Diversity, Equity, Inclusion and Belonging (DEI-B): Key Considerations in Hospital Medicine

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UNIVERSITY OF COLORADO
ANSCHUTZ MEDICAL CAMPUS

Disclosures

I have no relevant relationships with ineligible companies to disclose within the past 24 months.

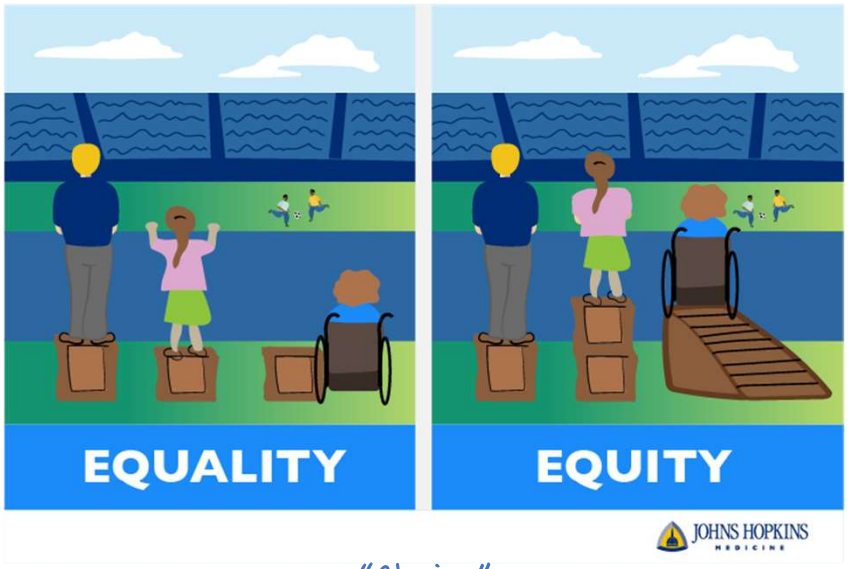
Disclaimer

Learning Objectives

1. Define Diversity, Equity, Inclusion, and Belonging (DEI-B) in the context of healthcare
2. Describe challenges related to DEI-B in our current healthcare systems and environments
3. Discuss ways in which hospitalists can incorporate evidence-based DEI-B principles into everyday workflow
4. List ways in which we can overcome barriers to advancing DEI-B in hospital medicine

Definitions

"Fact"



"Choice"

October 29. 2016; culturalorganizing.org

Health Equity

Everyone has a fair and just opportunity to be as healthy as possible. - RWJF

Requires removing obstacles to health – poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care, i.e., **Health Justice**

Inclusion

Active, intentional, and ongoing engagement with diversity, including intentional policies and practices that promote the full participation and sense of belonging of every individual

"Action"

Georgetown Univ. SOM

Belonging

Individual's sense that their uniqueness is accepted and valued by their organization and colleagues

"Outcome"

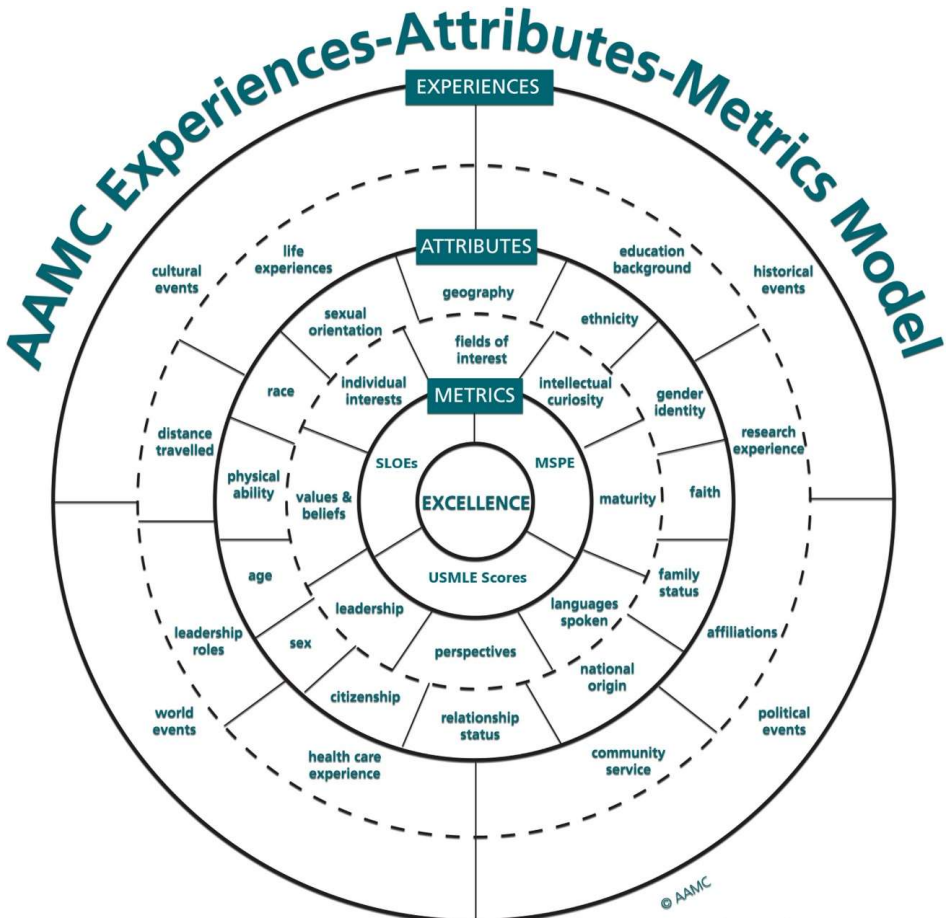
https://www.greatplacetowork.com/

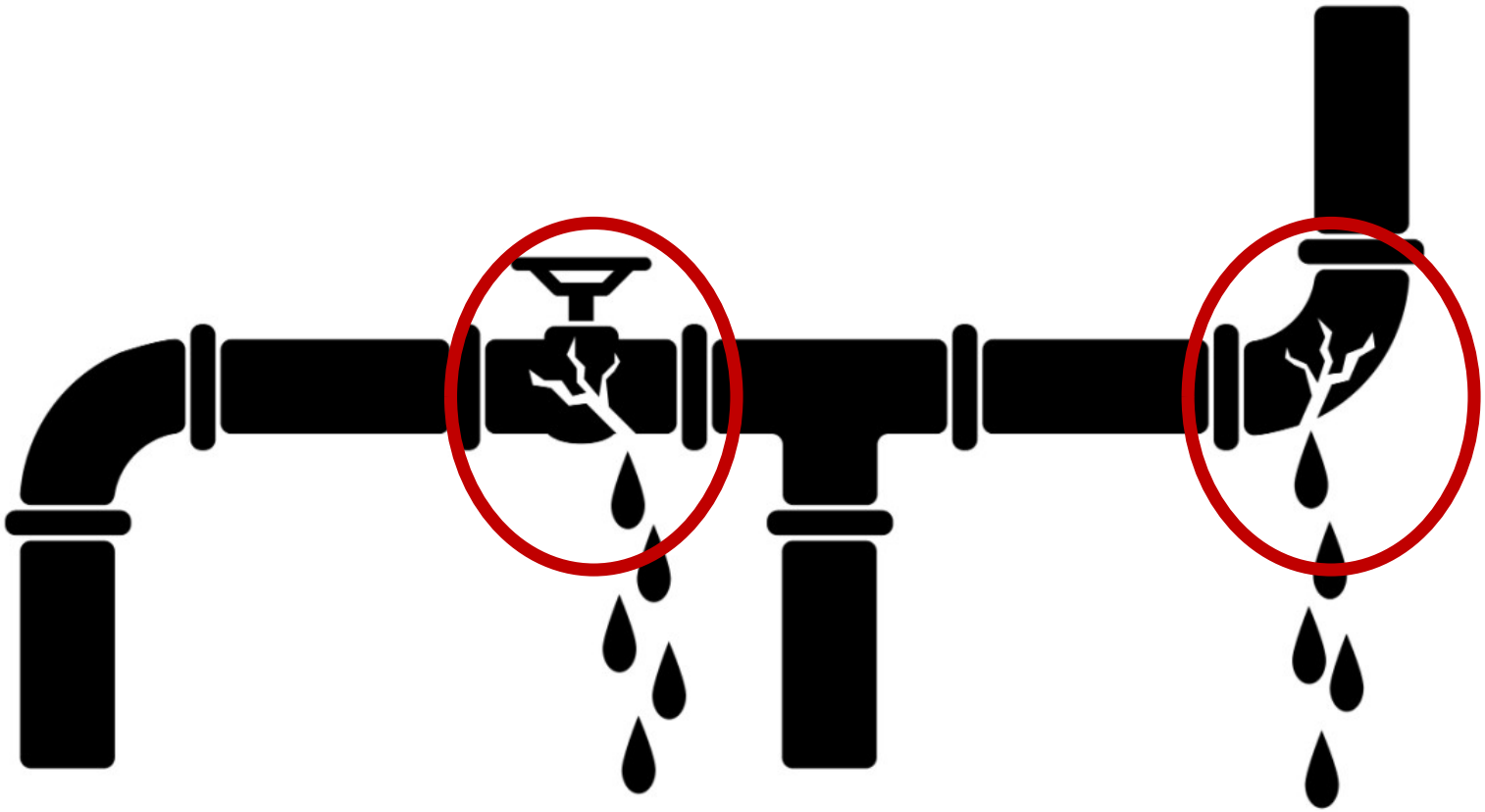
DEI-B Challenges:

Provider Workforce

Best Practices in Diversity Recruitment

- Holistic Review
- Unconscious Bias Trainings
- Diversification of Interview and Selection Committees
- Focused Outreach





Issues Faced By Minoritized*Learners, Trainees, Faculty, and Staff

- Marginalization
- Microaggressions
- Gaslighting
- Low expectations
- Lack of incorporation into communities

- Biased evaluations
- Forced assimilation
- Lack of development
- Discrimination
- Harassment
- Mistreatment
- Abuse

- Uneven use of disciplinary actions
- Uneven use of remediation and probation
- Threats, coercion, intimidation
- Lack of mentorship
- Lack of encouragement

Adapted from: "Addressing Structural Racism to Promote Equity and Well-Being in the Learning Environment" - Dr. William McDade, 2022

DEI-B Challenges:
Healthcare

Racial Disparities exist in the care of *all* patients

- Premature birth
- HIV
- Obesity
- Hypertension
- Rheumatoid arthritis
- Pain management
- Stroke
- Diabetes
- CAD
- Mental Illness

Perspective

Achieving the Triple Aim for Sexual and Gender Minorities

Michael Liu, M.Phil., Sahil Sandhu, M.Sc., and Alex S. Keuroghlian, M.D., M.P.H.

Sexual and Gender Minorities (SGMs)

As compared with the general population, SGM people have higher rates of:

- Cardiovascular Disease
- Obesity
- Cancer
- Sexually Transmitted Infections (including HIV, HPV, syphilis, and Hepatitis C)
- Mental Health Problems (including depression, anxiety, and substance use disorders)

Sexual and Gender Minorities (SGMs)

Perspective

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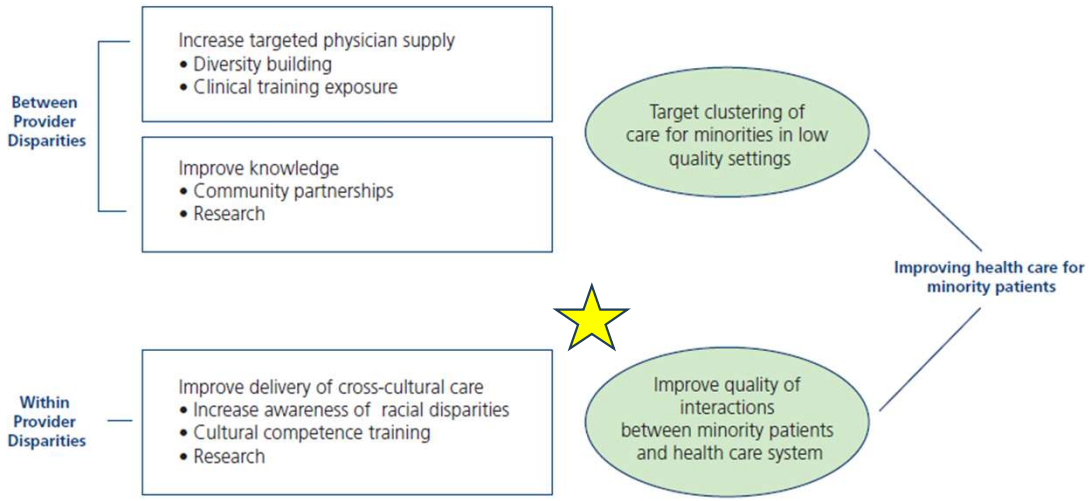
SGM people often have negative health experiences, e.g., 2015 national survey found that 23% of transgender adults avoid necessary health care because of mistreatment by providers, with higher rates in those who were also members of marginalized racial and ethnic groups

Addressing Racial Disparities in Health Care:

A Targeted Action Plan for Academic Medical Centers

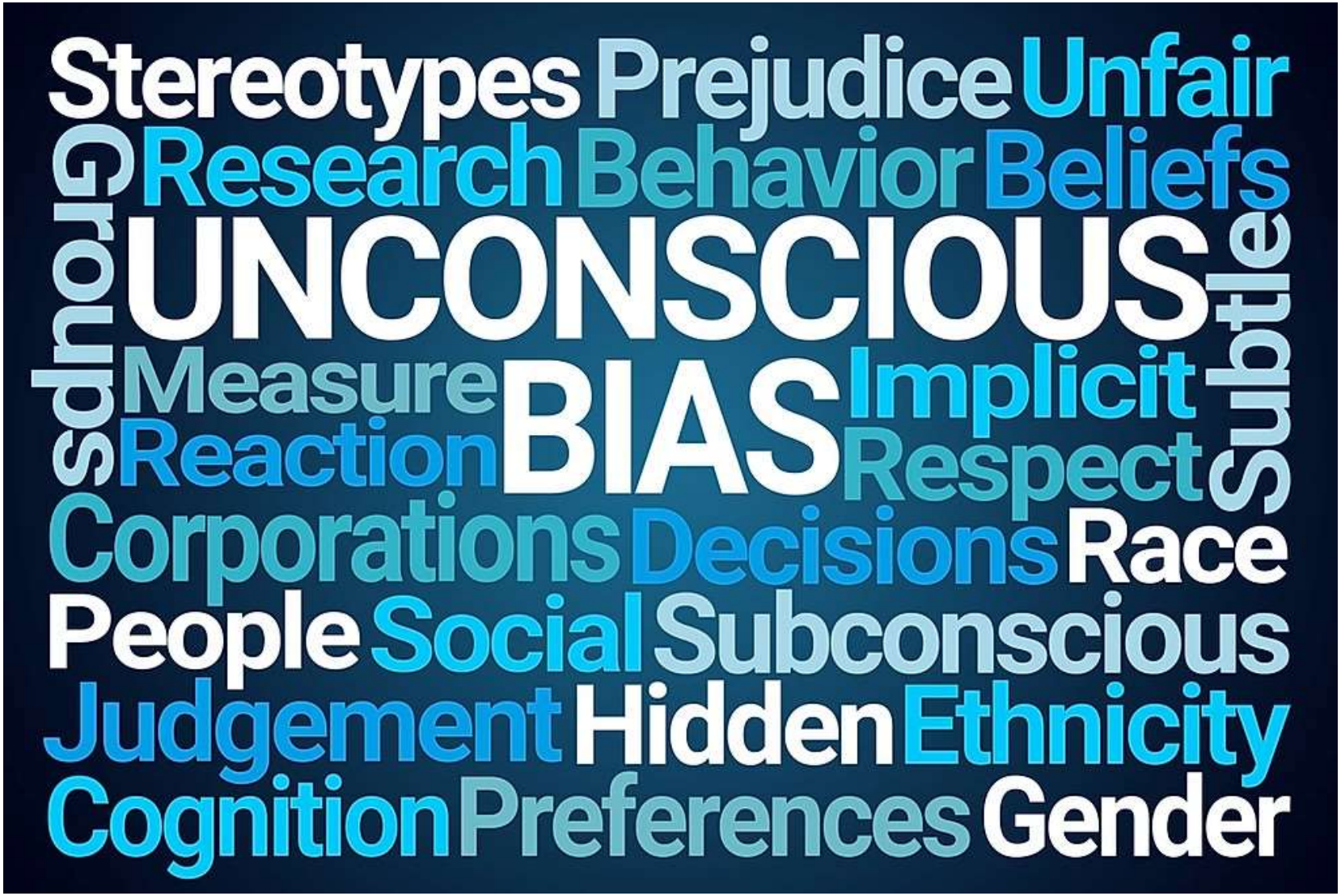
Model of Academic Centers' Role in Addressing Health Care Disparities

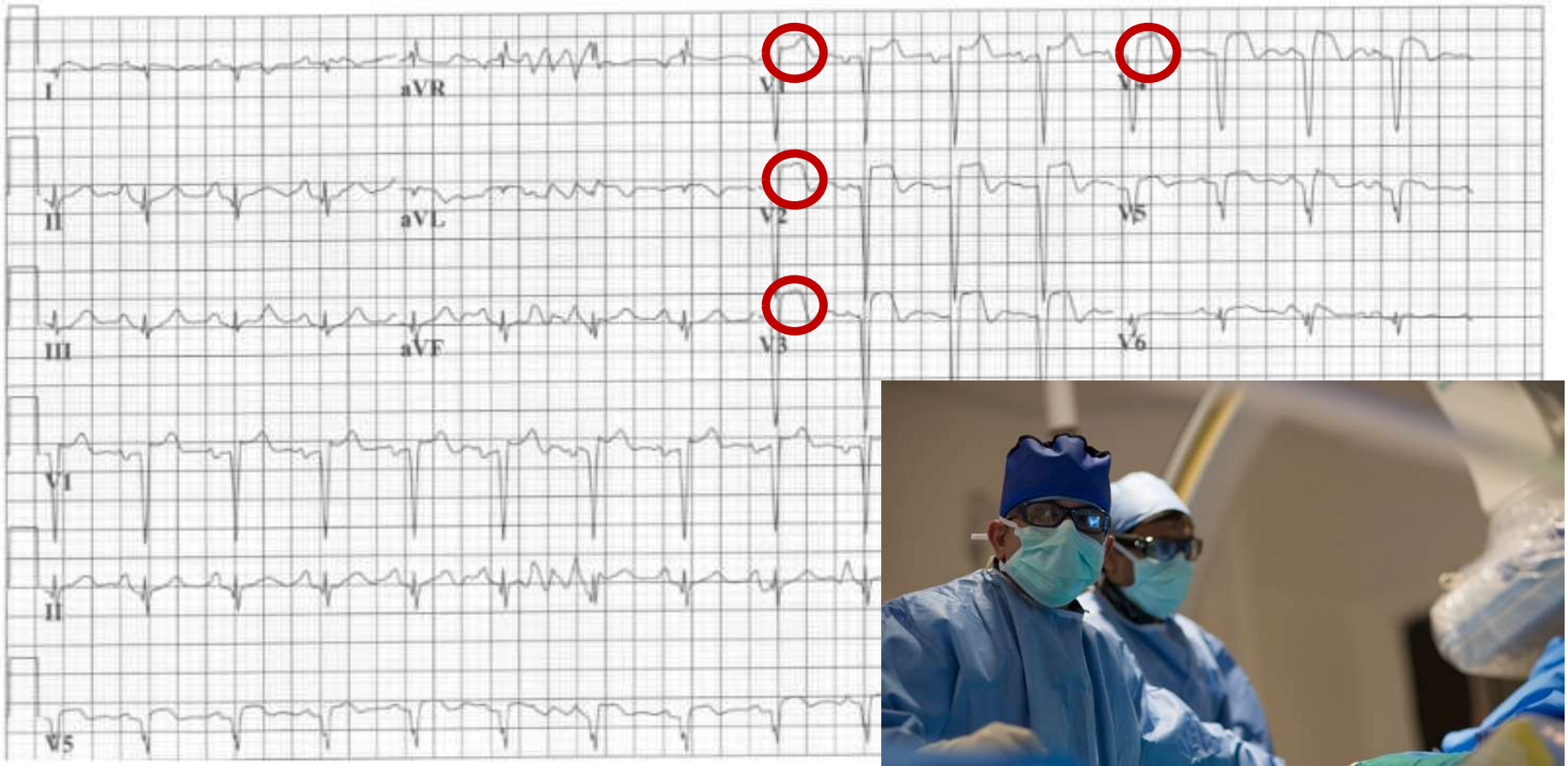


AAMC Addressing Racial Disparities in Health Care, 2009

Incorporating DEI-B Into Workflow

- Bias (use of race and language)
- Algorithms and Medical Devices
- Addressing Microaggressions


Stereotypes
Prejudice
Unfair
Groups
Research
Behavior
Beliefs
UNCONSCIOUS
Subtle
Measure
BIAS
Implicit
Reaction
Respect
Corporations
Decisions
Race
People
Social
Subconscious
Judgement
Hidden
Ethnicity
Cognition
Preferences
Gender


I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
VI
II
V5

Thinking Fast (System # 1) - Intuitive

- Best used for quick decisions, where speed is more important than accuracy
- Uses heuristics
- Heuristics simplify information and allow for quick decisions

Makes sense when time is a factor or stakes are low.

BIAS!

http://snappington.com/aphg/units/foundations/critical-thinking/thinking-fast-and-slow.html

Additional Triggers of Bias

- Ambiguous Evidence
- Emotional overload
- Cognitive overload
- Fear of threat
- Short on time

https://www.enactsolutions.com/ub/

How **Clinicians** Can be Biased

Use stereotypes to make clinical decisions

Differential weight of findings depending on patient history and appearance

Overt moral rationing

Unconscious behaviors affecting patient decisions, adherence, and satisfaction

Race and Ethnicity in Case Presentations

…and illness scripts, differential diagnoses, etc.

First Impressions — Should We Include Race or Ethnicity at the Beginning of Clinical Case Presentations?

Allan S. Brett, M.D., and Christopher W. Goodman, M.D.

- Clinical Reasoning
- Formulation of Diagnostic Hypotheses
- Notes – Historical Record
- Biologic probabilities relevant for hypotheses, diagnosis, and treatment
- Processing an individual patient's history and physical findings through the lens of race or ethnicity

Race and Ethnicity in Case Presentations

First Impressions — Should We Include Race or Ethnicity at the Beginning of Clinical Case Presentations?

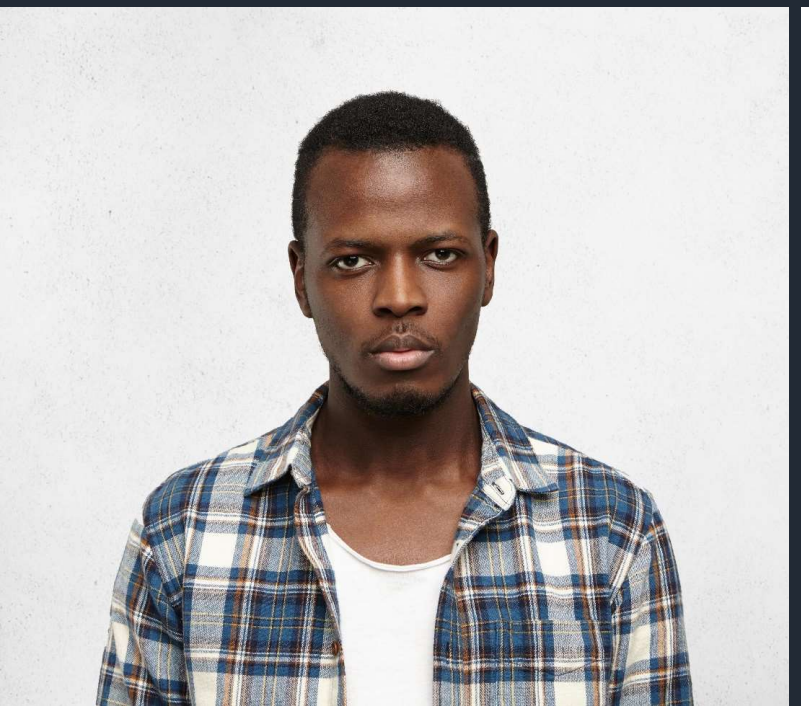
Allan S. Brett, M.D., and Christopher W. Goodman, M.D.

- Mistaken belief that race or ethnicity is a surrogate for genetic or innate biologic predisposition to disease
- Predisposes to premature diagnostic closure
- Conscious or unconscious demographic or cultural stereotyping

THE SCIENCE OF RESEARCH ON RACIAL/ETHNIC DISCRIMINATION AND HEALTH

Implicit Stereotyping and Medical Decisions: Unconscious Stereotype Activation in Practitioners' Thoughts About African Americans

Gordon B. Moskowitz, PhD, Jeff Stone, PhD, and Amanda Childs, MA



- Sickle Cell Anemia
- Sarcoidosis
- Obesity
- Illicit Drug Use

Clinical Pearls

- Race should be recorded in the social history, not in the opening sentence of the presentation or note
- Patient should self-identify their race or races
- Race should not be used as a proxy for genetic variation, social class, or other elements of the social history
- Clinicians should be mindful of the potential influence of racism in the clinical encounter

"The Role of Race in Clinical Presentations". Anderson et al. Fam Med. 2001. Jun,33(6):430-4

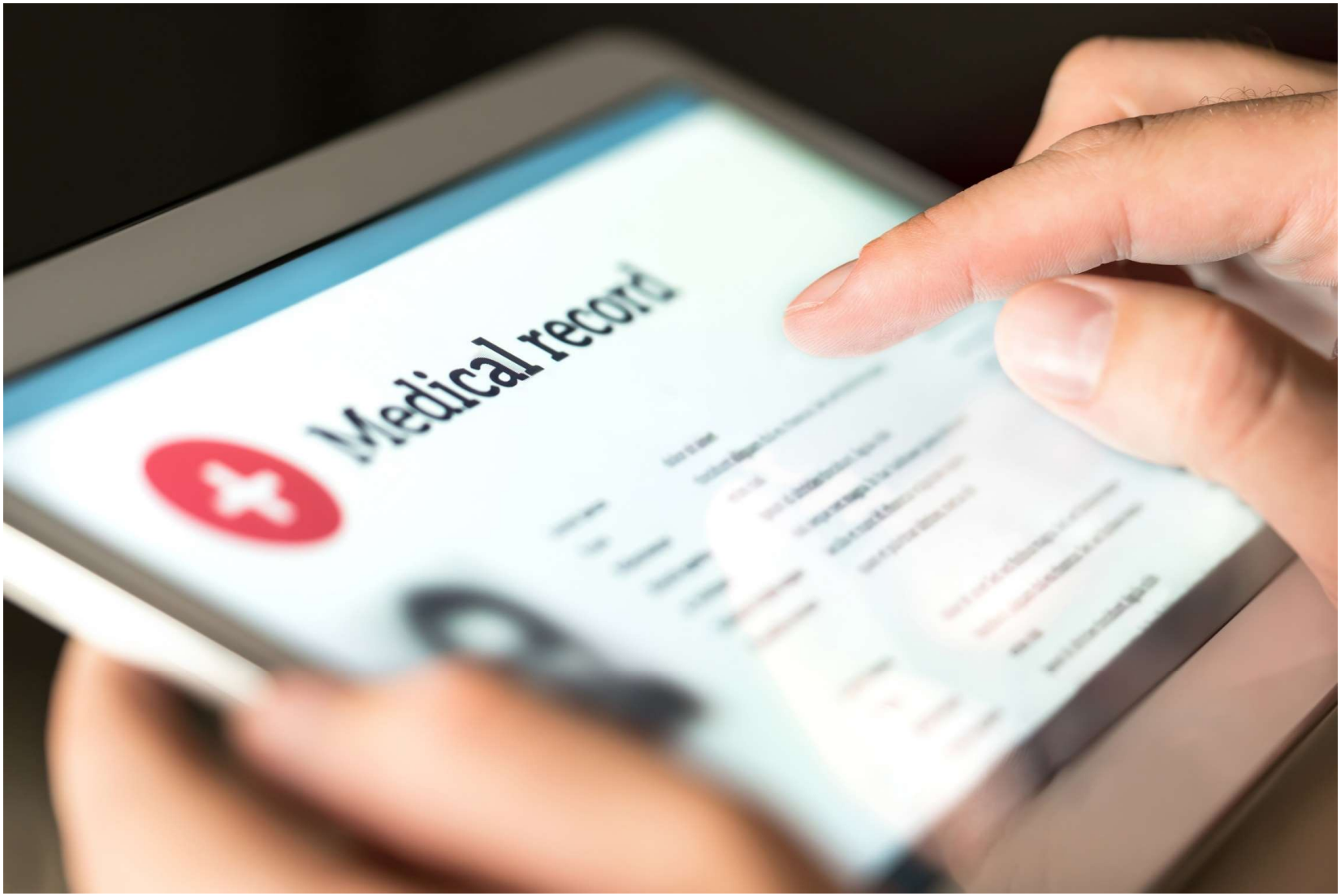

Slow down

Thinking Slow (System # 2) - Rational

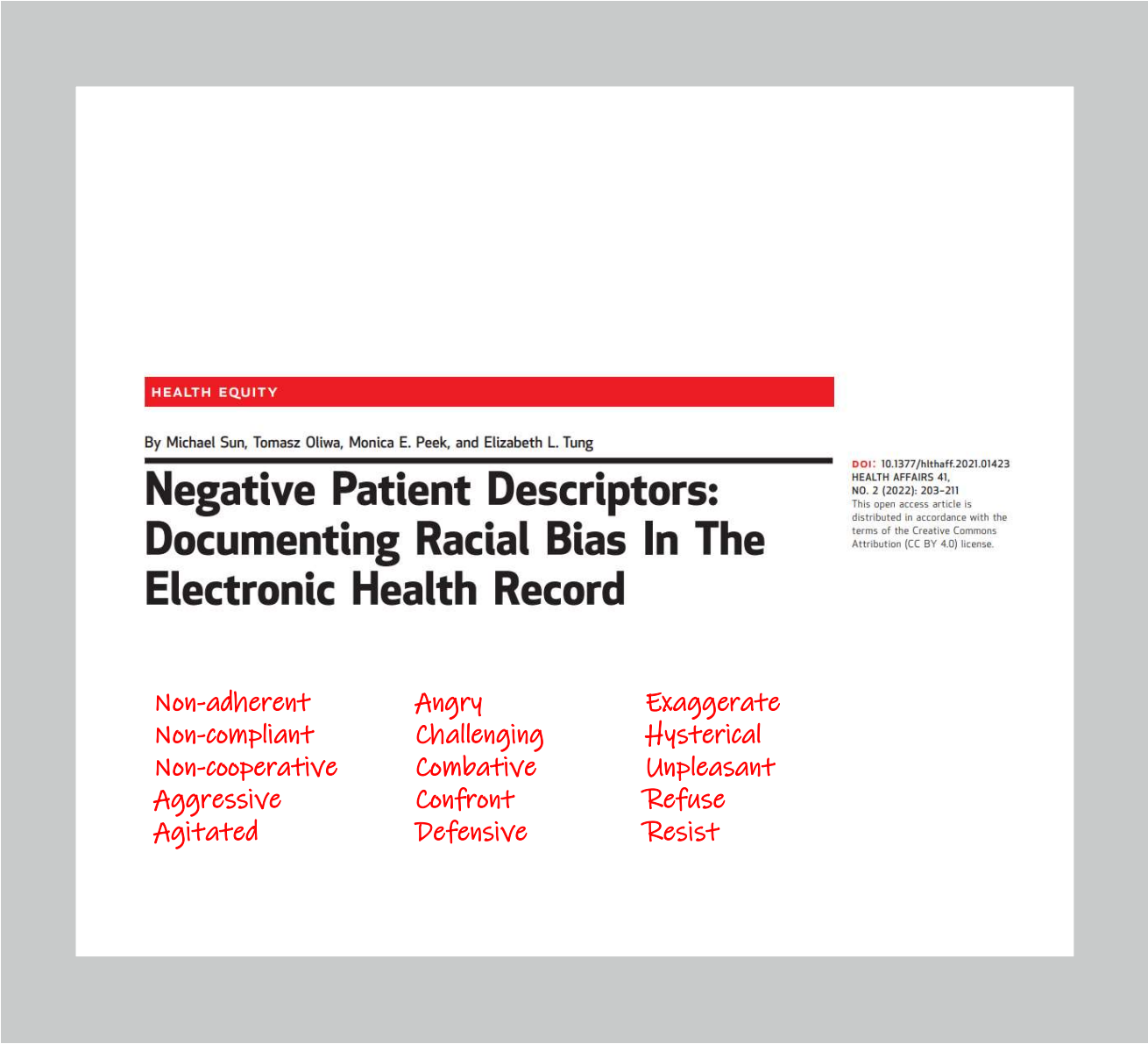
- Proceeds with conscious effort
- Gives you good decisions but takes time
- Used for evaluating evidence
- Uses algorithms

Makes sense if you have lots of time and consequences for failure are high.

http://snappington.com/aphg/units/foundations/critical-thinking/thinking-fast-and-slow.html


Medical record

- One urban academic medical center
- Analyzed sample of 40,113 History and Physical (H&P) notes from 18,459 patients for sentences containing a negative descriptor of the patient or patient's behavior, e.g., resistant, noncompliant
- Controlled for sociodemographic and health characteristics
- **Compared with White patients, Black patients had a 2.54 times the odds of having at least one negative descriptor in the H&P notes**



HEALTH EQUITY

By Michael Sun, Tomasz Oliwa, Monica E. Peek, and Elizabeth L. Tung

Negative Patient Descriptors: Documenting Racial Bias In The Electronic Health Record

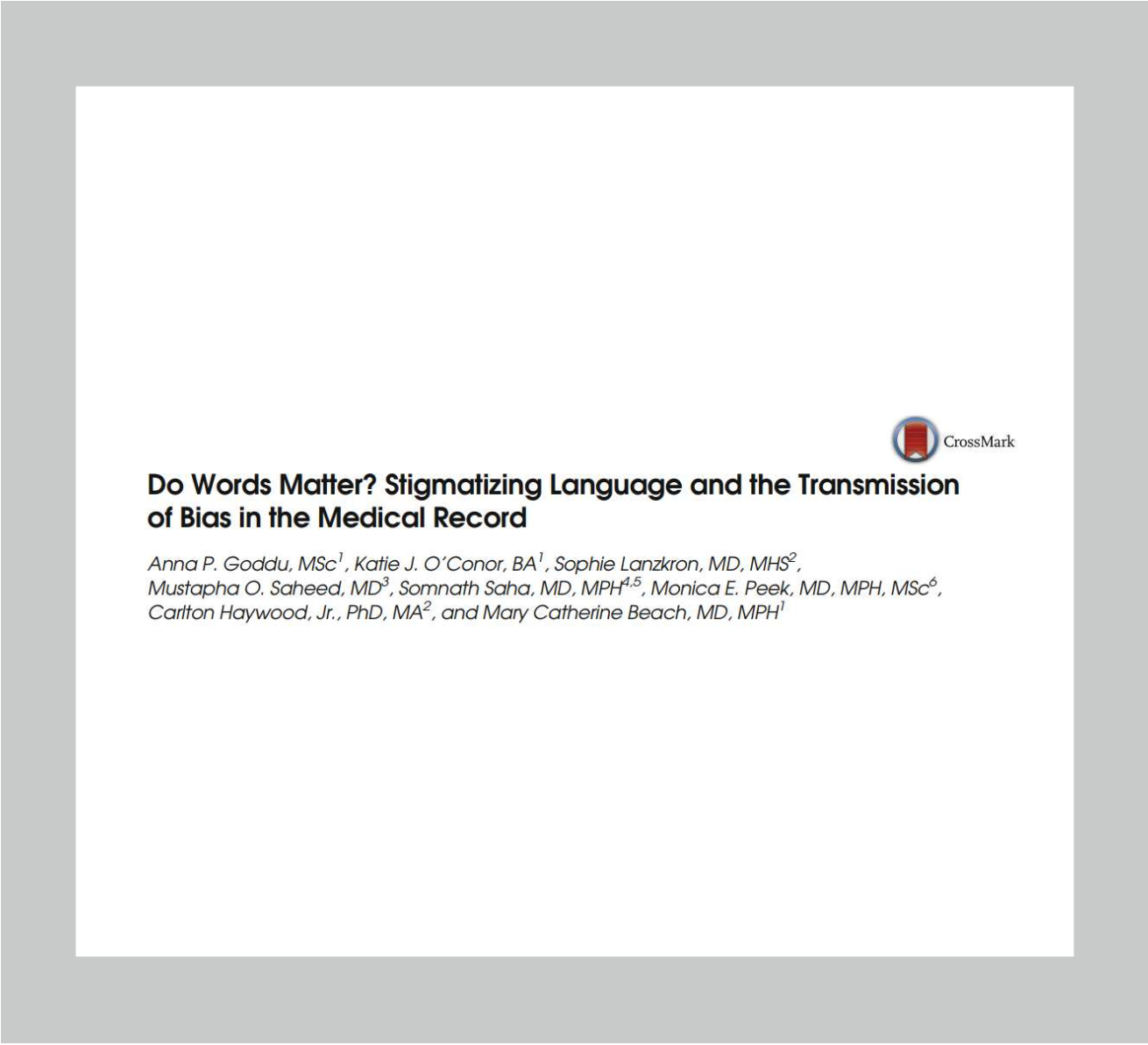
DOI: 10.1377/hlthaff.2021.01423
HEALTH AFFAIRS 41,
NO. 2 (2022): 203–211

Non-adherent
Non-compliant
Non-cooperative
Aggressive
Agitated

Angry
Challenging
Combative
Confront
Defensive

Exaggerate
Hysterical
Unpleasant
Refuse
Resist

- Randomized vignette study of two chart notes employing stigmatizing versus neutral language to describe the same hypothetical patient, a 28-year-old man with sickle cell disease.
- Participants - 413 physicians-in-training, medical students and residents in internal and emergency medicine programs at an urban academic medical center
- Response rate – 54%
- Measures - Attitudes towards hypothetical patients and Pain management decisions



CrossMark

Do Words Matter? Stigmatizing Language and the Transmission of Bias in the Medical Record

Anna P. Goddu, MSc[1], Katie J. O'Conor, BA[1], Sophie Lanzkron, MD, MHS[2], Mustapha O. Saheed, MD[3], Somnath Saha, MD, MPH[4,5], Monica E. Peek, MD, MPH, MSc[6], Carlton Haywood, Jr., PhD, MA[2], and Mary Catherine Beach, MD, MPH[1]

“Neutral Language” Note

- 28-year-old man with Sickle Cell Disease
- Comes to ED with 10 out of 10 pain in arms and legs
- Typically requires opioid pain medications
- Pain not alleviated by his home med regimen
- Moved to a new apartment
- On PE, he is in distress
- PE normal other than TTP along left hip
- Girlfriend is by his side

“Stigmatizing Language” Note

- 28-year-old Sickle Cell Patient
- Comes to ED stating he has 10/10 pain “all up in my arms and legs”
- Narcotic dependent and in our ED frequently
- Pain not helped by narcotic medications
- Housing authority moved him to a new neighborhood
- On PE, he appears to be in distress
- He reports TTP along his left hip
- Girlfriend is lying on bed with shoes on, requesting bus token

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- Exposure to the stigmatizing language note was associated with **more negative attitudes towards the patient** (20.6 stigmatizing vs. 25.6 neutral, $p < 0.001$).
- Reading the stigmatizing language note was associated with **less aggressive management of the patient's pain** (5.56 stigmatizing vs. 6.22 neutral, $p = 0.003$).

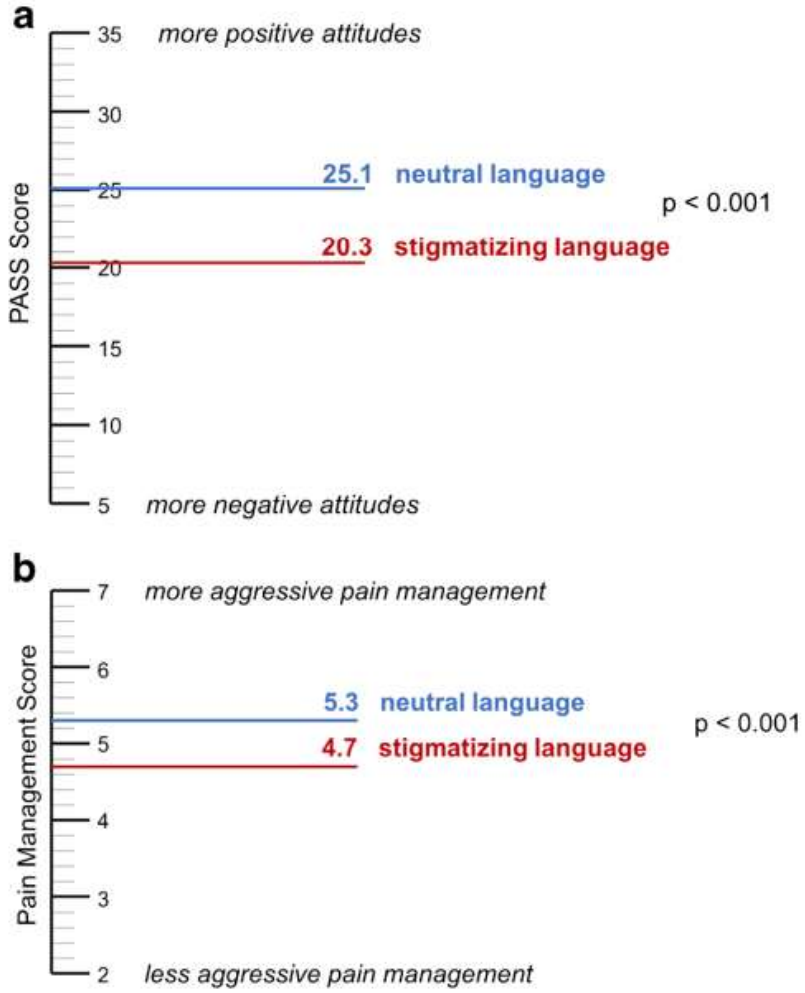

Figure 1 Effect of stigmatizing language on attitudes (Panel A) and on pain management (Panel B).

Testimonial Injustice: Linguistic Bias in the Medical Records of Black Patients and Women

Mary Catherine Beach, MD, MPH[1,2,3,4], Somnath Saha, MD, MPH[2,5,6], Jenny Park[2,7], Janiece Taylor, RN, PhD, FAAN[8], Paul Drew, PhD[9], Eve Plank[10], Lisa A. Cooper, MD, MPH[2,3,4], and Brant Chee, PhD[11]

- Content analysis of 600 clinic notes revealed 3 linguistic features suggesting disbelief:
  - Quotes, e.g., had a "reaction" to the medication
  - Specific judgement words, e.g., claims or insists
  - Evidentials
- Notes written about **Black patients** had higher odds of containing at least one quote and one judgement word and used more evidentials
- Notes about **female patients** had a higher odds ratio of containing at least one quote

Clinical Pearls

- Value judgements informed by feelings about a patient should not appear in the medical record
- Record data that are relevant and as objective as possible
- Recognize that using certain phrases (e.g., substance abuse vs. substance use), quotation marks, etc. opens the possibility for other clinicians to make or interpret judgement

Racialized Tools in Healthcare

Algorithms and Devices

The NEW ENGLAND JOURNAL of MEDICINE

MEDICINE AND SOCIETY

Debra Malina, Ph.D., *Editor*

Hidden in Plain Sight — Reconsidering the Use of Race Correction in Clinical Algorithms

Darshali A. Vyas, M.D., Leo G. Eisenstein, M.D., and David S. Jones, M.D., Ph.D.

JAMA Internal Medicine | Original Investigation

Racial and Ethnic Discrepancy in Pulse Oximetry and Delayed Identification of Treatment Eligibility Among Patients With COVID-19

Ashraf Fawzy, MD, MPH; Tianshi David Wu, MD, MHS; Kunbo Wang, MS; Matthew L. Robinson, MD; Jad Farha, MD; Amanda Bradke, MD, MA; Sherita H. Golden, MD, MHS; Yanxun Xu, PhD; Brian T. Garibaldi, MD, MEHP

- Retrospective cohort study of clinical data from 5 referral centers and community hospitals in the Johns Hopkins Health System
- Included patients with COVID-19 who self-identified as Asian, Black, Hispanic, or White
- Concurrent measurements (within 10 minutes) of oxygen saturation levels in arterial blood and by pulse ox
- Compared proportion of patients with occult hypoxemia ($SaO_2 < 88\%$ with concurrent SpO_2 of 92%-96%) by race and ethnicity

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- Occult hypoxemia occurred in 19 Asian (30.2%), 136 Black (28.5%), and 64 non-Black Hispanic (29.8%) patients compared with 79 White patients (17.2%)
- Black patients had a 29% lower hazard and non-Black Hispanic patients had a 23% lower hazard of treatment eligibility recognition
- A total of 451 patients (23.7%) never had their treatment eligibility recognized, most of whom (54.8%) were Black
- Among the remaining 1452 patients (76.3%) who had eventual recognition of treatment eligibility, Black patients had a median delay of 1 hour longer than White patients

Clinical Science | April 2005

Effects of Skin Pigmentation on Pulse Oximeter Accuracy at Low Saturation FREE

Philip E. Bickler, M.D., Ph.D.; John R. Feiner, M.D.; John W. Severinghaus, M.D.

Anesthesiology April 2005, Vol. 102, 715–719.

https://doi.org/10.1097/00000542-200504000-00004

"In a carefully controlled study published in 2005, lab scientists compared readings from 11 darkly pigmented individuals and 10 lightly pigmented individuals at various oxygen levels. They found the devices read 1% higher for dark-skinned individuals at higher oxygen levels and an average of 3% higher at lower (and more dangerous) oxygen levels. Some readings read up to 8% higher, the authors noted, adding that the issue 'deserves attention and possible provision of correction factors, tables, or even built-in user-optional adjustments.'" – STAT News

ARTICLE: RESEARCH REPORT

Dark Skin Decreases the Accuracy of Pulse Oximeters at Low Oxygen Saturation: The Effects of Oximeter Probe Type and Gender

Feiner, John R. MD; Severinghaus, John W. MD; Bickler, Philip E. MD, PhD

Author Information

Anesthesia & Analgesia 105(6):p S18-S23, December 2007. | **DOI:** 10.1213/01.ane.0000285988.35174.d9

FREE

Metrics

The data suggest that clinically important bias should be considered when monitoring patients with saturations below 80%, especially those with darkly pigmented skin; but further study is needed to confirm these observations in the relevant populations.

"The information remained largely unnoticed. Why wasn't this issue, that literally affects a majority of the world's population, more widely known? For one thing, the studies were largely published within the journals of one medical specialty, anesthesiology, and never reached a wider audience. Looking back, many now think that disinterest was a clear example of structural racism in medicine. 'It speaks to the fact that some scientific knowledge is not prioritized. And this was not,' said Sjoding." – STAT News

The FDA currently requires studies involving medical devices to include at least two people, or at least 15% of subjects, with darker skin.

JAMA. 2022 Sep 6;328(9):885-886. doi: 10.1001/jama.2022.12290.

Racial Differences in Detection of Fever Using Temporal vs Oral Temperature Measurements in Hospitalized Patients

Sivasubramanium V Bhavani [1], Zanthia Wiley [1], Philip A Verhoef [2], Craig M Coopersmith [3], Ighovwerha Ofotokun [1]

Clinical Pearls

Questions we should be asking:

- Do we have any data suggesting the equipment we are using may be inaccurate?
- How will this impact clinical decision making?
- Will using this device relieve or exacerbate health inequities?
- How do we advocate for changes, including increased representation in device testing and other studies?

Incorporating DEI-B Into Workflow

- Inclusion and Belonging in Work Environments


Addressing
MicroAggressions

Microaggressions:

Everyday, subtle, intentional or unintentional interactions or behaviors that communicate some sort of bias toward historically marginalized groups.

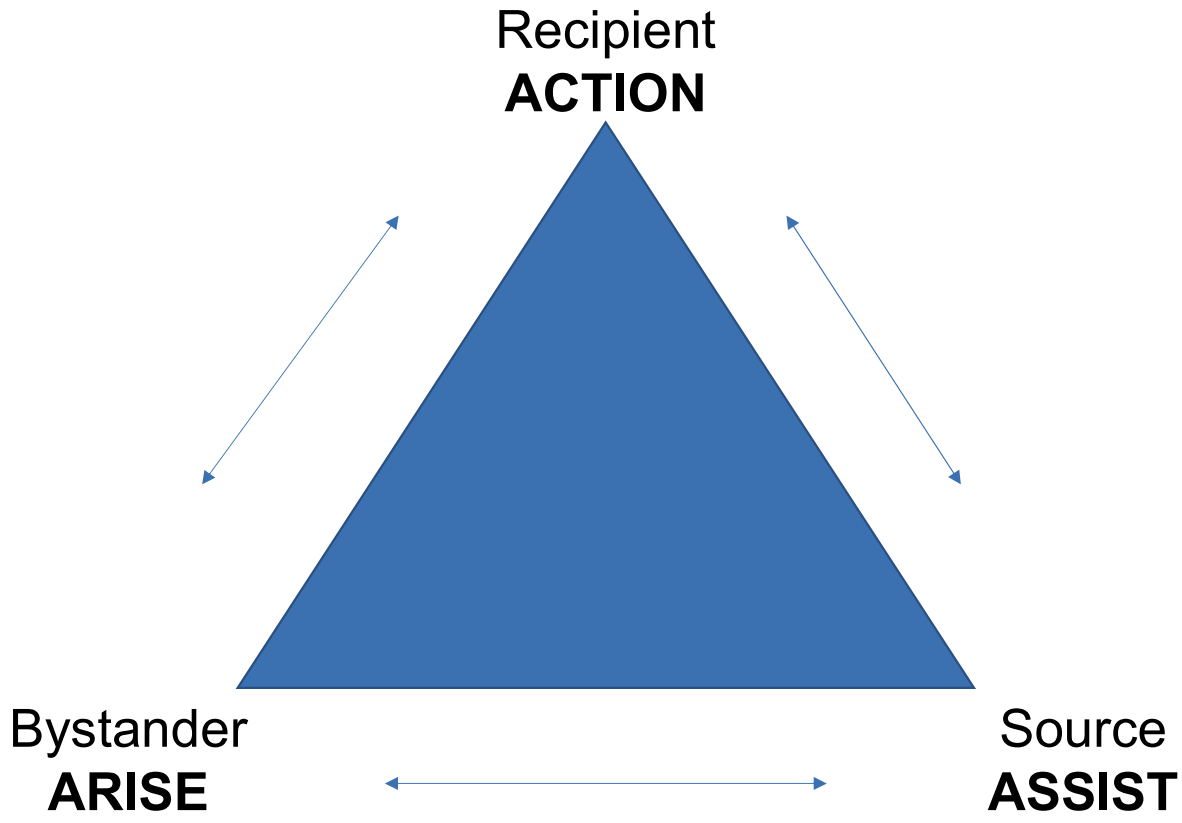
ON OUR SLEEVES®

Microassault
Microinsult
Microinvalidation

Upstander

A person who speaks or acts in support of an individual or a cause, particularly someone who intervenes on behalf of a person being attacked or bullied.

- Stands Up
- Combats
- Works to make it right
- Acts



Ackerman-Barger & Jacobs, 2020

Recipient **ACTION**

- **A**sk a clarifying question
- **C**ome from curiosity, not judgement
- **T**ell what you observed in a factual manner
- **I**mpact exploration
- **O**wn your thoughts and feelings about the subject
- **N**ext steps

Ackerman-Barger & Jacobs, 2020

Source
ASSIST

- **A**cknowledge your bias
- **S**eek feedback
- **S**ay you are sorry
- **I**mpact, not intent
- **S**ay :
- **T**hank You

Ackerman-Barger & Jacobs, 2020

Bystander **ARISE**

- **A**wareness
- **R**espond with empathy and avoidance of judgement
- **I**nquiry
- **S**tatements that start with “I”
- **E**ducate and engage

Ackerman-Barger & Jacobs, 2020

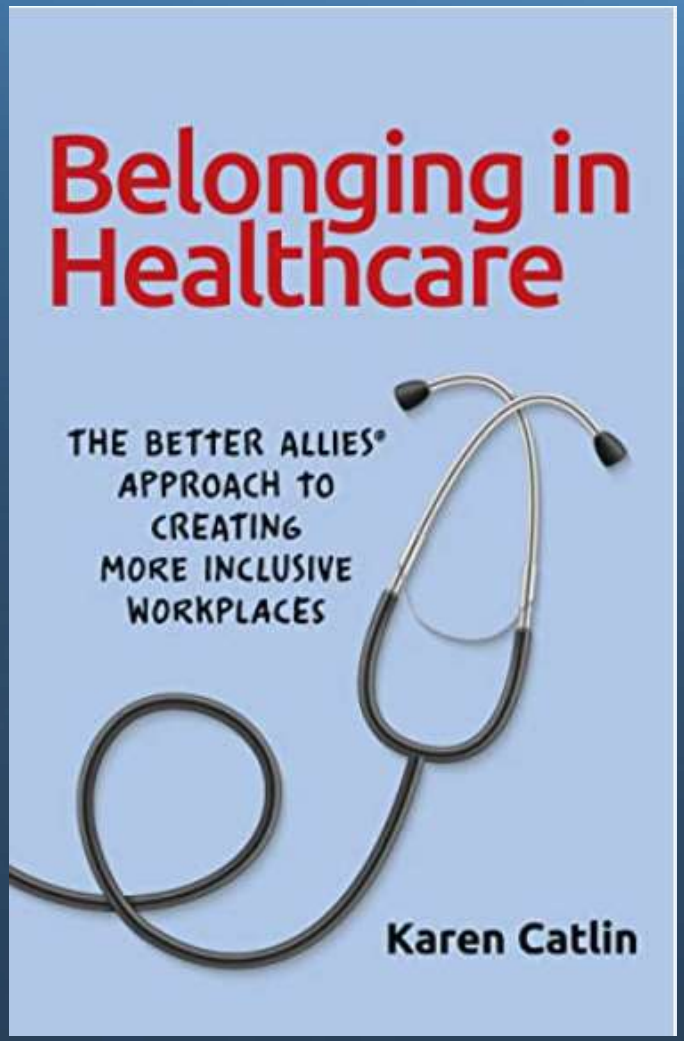
Approaches for Residents to Address Problematic Behavior: Before, During, and After the Clinical Encounter. Shankar, et al.

Approaches to Address Problematic Behaviors

Before the Encounter:
Reflecting **For** Action

During the Encounter:
Reflecting **In** Action

After the Encounter:
Reflection **On** Action



The Upstander
The Sponsor
The Amplifier
The Advocate
The Confidant

FULL TEXT ARTICLE

Teaching Anti-Racism in the Clinical Environment: The Five-Minute Moment for Racial Justice in Healthcare

Article in Press: Accepted Manuscript

Samantha XY Wang, Kevin Chi, Megha Shankar, Sonoo Thadaney Israni, Abraham Verghese and Donna M. Zulman

Clinical Significance

- Radical transformation of the medical education landscape is needed to disrupt structural racism in healthcare.
- Many practicing physicians are unaware of the present-day practices that perpetuate racial bias and contribute to healthcare disparities.
- A structured framework on how to teach this expansive topic in the clinical learning environment can be an effective way to engage learners in real-time as they encounter teachable moments with patients.

Teaching Antiracism in the Clinical Environment

CONTEXT

CURRENT STANDARDS

HISTORICAL NARRATIVE

DISPARITIES AND REALITIES

STEPS TO EQUITY

https://doi.org/10.1016/j.amjmed.2022.12.014

Overcoming Barriers

Engage Leadership Early

Form DEI-B Committees

Expand knowledge

Utilize Resources

- Offices of Diversity, Equity, and Inclusion
- Offices of Equity
- Offices of Disability, Access, and Inclusion
- AAMC
- ACGME – Equity Matters
- AIM – Equity Matters

Take-Home Points

While there are challenges related to DEI-B in our healthcare systems and environments, we can overcome them by:

- Actively working to mitigate bias in our daily work, e.g., avoiding stigmatizing language in documentation and communications, slowing down, utilizing race appropriately in clinical reasoning
- Learning about and educating others about DEI-B
- Being upstanders
- Slowing down!


Questions