Racism and Racial Bias in Medicine

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MedNet21
Center for Continuing Medical Education

The Ohio State University
Wexner Medical Center

Racism and Racial Bias in Medicine

- Evidence for Racism and Racial Bias in Medicine
- Impact on Patient Care
- Impact on Diversity of the Medical Profession
- Counteracting and Preventing Racism and Bias in Medicine

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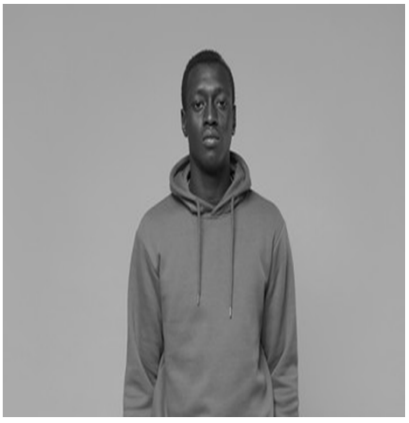
A Role for Implicit Bias?



Physicians' Implicit and Explicit Attitudes About Race by MD Race, Ethnicity, and Gender

Sabin, Nosek, Greenwald, Rivara
J Health Care Poor Underserved. 2009 August; 20(3): 896–913.

- " . . . Implicit preference for White Americans was strong among all MD groups except for African American MDs"
- "White MDs showed the strongest implicit preference for Whites"
- "African American MDs, on average, did not show an implicit preference for either White Americans or Black Americans"

Physician Implicit Racial Bias is One Thing …

But What About Physician **Explicit** Racial Bias (Racism)?

Black-White Race IAT also asks for self-reported explicit racial biases

White, Asian, and Hispanic physicians have self-reported having mild levels of **explicit** anti-black bias, or racism1,2.

Medical students self-report **explicit** negative attitudes toward Blacks3

1Sabin. J of Healthcare for Poor Underserved. 2009
2Capers. Academic Medicine. 2017
3Harrison. Proc Baylor U Med Ctr. 2019

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The Effects of Oncologist Implicit Racial Bias in Racially Discordant Oncology Interactions

- 18 Oncologists (non-Black) took the Black-White IAT
- Treatment of 112 Black pts several weeks later
- Office visits were recorded and "graded" by neutral observers
- Oncologists higher in implicit racial bias had shorter interactions
- Patients and observers rated these oncologists' communication as less patient-centered

Penner. Journal of Clinical Oncology 34, no. 24 (August 2016)

Disparities in Cardiovascular Care: Physician Bias?

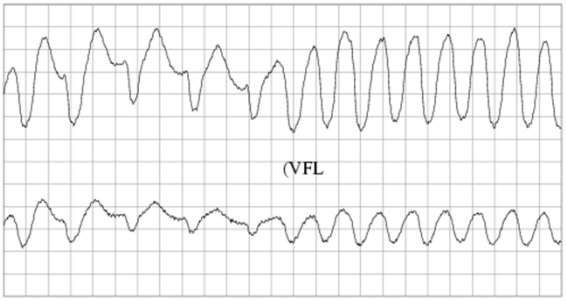
- ***Green, et al. J Gen Int Med 2007***
- 220 IM and EM residents from 4 programs in Boston and Atlanta completed web-based study
- Participants took "Implicit Association Test" : computer-based, psychological test to measure unconscious bias
- Participants were unaware of purpose of study

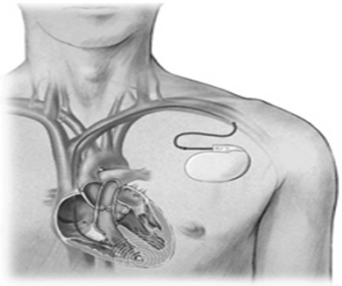
Disparities in Cardiovascular Care: Physician Bias?

- Clinical Vignette:

- Mr. T is a 50 year old male smoker with HTN who presents to the ED having a heart attack.
- Residents were less likely to treat the Black man with thrombolytic therapy (heart attack drug)
- Biggest predictor of the decision to not treat the Black man: implicit negative bias about Blacks and implicit association of Black Man = "less cooperative"

I. AICD therapy in pts at risk for SCD





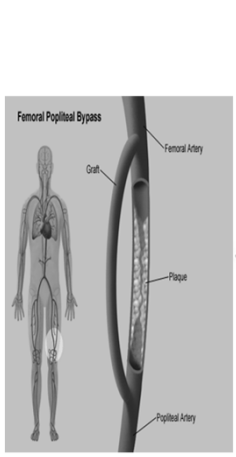
AICD Therapy in Patients at Risk for Cardiac Arrest

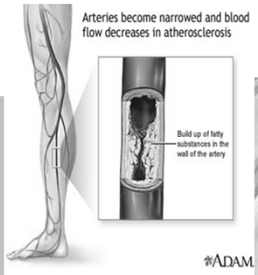
Circ 2003 Jul 22; 108 (3):286-291
6,000 Medicare patients after cardiac arrest
OR for Blacks (vs Whites) to receive AICD: 0.5

Circ 2016 Aug 16;134(7):517-26
21,000 pts with severely weakened heart muscle

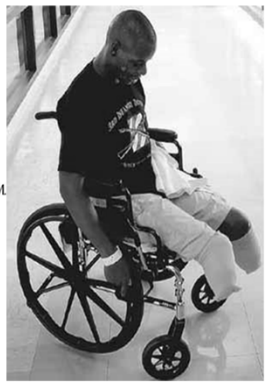
Blacks and Hispanics less likely than Whites to get counseled re: ICD

II. Restoring Blood Flow to Blocked Leg Arteries





Which would you prefer?



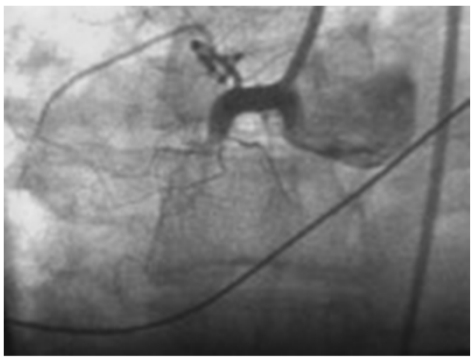
Treating Poor Circulation

- **Arch Surg 1995 Apr; 130 (4): 381-6**
  19,236 Medicare pts with LE ischemia
  African Americans compared to Whites:
  More likely to undergo amputation
  Less likely to undergo revascularization

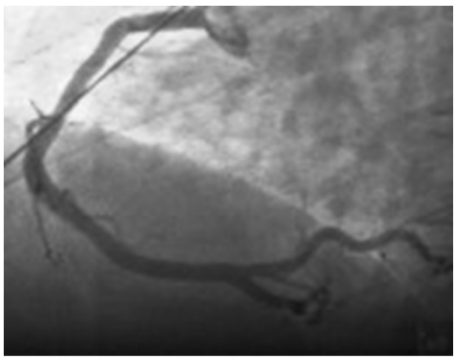
- **J Racial Ethn Health Disparities. 2017**
  African Americans 200% and Hispanics 50% more likely to have amputation than Whites

III. Rapid Treatment of Blocked Heart Arteries in Heart Attack Victims

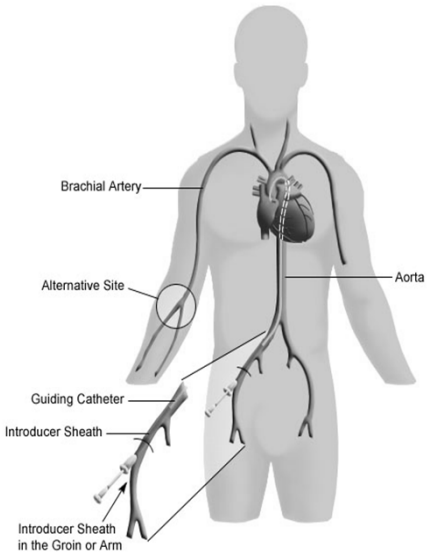
Before stent, artery closed, no blood flow to heart

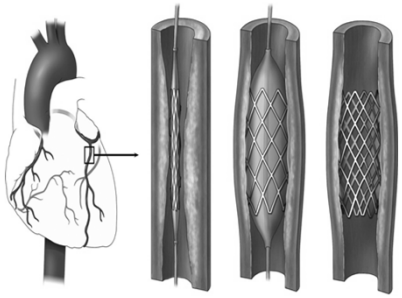


After stent, artery open, blood flow to heart restored



Cardiac Catheterization and Stent Placement:
A Life-Saving Therapy for Heart Attack





The Effect of Race and Sex on Physicians' Recommendations for Cardiac Catheterization

"Men and whites were significantly more likely to be referred than women and blacks."

Kevin Schulman, MD, et. al, NEJM, February, 1999

Temporal trends and predictors of time to coronary angiography following non-ST-elevation acute coronary syndrome in the USA

Muhammad Rashid[a,b], David L. Fischman[f], Sara C. Martinez[g], Quinn Capers IV[h], Michael Savage[f], Azfar Zaman[c], Nick Curzen[d], Joie Ensor[a], Jessica Potts[a], Mohamed O. Mohamed[a,b], Chun Shing Kwok[a,b], Tim Kinnaird[e], Rodrigo Bagur[a,i] and Mamas Mamas[a,b]

- National US Inpatient Sample, 4.3 million NSTEMI/USA pts, 2004-2014
- 57% of pts received coronary angiography
- Endpoint: Early (within 24 hrs) vs Late (> 3d after admission) coronary angiography

Coronary Artery Disease 2019.

Temporal trends and predictors of time to coronary angiography following non-ST-elevation acute coronary syndrome in the USA

Findings:
Independent predictors of LATE vs EARLY coronary angiography:

- Female gender
- African American race
- Weekend admission
- Lack of Private Insurance

Coronary Artery Disease 2019

J. Racial and Ethnic Health Disparities (2014) 1:171–180
DOI 10.1007/s40615-014-0021-7

Racial Disparities in Cardiovascular Care: A Review of Culprits and Potential Solutions

Quinn Capers IV · Zarina Sharalaya

Received: 28 January 2014 / Revised: 25 March 2014 / Accepted: 30 April 2014 / Published online: 23 May 2014

J of Racial and Ethnic Health Disparities: 2014

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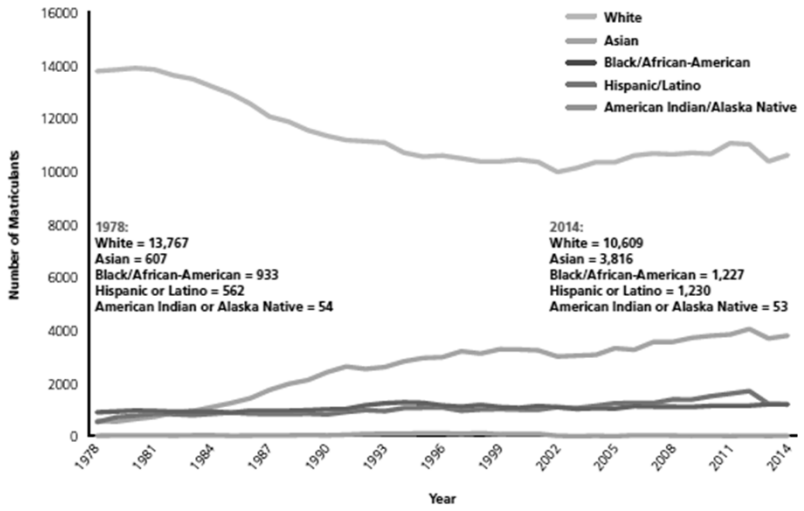
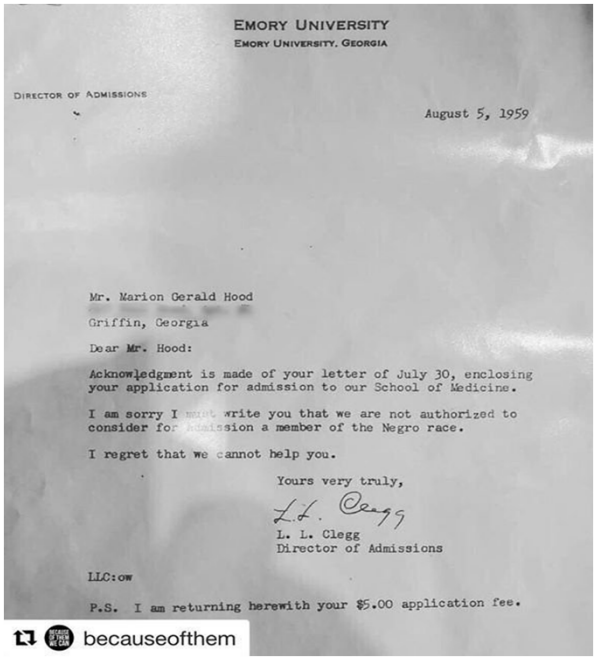
Matriculants

FIGURE 2. U.S. medical school matriculants by race and ethnicity, 1978–2014.





EMORY UNIVERSITY
EMORY UNIVERSITY, GEORGIA

DIRECTOR OF ADMISSIONS

August 5, 1959

Mr. Marion Gerald Hood
Griffin, Georgia

Dear Mr. Hood:

Acknowledgment is made of your letter of July 30, enclosing your application for admission to our School of Medicine.

I am sorry I must write you that we are not authorized to consider for admission a member of the Negro race.

I regret that we cannot help you.

Yours very truly,

L. L. Clegg
Director of Admissions

LLC:ow

P.S. I am returning herewith your $5.00 application fee.

becauseofthem

From Emory University, Aug 5, 1959

"Dear Mr. _____

I am sorry I must write you that we are not authorized to consider for Admission a member of the Negro Race."

Implicit Racial Bias in Medical School Admissions

Quinn Capers IV, MD, Daniel Clinchot, MD, Leon McDougle, MD, and Anthony G. Greenwald, PhD

Abstract

Problem
Implicit white race preference has been associated with discrimination in the education, criminal justice, and health care systems and could impede the entry of African Americans into the medical profession, where they and other minorities remain underrepresented. Little is known about implicit racial bias in medical school admissions committees.

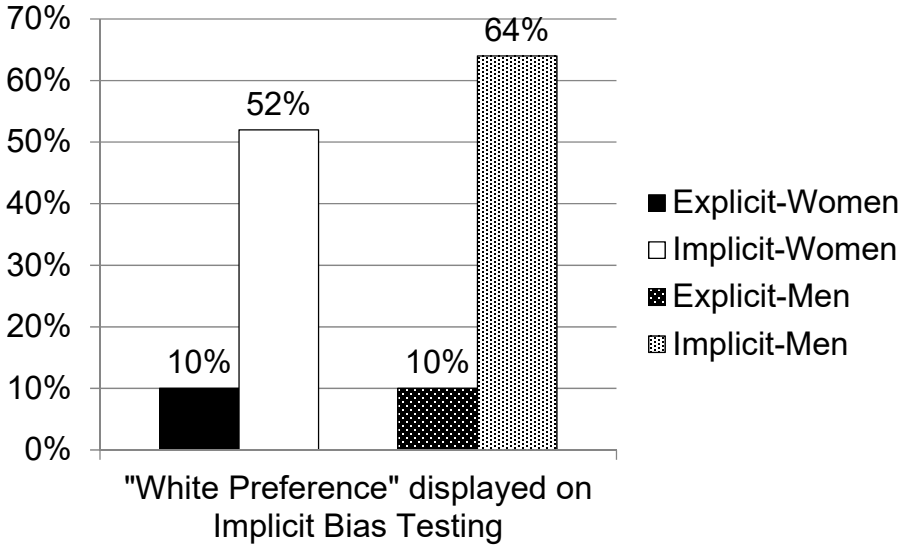
Approach
To measure implicit racial bias, all 140 members of the Ohio State University College of Medicine (OSUCOM) admissions committee took the black–white implicit association test (IAT) prior to the 2012–2013 cycle. Results were collated by gender and student versus faculty status. To record their impressions of the impact of the IAT on the admissions process, members took a survey at the end of the cycle, which 100 (71%) completed.

Outcomes
All groups (men, women, students, faculty) displayed significant levels of implicit white preference; men ($d = 0.697$) and faculty ($d = 0.820$) had the largest bias measures ($P < .001$). Most survey respondents (67%) thought the IAT might be helpful in reducing bias, 48% were conscious of their individual results when interviewing candidates in the next cycle, and 21% reported knowledge of their IAT results impacted their admissions decisions in the subsequent cycle. The class that matriculated following the IAT exercise was the most diverse in OSUCOM's history at that time.

Next Steps
Future directions include preceding and following the IAT with more robust reflection and education on unconscious bias. The authors join others in calling for an examination of bias at all levels of academic medicine.

Academic Medicine. March 2017

Implicit Bias Testing: White Preference OSU COM Admissions Committee 2012



Implicit Bias in Medical School Admissions

26

"An Exploration of Myths, Barriers, and Strategies for Improving Diversity Among STS Members"

- STS Task Force on Diversity and Inclusion surveyed 5,158 members with a response rate of 9.3% (n = 481 respondents). Questions:
  - What are some of the barriers to diversity and/or inclusion within cardiothoracic surgery?
  - If there is a barrier not included in the list above, please explain.
  - How can STS improve diversity and/or inclusion in cardiothoracic surgery and/or the Society?

Backus. Annals of Thoracic Surgery. 2019

"An Exploration of Myths, Barriers, and Strategies for Improving Diversity Among STS Members"

- *"White males are currently being discriminated against in admission to college, med school and residency programs! CT [cardiothoracic] surgery should be a meritocracy."*
- *"I do not believe barriers exist. This myth of the necessity of diversity and inclusiveness is political correctness on steroids. We need to worry about turning out well trained residents…."*
- *"[The STS] doesn't need to [address diversity] and this should not even be on the radar of things to be done." (15% of respondents)*
- *"There are no barriers. None of the above are important!"*

Backus. Annals of Thoracic Surgery. 2019

ORIGINAL RESEARCH

Perceptions on Diversity in Cardiology: A Survey of Cardiology Fellowship Training Program Directors

Anna Lisa Crowley, MD; Julie Damp, MD; Melanie S. Sulistio, MD; Kathryn Berlacher, MD, MS; Donna M. Polk, MD; Robert A. Hong, MD; Gaby Weissman, MD; Dorothy Jackson, PhD, RN; Chittur A. Sivaram, MD; James A. Arrighi, MD; Andrew M. Kates, MD; Claire S. Duvernoy, MD; Sandra J. Lewis, MD; Quinn Capers IV, MD

110 respondents (57% of US Cardiology Fellowship Programs represented)

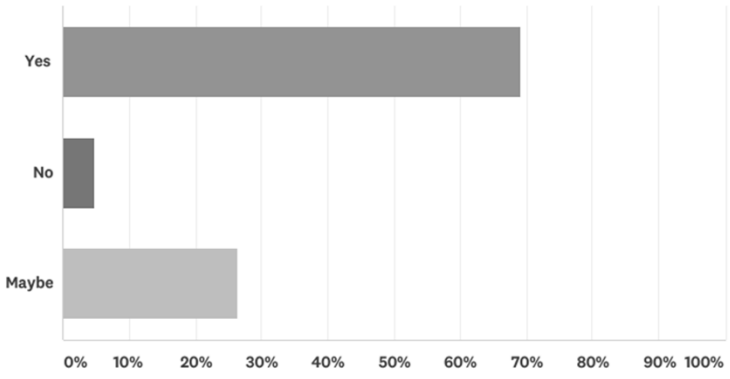
55% Adult General Cardiology

45% Adult Subspecialty Cardiology

Crowley. JAHA. 2020

Q3 “Diversity is a driver of excellence in healthcare delivery, ” in other words, the more diversity represented amongst your health care providers, the better the care delivered to patients. Do you believe this statement is true?

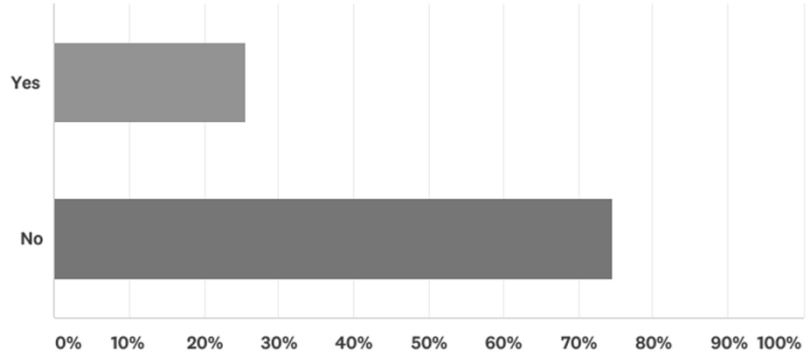
Answered: 110 Skipped: 0



Crowley. JAHA. 2020

Q4 Can you quote 1-2 references that support this statement?

Answered: 110 Skipped: 0



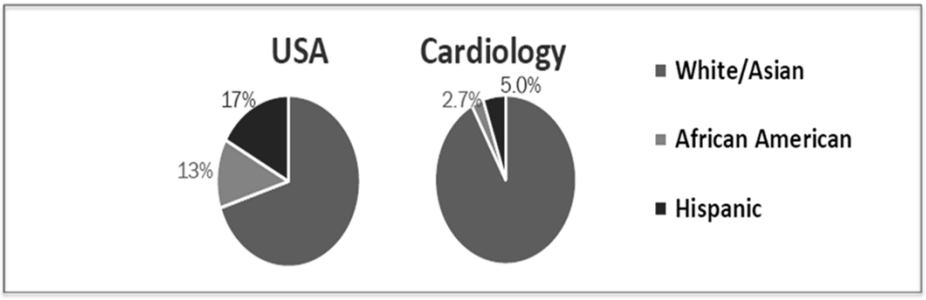
Crowley. JAHA. 2020

Q8 Which statement most accurately describes your position with respect to increasing diversity in your program?

1) 21%: We want to Increase Diversity in Our Program, But Don't Know How to Do it

2) 18%: We want to Increase Diversity in Our Program, and Have a Plan to Do it

3) 61%: Our Program is Diverse Already So Diversity Does not Need to be Increased



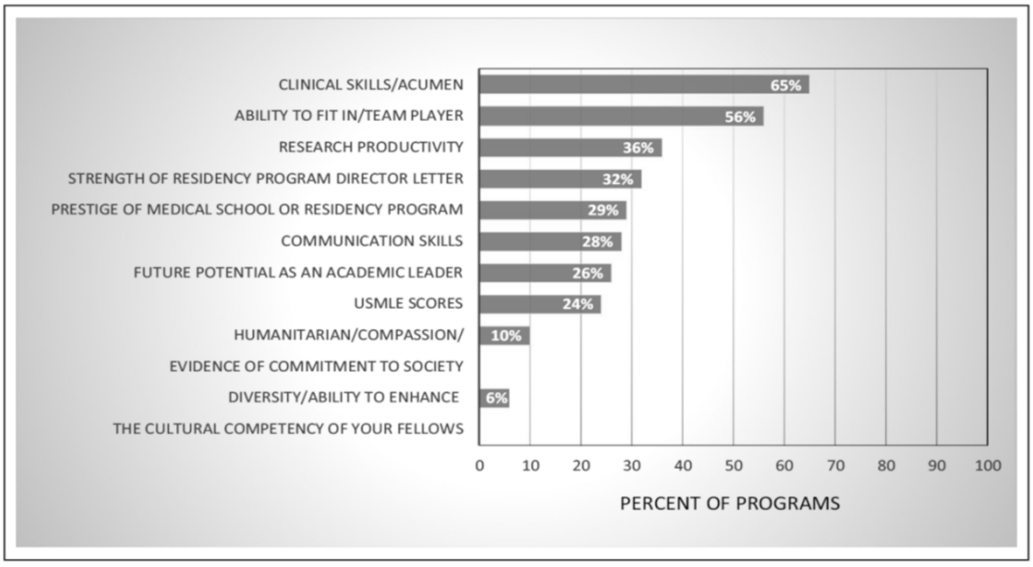
Crowley. JAHA. 2020

Top 3 Considerations When Making Your Rank List?

"Cigar smoke-filled backroom"

Crowley. JAHA. 2020

Top 3 Considerations When Making Your Rank List?



Crowley. JAHA. 2020

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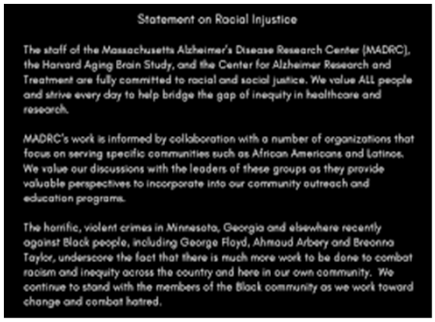
2020: Racism/Racial Bias is a "Second Pandemic"

- Blacks, Hispanics:
  - Overrepresented in Patients Hospitalized for COVID
  - Overrepresented in Patients Dying From COVID
  - Overrepresented in those Dying From Fatal Police Encounters (While Unarmed)
  - Underrepresented in the Medical Profession

Academic Medical Centers Bold Anti-Racism Statements



The Most Powerful Anti-Racism Statement That Medicine Can Make is …

- To Diversify Our Ranks!

Eliminate Bias and Racism

- Training. Rehearsing. Training Some More
- Direct Interventions
- Promote Anti-Racism Images/Role Models/Social Media
- Enhance Diversity in Medicine by Dismantling Bias/Racism in “Pipeline”
  - Deep Pipeline
  - Selection Strategies

How Clinicians and Educators Can Mitigate Implicit Bias in Patient Care and Candidate Selection in Medical Education

Quinn Capers IV

Cardiovascular Medicine, The Ohio State University College of Medicine, Columbus, Ohio

ABSTRACT

In an attempt to help us navigate a complex world, our unconscious minds make certain group associations on the basis of our experiences. Physicians are not immune to these implicit associations or biases, which can lead physicians to unknowingly associate certain demographic groups with negative concepts, like danger, noncompliance, and lower competence. These biases can influence clinical decision making in ways that potentially harm patients and may unfairly influence the medical school, residency, and fellowship application processes for candidates in certain underrepresented groups. To minimize the potential negative impact of implicit biases on patient care and diversity in the medical profession, physician-leaders have a responsibility to understand biases and how to consciously override them. This article discusses the potential impact of implicit bias in health care and student/trainee selection and reviews research-proven tools to reduce implicit bias in one-on-one interactions.

Keywords
implicit bias; race; black; white

You have all the data: the X-rays, computed tomography scans, electrocardiogram, laboratory tests, and results of the history and physical. Or, you have interviewed the well-dressed applicant to your residency or fellowship program after reviewing in detail the Electronic Residency Application Service application, photo, and letters of recommendation. It is decision time. Will your conscious mind or your unconscious mind have the final say in your disposition?

WHAT IS IMPLICIT BIAS?

On the basis of images and stimuli that we have repeatedly experienced, our brains make positive or negative associations about certain groups of people. A positive example would be the association of a

(Received in original form February 26, 2020; accepted in final form May 13, 2020)

Correspondence and requests for reprints should be addressed to Quinn Capers IV, M.D., Professor of Medicine (Cardiovascular Medicine), The Ohio State University College of Medicine, 370 West 9th Avenue, Columbus, OH 43210-1238. E-mail: quinn.capers@osumc.edu.

Originally Published as DOI: 10.34197/ats-scholar.2020-0024PS

ATS SCHOLAR

HOW CLINICIANS AND EDUCATORS CAN MITIGATE IMPLICIT BIAS IN PATIENT CARE AND CANDIDATE SELECTION IN MEDICAL EDUCATION

Author: @DrQuinnCapers4 DOI: 10.34197/ats-scholar.2020-0024PS

1. **REMOVE OR BLIND PHOTOS IN ERAS APPLICATIONS**
Physical features can trigger biases. Removal of photographs from medical school & GME ERAS applications prior to admission committee review may mitigate bias.

2. **REMOVE ACADEMIC METRICS FROM APPLICATION**
MCAT scores, GPAs, & all other academic records removed prior to admission committee review to avoid bias. To ensure applicants met evidence-based thresholds for success at the medical school staff members screened applications prior to review by admission committee members.

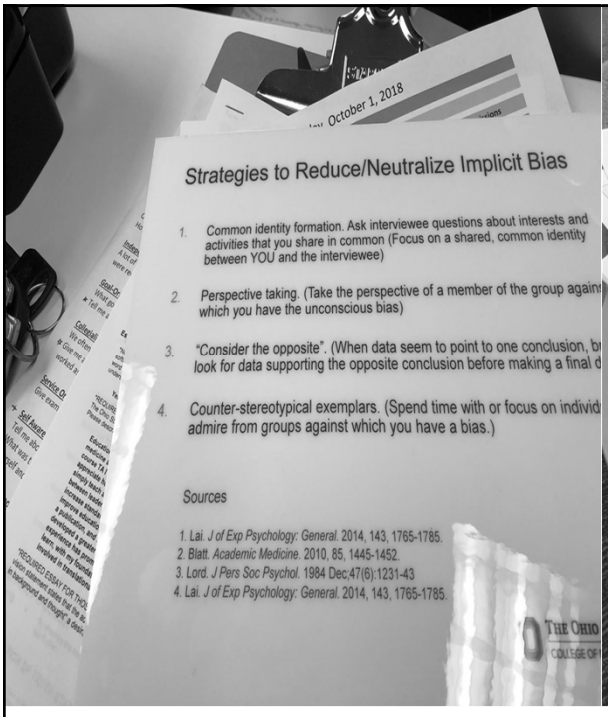
3. **MANDATORY IMPLICIT ASSOCIATION TESTING**
All application reviewers and admissions committee members are expected to complete one or two IATs prior to start of the application cycle.

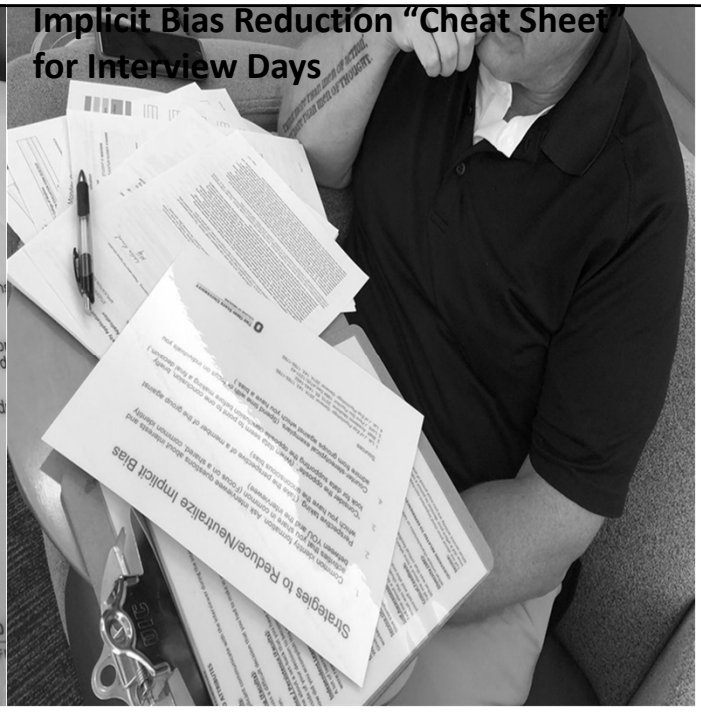
4. **IMPLICIT BIAS MITIGATION WORKSHOP TRAINING**
Admission committee review members participate in a case-based mitigation workshop by a trained moderator. Implicit bias awareness and mitigation training is intended to be an ongoing process of professional development.

5. **USE OF "IMPLICIT BIAS REDUCTION CHEAT-SHEET"**
Research-proven strategies to reduce implicit bias were compiled in a"cheat sheet" for committee members to review immediately prior to interviewing candidates and include:
- Consider the Opposite
- Common Identity Formation
- Counter-sterotypical Exemplars
- Perspective Taking

Created by @dina_khateebDO

Capers. ATS *Scholar*. 2020





Eliminate Bias and Racism

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  - Deep Pipeline
  - Selection Strategies

How I Do It

Bias and Racism Teaching Rounds at an Academic Medical Center

Quinn Capers IV MD [1] ... Uday S. Nori MD [3]

Show more

https://doi.org/10.1016/j.chest.2020.08.2073

Abstract

Racism and events of racial violence have dominated the US news in 2020 almost as much as the novel coronavirus pandemic. The resultant civil unrest and demands for racial justice have spawned a global call for change. As a subset of a society that struggles with racism and other

New Idea:

Bias and Racism "M & M" Teaching Rounds

"Events" noted by attendings, housestaff, students, RNs

Collected and discussed in non-threatening way

Education and Prevention

Capers. CHEST. 2020

American College of Cardiology Progam Directors Summit

ACC Heart House 2019

Eliminate Bias and Racism

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Twitter Campaign to Inspire and Encourage

(L-R: PGY6 🖤 fellow; Anesthesia PGY1; EM PGY1; M3 student; IM PGY1)

#DiversityDrivesExcellence in Cardiac care @OSUWexMed

Quinn Capers, IV
@DrQuinnCapers4

With these CARDIOLOGISTS around, Heart Disease is in trouble.

So is RACISM ✊

#DidntComeToPlay

The OSU
African American Male
Mentoring Roundtable

Eliminate Bias and Racism

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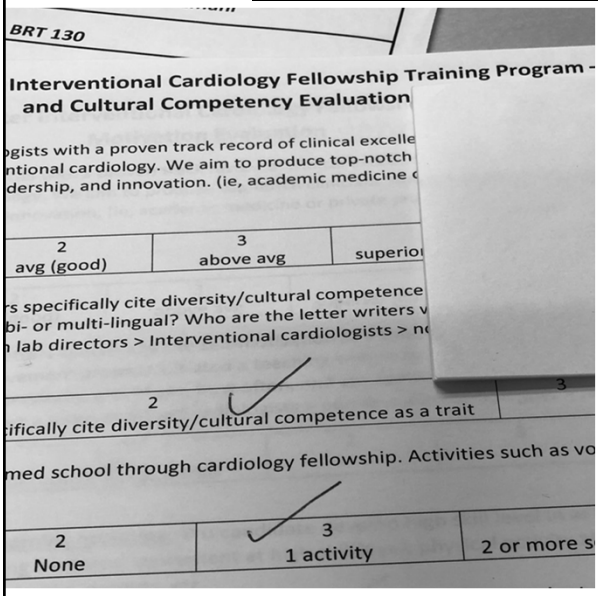
Ohio State University-Columbus City Schools K-12 Health Sciences Academy

“Growing Your Own Garden”

Make "Ability to Enhance Diversity/Cultural Competency of Program" ***A Top Priority*** When Ranking GME Candidates



BRT 130

Interventional Cardiology Fellowship Training Program -
and Cultural Competency Evaluation

gists with a proven track record of clinical excelle
ntional cardiology. We aim to produce top-notch
dership, and innovation. (ie, academic medicine

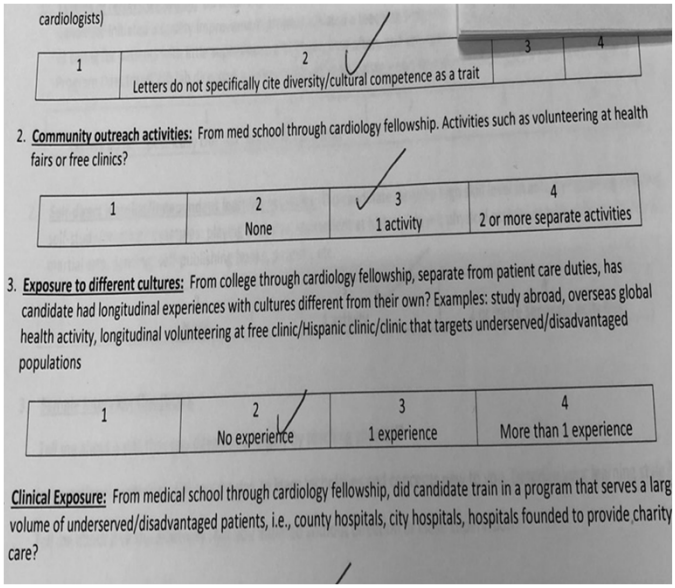
2	3	
avg (good)	above avg	superio

s specifically cite diversity/cultural competence
bi- or multi-lingual? Who are the letter writers v
lab directors > Interventional cardiologists > n

2	3
ifically cite diversity/cultural competence as a trait	

med school through cardiology fellowship. Activities such as vo

2	3	
None	1 activity	2 or more s



cardiologists)

1	2	3	4
	Letters do not specifically cite diversity/cultural competence as a trait		

2. **Community outreach activities:** From med school through cardiology fellowship. Activities such as volunteering at health fairs or free clinics?

1	2	3	4
	None	1 activity	2 or more separate activities

3. **Exposure to different cultures:** From college through cardiology fellowship, separate from patient care duties, has candidate had longitudinal experiences with cultures different from their own? Examples: study abroad, overseas global health activity, longitudinal volunteering at free clinic/Hispanic clinic/clinic that targets underserved/disadvantaged populations

1	2	3	4
	No experience	1 experience	More than 1 experience

Clinical Exposure: From medical school through cardiology fellowship, did candidate train in a program that serves a larg volume of underserved/disadvantaged patients, i.e., county hospitals, city hospitals, hospitals founded to provide charity care?

Diversity Drives Excellence … In the Cath Lab!

For 8 years in a row, an underrepresented minority Interventional Cardiology Fellow

Summary

- Bias and Racism in Medicine Exacerbate Healthcare Disparities
- Bias and Racism Contribute to the Lack of Diversity in Medicine
- Lack of Diversity in Medicine & Healthcare Disparities Put Patients at Risk
- There is a Global Call to End Racism
- Academic Medicine Must (and Can) Heed this Call