopelessness
Increased irritability, emotional exhaustion
Lack of productivity and poor performance

Burnout impairs job performance

Pipeline Withdrawn by Ethnicity (%)
Pipeline Dismissed by Ethnicity (%)
2015-2016 Pipeline Dismissed by Specialty

- Anesthesiology: 11.8% White, 23.5% Unknown, 5.9% Black, 17.6% Hispanic, 17.6% Other, 23.5% Asian or Pacific Islander
- Family medicine: 24.3% White, 13.5% Unknown, 13.5% Black, 13.5% Hispanic, 8.1% Other, 27.0% Asian or Pacific Islander
- Internal medicine: 19.1% White, 27.7% Unknown, 4.3% Black, 4.3% Hispanic, 31.9% Other, 12.8% Asian or Pacific Islander
- Obstetrics and gynecology: 13.3% White, 20.0% Unknown, 20.0% Black, 6.7% Hispanic, 40.0% Other
- Orthopaedic surgery: 42.9% White, 14.3% Unknown, 14.3% Black, 28.6% Hispanic, 28.6% Asian or Pacific Islander
- Pediatrics: 7.1% White, 21.4% Unknown, 7.1% Black, 7.1% Hispanic, 28.6% Other, 28.6% Asian or Pacific Islander
- Psychiatry: 27.3% White, 13.6% Unknown, 4.5% Black, 4.5% Hispanic, 27.3% Other, 22.7% Asian or Pacific Islander
- Surgery: 12.9% White, 25.8% Unknown, 6.5% Black, 9.7% Hispanic, Other, 41.9% Asian or Pacific Islander

- 3.1% of all ortho residents are Black
- 5.9% of all pediatrics residents are Black
- 5.1% of all surgery residents are Black
2015-2016 Pipeline Grads Dismissed by Specialty

- Anesthesiology:
  - White, non-Hispanic: 0.4%
  - Unknown Hispanic: 1.3%
  - Black, non-Hispanic: 2.0%
  - Asian or Pacific Islander: 0.6%
  - White, non-Hispanic: 4.1%

- Family medicine:
  - White, non-Hispanic: 0.7%
  - Unknown Hispanic: 1.4%
  - Black, non-Hispanic: 2.2%
  - Asian or Pacific Islander: 1.4%
  - White, non-Hispanic: 3.7%

- Internal medicine:
  - White, non-Hispanic: 0.7%
  - Unknown Hispanic: 1.2%
  - Black, non-Hispanic: 2.4%
  - Asian or Pacific Islander: 1.4%
  - White, non-Hispanic: 3.8%

- Obstetrics and gynecology:
  - White, non-Hispanic: 0.8%
  - Unknown Hispanic: 1.4%
  - Black, non-Hispanic: 2.4%
  - Asian or Pacific Islander: 1.4%
  - White, non-Hispanic: 3.8%

- Orthopaedic surgery:
  - White, non-Hispanic: 1.2%
  - Unknown Hispanic: 5.9%
  - Black, non-Hispanic: 6.7%
  - Asian or Pacific Islander: 3.3%
  - White, non-Hispanic: 10.3%

- Pediatrics:
  - White, non-Hispanic: 0.3%
  - Unknown Hispanic: 2.0%
  - Black, non-Hispanic: 2.0%
  - Asian or Pacific Islander: 0.2%
  - White, non-Hispanic: 3.5%

- Psychiatry:
  - White, non-Hispanic: 2.0%
  - Unknown Hispanic: 4.2%
  - Black, non-Hispanic: 1.4%
  - Asian or Pacific Islander: 2.4%
  - White, non-Hispanic: 6.1%

- Surgery:
  - White, non-Hispanic: 2.2%
  - Unknown Hispanic: 3.3%
  - Black, non-Hispanic: 6.7%
  - Asian or Pacific Islander: 4.2%
  - Black, non-Hispanic: 12.3%

- Latinx/White:
  - 14.75-fold Latinx/White; 31.25-fold Black/White

- Black/White:
  - 10.3-fold Black/White
  - 3.3-fold Black/White
  - 12.3-fold Black/White
  - 4.8-fold Latinx/White
  - 6.7-fold Black/White
  - 4.2-fold Black/White
  - 6.1-fold Black/White
Second-year med student Christopher Veal had just learned he failed a remediation course, necessitated because he had failed — by just one point — his final musculoskeletal exam.

Those failures were bad enough. Then, as a University of Vermont (UVM) dean was giving him this bad news, Veal heard the words he had dreaded. Two former classmates grimly told him: Whenever the dean asked this question, it was a signal he should consider quitting.

"Are you sure you really want to become a doctor?"

In an invited commentary published Feb. 9 in Academic Medicine, Veal, now in his fourth year at UVM's Larner College of Medicine, described how crushed and terrified he felt. He hid in a stairwell, got down on his knees and cried. He most certainly did want to become a doctor.
Table 2. Frequency of Mistreatment, Duty-Hour Violations, Burnout, and Suicidal Thoughts among U.S. Surgical Residents.\textsuperscript{a}

<table>
<thead>
<tr>
<th>Variable</th>
<th>Overall (N=7409)</th>
<th>Men (N=4438)</th>
<th>Women (N=2935)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>number (percent)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender discrimination</td>
<td>2366 (31.9)</td>
<td>442 (10.0)</td>
<td>1912 (65.1)</td>
</tr>
<tr>
<td>A few times per year</td>
<td>1453 (19.6)</td>
<td>325 (7.3)</td>
<td>1123 (38.3)</td>
</tr>
<tr>
<td>A few times per month or more frequently</td>
<td>913 (12.3)</td>
<td>117 (2.6)</td>
<td>789 (26.9)</td>
</tr>
<tr>
<td>Racial discrimination</td>
<td>1227 (16.6)</td>
<td>671 (15.1)</td>
<td>547 (18.6)</td>
</tr>
<tr>
<td>A few times per year</td>
<td>859 (11.6)</td>
<td>477 (10.7)</td>
<td>379 (12.9)</td>
</tr>
<tr>
<td>A few times per month or more frequently</td>
<td>368 (5.0)</td>
<td>194 (4.4)</td>
<td>168 (5.7)</td>
</tr>
<tr>
<td>Discrimination based on pregnancy or childcare status</td>
<td>532 (7.2)</td>
<td>144 (3.2)</td>
<td>383 (13.0)</td>
</tr>
<tr>
<td>A few times per year</td>
<td>361 (4.9)</td>
<td>84 (1.9)</td>
<td>275 (9.4)</td>
</tr>
<tr>
<td>A few times per month or more frequently</td>
<td>171 (2.3)</td>
<td>60 (1.4)</td>
<td>108 (3.7)</td>
</tr>
<tr>
<td>Any discrimination on the basis of gender, race,</td>
<td>2848 (38.4)</td>
<td>884 (19.9)</td>
<td>1950 (66.4)</td>
</tr>
<tr>
<td>or pregnancy or childcare status\textsuperscript{b}</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A few times per year</td>
<td>1773 (23.9)</td>
<td>645 (14.5)</td>
<td>1122 (38.2)</td>
</tr>
<tr>
<td>A few times per month or more frequently</td>
<td>1075 (14.5)</td>
<td>239 (5.4)</td>
<td>828 (28.2)</td>
</tr>
</tbody>
</table>

Only 5.1\% (810) of all surgery residents are Black, 8.8\% (810) are Latinx, 18.8\% (1737) are Asian.

Hu and Ellis et al. NEJM (2019) DOI: 10.1056/NEJMsa1903759

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<table>
<thead>
<tr>
<th>Variable</th>
<th>Overall (N = 7409)</th>
<th>Men (N = 4438)</th>
<th>Women (N = 2935)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Any mistreatment exposure†</strong></td>
<td>3694 (49.9)</td>
<td>1605 (36.1)</td>
<td>2073 (70.6)</td>
</tr>
<tr>
<td>A few times per year</td>
<td>2289 (30.9)</td>
<td>1120 (25.2)</td>
<td>1162 (39.6)</td>
</tr>
<tr>
<td>A few times per month or more frequently</td>
<td>1405 (19.0)</td>
<td>485 (10.9)</td>
<td>911 (31.0)</td>
</tr>
<tr>
<td><strong>Duty-hour violations of the 80-hr rule in the previous 6 mo — no. of mo</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>4518 (61.0)</td>
<td>2952 (66.5)</td>
<td>1548 (52.7)</td>
</tr>
<tr>
<td>1–2</td>
<td>1869 (25.2)</td>
<td>954 (21.5)</td>
<td>906 (30.9)</td>
</tr>
<tr>
<td>≥3</td>
<td>1022 (13.8)</td>
<td>532 (12.0)</td>
<td>481 (16.4)</td>
</tr>
<tr>
<td><strong>Outcome measures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burnout‡</td>
<td>2849 (38.5)</td>
<td>1591 (35.9)</td>
<td>1245 (42.4)</td>
</tr>
<tr>
<td>Suicidal thoughts‡</td>
<td>333 (4.5)§</td>
<td>173 (3.9)</td>
<td>156 (5.3)</td>
</tr>
</tbody>
</table>

Hu and Ellis et al. NEJM (2019) DOI: 10.1056/NEJMsa1903759

VI.B.6. Programs, in partnership with their Sponsoring Institutions, must provide a professional, equitable, respectful, and civil environment that is free from discrimination, sexual and other forms of harassment, mistreatment, abuse, or coercion of students, residents, faculty, and staff. (Core)
The Cost of Incivility
SEXUAL HARASSMENT OF WOMEN: Recommendations

• Address the most common form of sexual harassment: gender harassment
• Move beyond legal compliance to address culture and climate
• Create diverse, inclusive, and respectful environments
• Improve transparency and accountability

• Diffuse the hierarchical and dependent relationship between trainees and faculty
• Provide support for the target
• Strive for strong and diverse leadership

Addressing Harmful Bias and Eliminating Discrimination in Health Professions Learning Environments

- Build an institutional culture of fairness, respect and anti-racism by making diversity equity and inclusion top priorities
- Develop, assess, and improve systems to mitigate harmful biases and to eliminate racism and all other forms of discrimination
- Integrate equity into health professions curricula, explicitly aiming to mitigate the harmful effects of bias, exclusion, discrimination, racism, and all other forms of oppression
- Increased the numbers of health professions students, trainees, faculty, an institutional administrators and leaders from historically marginalized and excluded populations
ACGME Office of Diversity and Inclusion

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Do We Overemphasize Standardized Examination Performance?

William McDade, MD, PhD
Chief Diversity, Equity and Inclusion Officer
Accreditation Council for Graduate Medical Education
First-time board pass-rate
Changes relating to how programs will be assessed based on specialty board examination pass rate were made by the ACGME Board based on lack of evidence that passing the specialty board exam on the first attempt versus a subsequent attempt led to differences in practice performance.

However, there is considerable evidence that correlates MCAT with USMLE Step 1 performance, and that links USMLE Step 1 performance with specialty board examination performance.

So, the practice of using standardized test scores to determine who is “best” relies on what the definition of best should be: Test-taking ability or clinical performance and/or likelihood to serve the underserved.
The validity argument about using USMLE Step 1 and 2 scores for postgraduate residency selection decisions is neither structured, coherent, nor evidence based.

...scores are not associated with measures of clinical skill acquisition among advanced medical students, residents, and subspecialty fellows.
Do we overemphasize standardized examination performance?

94-99% of physicians ultimately pass their board examinations.

First-time passage does not correlate with stronger clinical performance.

Considerable evidence correlates MCAT with USMLE Step 1 score, and USMLE Step 1 score with first-time board examination performance.

Using standardized test scores to determine who is “best” has little merit.

ACGME modified common program requirements regarding first-time board pass rates

Intended to reduce importance of USMLE Step 1 performance

Reduces the unintended consequences of the emphasis now placed on Step 1

Levels the floor for all specialties in terms of percentage of first-time pass rate

Allows medical schools to stress their distinctive, mission-driven strengths as opposed to having a national curriculum
Since holistic admission relies less on standardized test performance history, expectations that standardized testing ability will improve without intervention to address the skills deficit is harmful:

- Provide individualized education supplementation
- Remove or reduce significance of standardized testing requirements from assessment and promotion in training

A Plea to Reassess the Role of United States Medical Licensing Examination Step 1 Scores in Residency Selection

“We do not believe that USMLE Step 1 scores should continue to be the major determining factor in the selection of graduating medical students for interview for graduate medical education positions.”

“These scores (USMLE STEP1) do not measure many clinical aptitudes and skills, qualities of professionalism, or competencies specific to the planned training program.”

“Although using numbers as a filter is a convenient way to screen large numbers of applications, USMLE Step 1 scores do not come close to reflecting the totality of attributes critically relevant to a candidate’s potential performance during residency training.”

Holistic Approaches to Residency Selection

Gives greater attention to other important qualities, such as clinical reasoning, patient care, leadership, professionalism, and ability to function as a member of a health care team

We will need more standardized modes of assessment and reporting that are readily sortable to do this

Other components of a holistic review of candidates should be nationally normed as well; these might include research experience and accomplishments, community engagement, leadership roles, unique personal attributes, and diversity
USMLE program announces upcoming policy changes

Posted: February 12, 2020

Today, the Federation of State Medical Boards (FSMB) and the National Board of Medical Examiners\textsuperscript{(R)} (NBME\textsuperscript{(R)}), co-sponsors of the United States Medical Licensing Examination\textsuperscript{(R)} (USMLE\textsuperscript{(R)}), announced upcoming policy changes to the USMLE program.

- **Changing Step 1 score reporting from a three-digit numeric score to reporting only pass/fail:**
- **Reducing the allowable number of exam attempts on each Step or Step Component from six to four; and**
- **Requiring all examinees to successfully pass Step 1 as a prerequisite for taking Step 2 Clinical Skills**

Those new policies will continue to enable the USMLE program to provide high-quality assessments for the primary user of exam results (state medical boards) while also addressing other considerations, such as exam security and unintended consequences of secondary score uses. The secondary uses of Step 1 scores for residency screening, in particular, have been the focus of extensive discussion over the past year at the FSMB and NBME, within the USMLE program, and with multiple stakeholders within the broader medical education and regulatory communities.

"These new policies strengthen the integrity of the USMLE and address concerns about Step 1 scores impacting student well-being and medical education," said Humayun Chaudry, DO, MACP, President and CEO of the FSMB. "Although the primary purpose of the exam is to assess the knowledge and skills essential to safe patient care, it is important that we improve the transition from undergraduate to graduate medical education."

"The USMLE program governance carefully considered input from multiple sources in coming to these decisions. Recognizing the complexity of the environment and the desire for improvement, continuation of the status quo was not the best way forward," reported Peter Katsufrakis, MD, MBA, President and CEO of NBME. "Both program governance and staff believe these changes represent improvements to the USMLE program and create the environment for improved student experiences in their education and their transition to residency."

These policy changes are currently planned to be phased in over the next 11-24 months. For specific information on each policy, consult the links above to the detailed statements accompanying each policy change. A podcast supplementing the information contained in this announcement is below.
Are there better ways to measure physician quality that link to medical education?

New work beginning with medical schools and ACGME will combine medical school parameters with milestones data from resident performance to begin to identify patterns that may be more correlative with actual practice in training.

Continued work examining physician performance and linking to training parameters might inform future decisions. As augmented intelligence permits associations to be discovered, prediction of performance may be more accurate.
Parental income directly correlates with MCAT performance

- Parental Income predicts MCAT
- MCAT predicts USMLE
- USMLE Step 1 predicts ITE and Board passage
- ACGME formerly evaluated programs on first-time board pass rate as opposed to eventual pass rate
- No correlation exists at present to link USMLE Step 1 performance and success as a clinician, so new interpretation of program quality de-emphasizes the need to select candidates based on achievement of a score that is seldom achieved by minority test-takers who arise from less wealthy families

Cohen JJ. The Consequences of Premature Abandonment of Affirmative Action in Medical School Admissions JAMA. 2003; 298(9):1143-9
Highland Diversification Initiative

No USMLE filter

Increased weight of gestalt score

Diversity Committee

Attending and resident buy-in

Diversity applicant week

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**Introduction**

In 2017, the US Census reported the racial/ethnic breakdown of the population as 60.7% white, 18.1% Hispanic/Latino, 13.4% Black, 5.8% Asian, 1.3% American Indian or Alaska Native, 0.3% Native Hawaiian or Other Pacific Islander, and 2.5% other races/ethnicities. The Hispanic/Latinx population has experienced the fastest growth among all racial/ethnic groups. The US Census data shows that the Hispanic/Latinx population has increased from 13% in 2010 to 18.1% in 2017, which is the fastest-growing racial/ethnic group in the United States. The American Indian/Alaska Native and Pacific Islander populations are also growing rapidly, but they remain substantially underrepresented compared to their proportion of the total US population.

In addition to the increasing Hispanic/Latinx population, the number of Asian, Black, and Native American/Alaskan Natives is also growing. Given the increasing diversity of the US population, the healthcare field faces a challenge to ensure that medical schools and residency programs adequately address the needs of diverse communities. To address this challenge, many institutions have implemented strategies to increase diversity among medical students, residents, and faculty.


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*Figure 2. Race/ethnicity of highland emergency medicine residents before and after the Highland diversification initiative.*
Program Requirement Changes to Section V: Board Certification

Program director should encourage all eligible program graduates to take the certifying examination offered by the applicable American Board of Medical Specialties (ABMS) member board or American Osteopathic Association (AOA) certifying board

V.C.3.a)-d) Board pass rate (addresses both written and oral exams):

The program’s aggregate pass rate of those taking the examination for the first time must be higher than the bottom fifth percentile of programs in that specialty averaged over 3 years (or 6 years in certain specialties)
Program Requirement Changes to Section V: Board Certification

V.C.3.e) Any program whose graduates over the time period specified in the requirement have achieved an 80 percent pass rate will have met this requirement, no matter the percentile rank of the program for pass rate in that specialty.

Rolling seven year certification rate
V.C.3.f) Programs must report board certification status annually for the cohort of board-eligible residents that graduated in the seven years earlier.
Microaggression prevention
Dr. S et al.

- Be intentional
  - Ask
  - Listen
  - Practice
  - Reaffirm

“The choice not to learn my name renders me invisible. It seeds disappointment and erodes my normally jovial spirit.”

https://www.teenvogue.com/story/names-that-are-unfamiliar-to-you-arent-hard-theyre-unpracticed
What’s in a name?

• Honoring your name is honoring you
• Some names automatically get revised/remixed and some don’t
• Exhaustion leads to acceptance of a name they don’t prefer or isn’t even theirs
• Respecting names is an antiracist act
• Pay attention to how people introduce and refer to themselves
• Note the name they sign emails with
• Some preference depend on circumstances
• Some get an automatic formal name/title default while others don’t – privilege must be acknowledged
Structural Racism Example
Board Certification Examination

Before 2012, the written exam was administered after the PGY-4 year in a single sitting.

Since then, examinees take a staged written exam on fundamental scientific concepts after the PGY-2 year and clinical topics after the PGY-4 year.

A passing score must be obtained on both in order to sit for the oral examination.

ACGME is now working with this board to ask whether race could have played a role for the observed disproportionate increase in dismissals of Black residents in 2015-16.

The unintended consequence of splitting the exam, administering it before training is completed, and penalizing failures with loss of advancement in the program could have contributed to outcomes post-2014.
Relative dismissal Black to Black+White

First cohort starts

%Black dismissals/total
Black resident dismissals

First cohort starts
Disparate impact analysis


Employer required a HS diploma and a passing score on two professionally developed tests

Lower court held the plaintiff failed to prove that the employer had a discriminatory motive

Title VII of the 1964 Civil Rights Act proscribes not only overt discrimination but also practices that are fair in form but discriminatory in operation.

“The absence of discriminatory intent does not redeem employment procedures or testing mechanisms that operate as built-in headwinds for minority groups and are unrelated to measuring job capacity”
Examine your practices and policies for structural racism

Does a practice or policy have a disproportionately adverse effect on members of the one group as compared to non-members of that group?

- Blacks have lower income and may be less likely to afford test prep and have experience with high stakes exams prior to residency (Wealth gap)
- Entering MCATs for Blacks are comparatively lower
- Residency is the “Great Equalizer” over four years
  - More inclusive learning communities form in residency
  - Curriculum and pedagogy focused on certification
  - ITEs provide multiple exposures to exam content and practice improves performance
  - Mitigation of stereotype threat – internalized racism

By moving a P/F exam two years earlier in training, the full 4-yr benefit has not been realized

Since failure is linked to not receiving training credit with the board after the second attempt, PDs view this failure as a measure of learner quality and cost to the program (Salary and benefits to be paid after the initial residency period ends)

Many have elected to dismiss residents after failure of the first element of split exam.
Resident as peer and teacher dispels bias and racism

Steele, Claude M. *Whistling Vivaldi: And other clues to how stereotypes affect us (issues of our time)*. WW Norton & Company, 2011.

Stereotype disruption through humanizing the other
Demystifies white intellectual superiority
Mitigates stereotype threat
Disrupts imposter syndrome
Reinforces confidence
Path to dismantling

Acknowledgement
- Measure
- Compare

Acceptance
- Resist urge to deny
- Listen to what the data tell you
- Determine what must be changed

Action
- Inform steps to create positive change on the basis of data and evidence
- Look for disparate impact in any action taken

Assessment
- Ensure steps taken achieve the goals intended
- Continuously re-evaluate to improve
Action now

Every medical education entity should collect data on race/ethnicity/ and language demographics as a best practice

- Promotes transparency
- Mitigates aversive racism and shows where structural racism may be operating

Every medical education entity should perform disparate impact analysis of its test items, processes, norms, mission, values, practices and policies with the goal of promoting equity

Start where you are, use what you have, do what you can – Arthur Ashe, Days of Grace