

# **RACIAL INEQUITIES IN THE HOSPITAL**

## **CASE STUDIES IN ANTIRACISM RESEARCH AND ACTION**

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### Objectives

- **Definitions**
- Institutional Racism: Security Responses
- Institutional Racism: Opioid Prescribing
- Institutional Racism: Hospital Admissions

## Definitions

- **Health Disparities**

- The differences between the health of one population and another in measures of who gets diseases, who has a disease, who died from disease, and other adverse health conditions that exist among specific population groups in the US.

- **Health Inequities**

- The differences in health status or in the distribution of health determinants between different population groups, and ***these differences are systematic, avoidable, unfair and unjust, and are rooted in racial, social and economic injustice***, and are attributable to social, economic, and environmental conditions in which people live, work and play.

Bharmal, N., Derose, K. Felician, M. (2015) Understanding the upstream social determinants of health. *Encyclopedia of Public Health: RAND Health*. And "Fact File on Health Inequities." (2016). *World Health Organization*.

## Definitions

- **Racism**

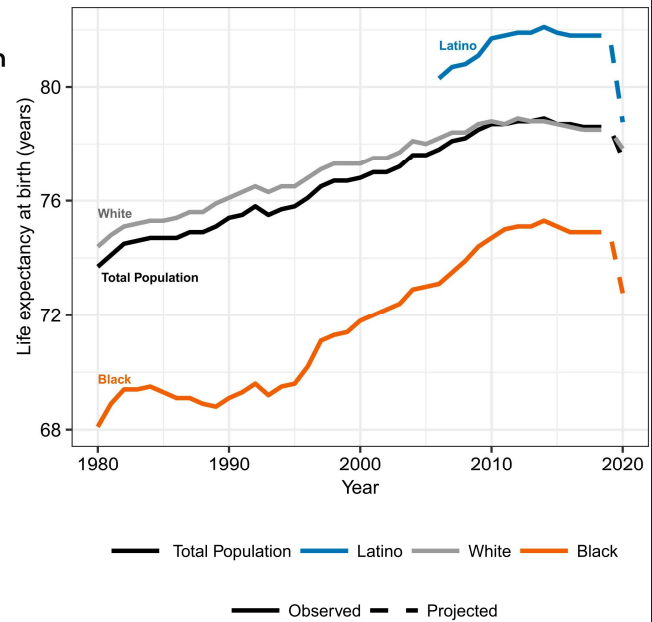
“Racism, specifically, is the state-sanctioned or extralegal production and exploitation of group-differentiated vulnerability to premature death.”

Ruth Wilson Gilmore. *The Golden Gulag: Prisons, Surplus, Crisis, and Opposition in Globalizing California*. U of Cal Press. 2007.

## Reductions in 2020 US life expectancy due to COVID-19 and the disproportionate impact on the Black and Latino populations

Theresa Andrasfay  and Noreen Goldman  [Authors Info & Affiliations](#)

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Source PNAS

## Definitions

- **Internalized Racism**
  - The set of private beliefs, prejudices, and ideas that individuals have about the superiority of Whites and the inferiority of people of color. Among people of color, it manifests as internalized racial oppression. Among Whites, it manifests as internalized racial superiority.
- **Interpersonal Racism**
  - The expression of racism between individuals. These are interactions occurring between individuals that often take place in the form of harassing, racial slurs, or telling of racial jokes.

## Definitions

- Institutional Racism
  - Discriminatory treatment, unfair policies and practices, and inequitable opportunities and impacts within organizations and institutions, based on race.
- Structural Racism
  - Racial bias across institutions and society over time. It's the cumulative and compounded effects of an array of factors such as public policies, institutional practices, cultural representations, and other norms that work in various, often reinforcing, ways to perpetuate racial inequity.

## Critical Race Theory

“The critical race theory movement is a collection of activists and scholars engaged in studying and transforming the relationship among race, racism, and power.”

-Delgado and Stefancic

“Critical race theory is a practice—a way of seeing how the fiction of race has been transformed into concrete racial inequities.”

-Kimberlé Crenshaw

## Critical Race Theory

- Some Key Tenets:
  - Racism is embedded in society – it is ordinary
  - Racism serves the material and psychic interests of the dominant group
  - Race is socially constructed
  - Differential racialization
  - Intersectionality
  - Unique voice of color
  - Interest convergence

### What does “socially constructed” mean?

Races can be understood as a “traces of history,” since racialization acts to reflect, justify, and reproduce—into the present—the unequal relationships engendered by historical processes of colonization and domination.

E.g. racism may be redundant since *race is already an ‘-ism’*

## Definitions

**Race** is “a technology for the management of human difference, the main goal of which is the production, reproduction, and maintenance of white supremacy on both a local and a planetary scale.”

-Alana Lentin

*Why Race Still Matters*

### How does race function today?

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“Race [has] a complex dimension, serving as both a technology of oppression and a vehicle for resistance to that oppression. This...is part of the messiness we must consider.”

-Cheryl Harris

*Of Blackness and Indigeneity. Critical Ethnic Studies , Vol. 5, No. 1-2.*

# Public Health Critical Race Praxis

**Table 3. PHCRP model by focus and its related CRT-based affiliated principles**

| Focus                                    | Affiliated Principles  |
|--|--|
| Focus 1: Contemporary Racialization      | Primacy of racism – racism is a dominant social force in society<br>Race as social construct – phenotypic characteristics have meaning because of socio-political, not biological, factors<br>Ordinariness of racism – racism exists in all facets of everyday life, even if not perceived<br>Structural determinism – systems of power preserve the interests of dominant group members   |
| Focus 2: Knowledge Production            | Social construction of knowledge – study findings reflect research-related biases (eg, a priori assumptions)<br>Critical approaches – to challenge initial understandings, “question the question” and perform self-critiques<br>Voice – to privilege the perspectives of marginalized communities   |
| Focus 3: Conceptualization & Measurement | Race as social construct – socio-political factors give meaning to phenotypic characteristics<br>Intersectionality – oppressive social forces produce interlocking effects and social identities   |
| Focus 4: Action                          | Critical approaches – to challenge initial understandings, questioning the questioner and perform self-critiques<br>Disciplinary self-critique - collective assessment by members of a discipline of unintended racial influence on assumptions, methods, etc.<br>Intersectionality – oppressive social forces produce interlocking effects and social identities<br>Voice – to privilege the perspectives of marginalized communities |

Ford C and Airhihenbuwa C. Just What is Critical race theory and What’s it doing in a Progressive Field like Public health? *Ethn Dis.* 2018; 28 (Suppl 1): 223-230.

BRIGHAM HEALTH



BRIGHAM AND  
WOMEN'S HOSPITAL

## Goals:

- 1) Utilize PHCRP to become an “outsider within,” able to readily identify racism at work and unearth discoveries from marginalized perspectives.
- 2) Build a body of knowledge that can challenge existing policy and practice.

# Objectives

- Definitions
- Institutional Racism: Security Responses
- Institutional Racism: Opioid Prescribing
- Institutional Racism: Hospital Admissions

## Security Emergency Responses (SERs) and Patient Trauma

SERs are utilized to deal with threats in the hospital...

*Definition: Security Emergency Response (SER/Code Grey) – the summoning of security officers to a patient's bedside to maintain safety*

SERs are called for multiple reasons at BWH

- Patient or visitor is perceived as threat to staff, other patients, or other visitors
- Patient is perceived as a threat to themselves

...but patients often experience restraints as dehumanizing

*All I did was ask them to just release my arms. I don't care about being restrained. Leave them on my legs, it doesn't bother me on my legs. Let me wipe my face or itch my nose or whatever. **There's no need to treat me like an animal. It's uncalled for. Honestly.***

*When my sisters call the paramedics. Oh it's going to be a while. I just go kiss my son, see you later. The experience in the emergency room, **it's traumatic as hell and it makes me feel like a piece of sh-t.***

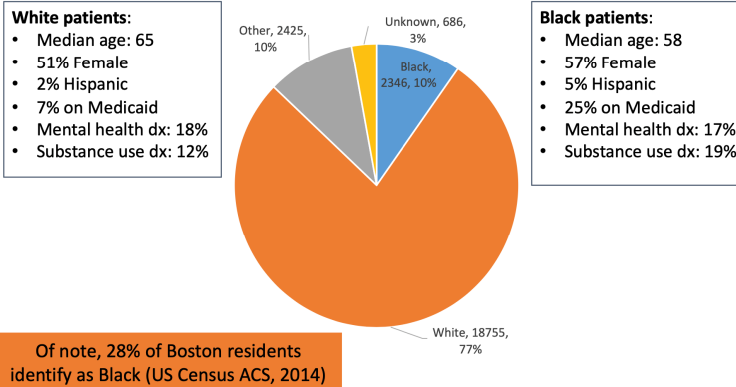
Source: Ambrose et al., *JAMA Network Open*, 2020.

Slide credit: Yannis Valtis, MD



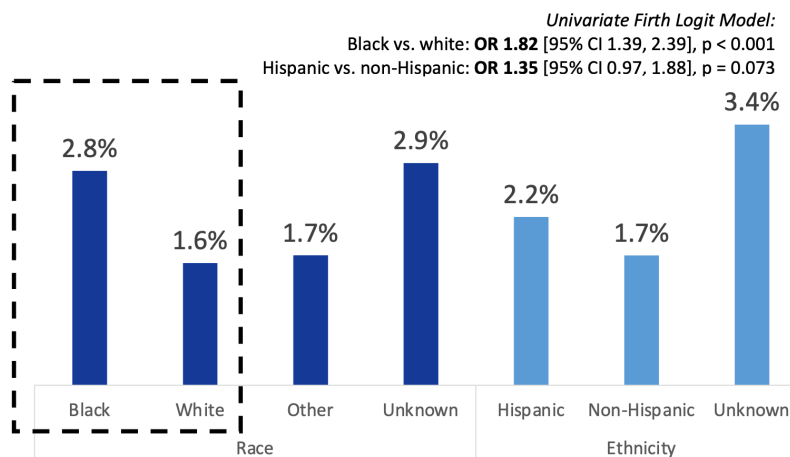
Study time period: 9/1/2018-12/31/2019

24,212 unique patients were discharged from the BWH Tower: 10% identified as Black



Slide credit: Yannis Valtis, MD

In univariate analysis, Black patients were almost twice as likely to have SER called as white patients



Slide credit: Yannis Valtis, MD

## In multivariable analysis, Black patients had higher odds of SER

**Outcome:** SER

n = 24,212

|                           | Multivariable (1)<br>Firth Logit*<br>OR [95% CI] | P      | Multivariable (2)<br>Firth Logit*<br>OR [95% CI] | P      |
|---------------------------|--|--------|--|--------|
| <b>Race</b>               |  |        |  |        |
| Black vs. White           | 1.55 [1.17, 2.05]                                | 0.002  | 1.36 [1.02, 1.81]                                | 0.037  |
| Other vs. White           | 0.92 [0.61, 1.39]                                | 0.69   | 0.85 [0.56, 1.29]                                | 0.45   |
| Unknown vs. White         | 1.41 [0.86, 2.33]                                | 0.18   | 1.34 [0.81, 2.22]                                | 0.25   |
| <b>Ethnicity</b>          |  |        |  |        |
| Hispanic vs. non-Hispanic | 1.33 [0.88, 2.03]                                | 0.18   | 1.20 [0.78, 1.83]                                | 0.41   |
| Unknown vs. non-Hispanic  | 1.73 [1.13, 2.65]                                | 0.011  | 1.71 [1.12, 2.62]                                | 0.014  |
| <b>Age</b>                | 1.00 [0.99, 1.00]                                | 0.26   | 1.00 [0.99, 1.01]                                | 0.43   |
| <b>Sex M vs. F</b>        | 2.25 [1.82, 2.79]                                | <0.001 | 2.24 [1.81, 2.78]                                | <0.001 |
| <b>Mental Health Dx</b>   | 1.56 [1.24, 1.95]                                | <0.001 | 1.51 [1.21, 1.90]                                | <0.001 |
| <b>Substance Abuse Dx</b> | 4.86 [3.95, 5.97]                                | <0.001 | 4.28 [3.46, 5.30]                                | <0.001 |
| <b>Length of Stay</b>     | 1.03 [1.02, 1.03]                                | <0.001 | 1.03 [1.02, 1.03]                                | <0.001 |
| <b>Medicaid vs. Other</b> |  |        | 2.20 [1.70, 2.84]                                | <0.001 |

*Because of collinearity of race and insurance in our dataset, models were run both with and without insurance as a co-variate, without altering the conclusion*

Slide credit: Yannis Valtis, MD

## Among those with SER, race/ethnicity & restraints were not statistically associated

**Outcome:** Physical restraint

n = 423 (patients on whom SER was called)

|                           | Multivariable (1)<br>Poisson<br>IRR [95% CI] | P      | Multivariable (2)<br>Poisson<br>IRR [95% CI] | P      |
|---------------------------|--|--------|--|--------|
| <b>Race</b>               |  |        |  |        |
| Black vs. White           | 0.64 [0.34, 1.19]                            | 0.16   | 0.64 [0.34, 1.20]                            | 0.17   |
| Other vs. White           | 1.29 [0.50, 3.33]                            | 0.60   | 1.30 [0.50, 3.37]                            | 0.59   |
| Unknown vs. White         | 0.44 [0.13, 1.48]                            | 0.19   | 0.45 [0.14, 1.51]                            | 0.20   |
| <b>Ethnicity</b>          |  |        |  |        |
| Hispanic vs. non-Hispanic | 0.85 [0.31, 2.32]                            | 0.75   | 0.85 [0.31, 2.32]                            | 0.75   |
| Unknown vs. non-Hispanic  | 1.03 [0.41, 2.63]                            | 0.94   | 1.02 [0.40, 2.59]                            | 0.97   |
| <b>Age</b>                | 1.03 [1.01, 1.04]                            | <0.001 | 1.03 [1.01, 1.04]                            | <0.001 |
| <b>Sex M vs. F</b>        | 1.39 [0.87, 2.23]                            | 0.17   | 1.39 [0.86, 2.23]                            | 0.18   |
| <b>Mental Health Dx</b>   | 1.05 [0.63, 1.75]                            | 0.85   | 1.06 [0.64, 1.77]                            | 0.82   |
| <b>Substance Abuse Dx</b> | 0.74 [0.46, 1.18]                            | 0.21   | 0.76 [0.47, 1.24]                            | 0.28   |
| <b>Length of Stay</b>     | 1.02 [1.01, 1.04]                            | 0.004  | 1.02 [1.01, 1.04]                            | 0.004  |
| <b>Medicaid vs. Other</b> |  |        | 0.86 [0.48, 1.53]                            | 0.60   |

*Because of collinearity of race and insurance in our dataset, models were run both with and without insurance as a co-variate, without altering the conclusion*

Slide credit: Yannis Valtis, MD

## We hypothesize there are multiple mechanisms contributing to our two main findings

1

Black patients are more likely to have SER called on them...

### **Potential mechanisms**

- Hospital staff racism leading to perception of Black patients as threatening
- Language or cultural barriers between providers and patients
- Stigmatizing language in the medical record
- Prior negative experience of Black patients with healthcare system leading to guarded approach towards providers

2

...but less likely to be physically restrained as a result

### **Potential mechanisms**

- Lower threshold to call SER on Black patients – many of them not an actual threat
- Multiple decision makers involved in decision to place patient in restraints – decreased impact of implicit bias

Slide credit: Yannis Valtis, MD

## Objectives

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## Pain management and equity: what we know

- Non-White patients are less likely to have sufficient pain management, regardless of clinical context or healthcare setting
- Inequity is most pronounced for Black patients, who are 22% less likely than White patients to receive any pain medication
- CRT assumption: our institution is not uniquely exempt from this problem

Meghani SH, Byun E, Gallagher RM. Time to take stock: a meta-analysis and systematic review of analgesic treatment disparities for pain in the United States. *Pain Med.* 2012 Feb;13(2):150-74. doi: 10.1111/j.1526-4637.2011.01310.x. Epub 2012 Jan 13. PMID: 22239747.

## Intervention: standardizing treatment

- Brigham Inpatient Opioid Stewardship Initiative (BIOSI)
- Pre/Post with total of 281 patients

Your orders should be based on a **functional pain assessment**

| <u>Mild Pain</u>   | <u>Moderate Pain – Add</u>  |
|--|---|
| <ul style="list-style-type: none"><li>• Opt for co-analgesia (APAP + ibuprofen) when not contraindicated</li><li>• Lidocaine patch (use up to 3)</li><li>• Heat/cold therapy</li><li>• Reiki</li></ul> | <ul style="list-style-type: none"><li>• Ketorolac IV</li><li>• Lidocaine Patch</li><li>• PR Tylenol</li></ul> |

Credit: Agustina Saenz, MD MPH

# Intervention: standardizing treatment

## Severe Pain

- Maximize the above medications- make sure non-opioids are written as ATC before escalating pain regimen.
- Give opioids ALWAYS with adjunctive analgesia (APAP / Ibuprofen) unless contraindicated
- Start with oral opioids unless the patient is unable to take POs
- Avoid long-acting or extended-release opioids for the treatment of acute pain
- If pain is uncontrolled, try up titrating the dose or switching to an alternative agent before switching the modality of administration. (Morphine PO-> Oxycodone PO rather than Morphine PO -> Morphine IV)
- Use the lowest possible dose to maintain adequate analgesia
- Trial SQ administration rather than IV if patient is unable to take PO
- If giving x1 for breakthrough, administer SQ rather than IV, then consider up titrating oral dose
- Avoid administering IV Benadryl with IV opioids
- Reassess pain every 24 h and consider weaning opioids every day
- Consult pain medicine to help you manage your patient's pain if you escalate the regimen for two consecutive days.

Credit: Agustina Saenz, MD MPH

# Outcomes

- For all patients, MME/day decreased from 14.1 to 7.4
- Pre-intervention: White 15.8 vs Non-White 12
- Post-intervention: White 7.3 vs Non-White 7.9
- Pre-intervention: English 16.1 vs. Other Primary 0.35
- Post-intervention: English 7.6 vs Other Primary 6.2

Credit: Agustina Saenz, MD MPH

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## General Medicine vs. Cardiology



## Context: Specialty Care for CHF

- Patients admitted to the Shapiro Cardiovascular Center receive:
  - Specialty-trained nursing
  - Single rooms
  - Larger, more comfortable rooms
  - Spacious family zones
  - Increased natural light
  - Specialty pharmacy and discharge planning
- And yet, specialty cardiology care in Shapiro remains a limited resource



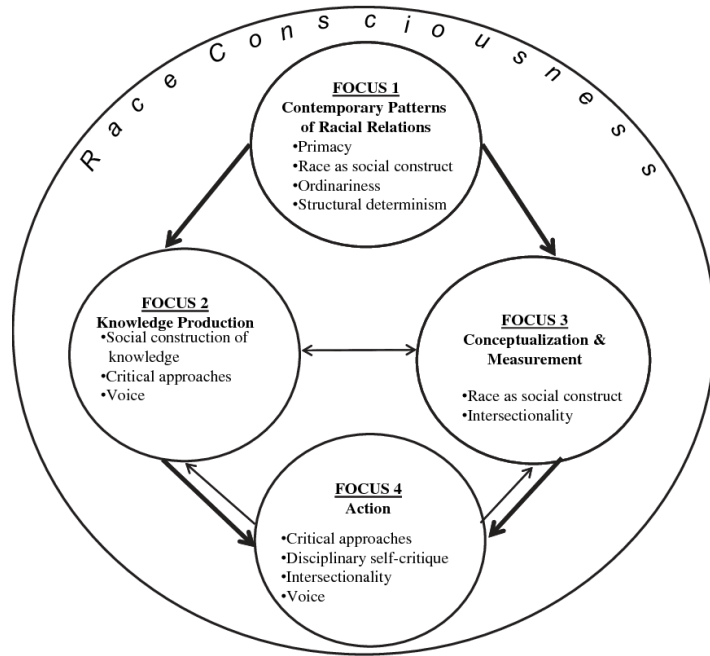
## Specialty Care for CHF

- Observational data from community and academic settings suggest differential outcomes for patients receiving specialty cardiology care during admissions for CHF:
  - Mortality
  - Re-admission rates
  - Cardiology clinic follow-up
- At BWH, differential outcomes for CHF (GMS vs Cards):
  - Lower cardiology clinic follow up (25 vs 51%)
  - Higher 7 day readmissions (10 vs 5%)
  - Higher 30 day readmissions (24 vs 17%)

Steinberg et al, Circulation 2012  
Foody et al, AJM 2005  
Jong et al, Circulation 2003  
Salata et al, AJC 2018  
Uthamalingam et al, AJC 2015

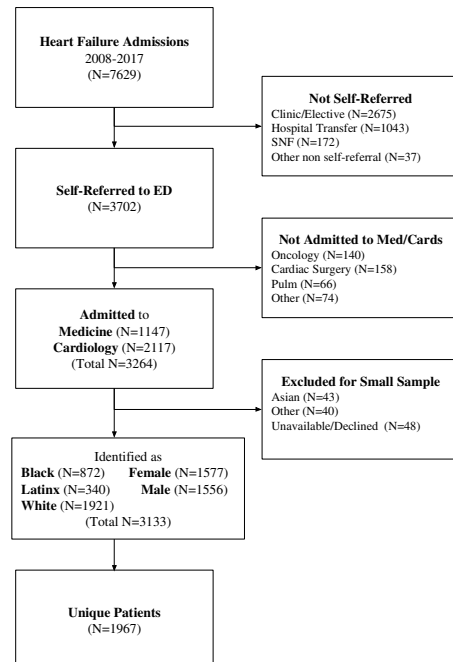
# Public Health Critical Race Praxis

Ford C and Airhihenbuwa C. Just What is Critical race theory and What's it doing in a Progressive Field like Public health? *Ethn Dis.* 2018; 28 (Suppl 1): 223-230.



## Heart Failure Admission Service Triage Study

- Data source:
  - BWH clinical and financial databases
  - All admissions 2008-2017 with principal diagnosis of heart failure
- Self-referred to ED
- Admitted to Medicine or Cardiology
- White, Black, or Latinx
- Outcome: admission to cardiology





## Heart Failure: Study Outcomes

- **Raw data:**

- 67% of White vs 53% of Black and Latinx patients admitted to Cardiology

- **Primary Outcome, multivariate analysis:**

- Black and Latinx patients admitted to Cardiology less frequently than White peers

- **Secondary Outcomes, Cardiology admission associated with:**

- Significantly decreased likelihood of hospital readmission (hazard ratio = 0.84, 95%CI 0.72-0.97)
- Increased outpatient Cardiology follow up (46% vs 25% for GMS)

| Characteristic | Multiply Imputed Analysis |           |         |
|----------------|---------------------------|-----------|---------|
|                | Adjusted RR               | 95% CI    | P Value |
| Race           |                           |           |         |
| White          | ref                       |           |         |
| Black          | 0.91                      | 0.84–0.98 | 0.015   |
| Latinx         | 0.84                      | 0.73–0.96 | 0.012   |

|                 | Rate Ratio of Admission to Cardiology | 95% CI    | P Value |
|-----------------|---------------------------------------|-----------|---------|
| Black vs white  | 0.74                                  | 0.63–0.87 | 0.0001  |
| Latinx vs white | 0.75                                  | 0.60–0.95 | 0.014   |
| Female vs male  | 0.86                                  | 0.77–0.96 | 0.0055  |

## H-FAST: Results and Implications

- White patients push for specialty care more often and more strenuously, and providers are responsive to this.
- Clinicians were more likely to report having spoken with this outpatient provider for White patients than for Black or Latinx patients (24.3 vs 16.7%).



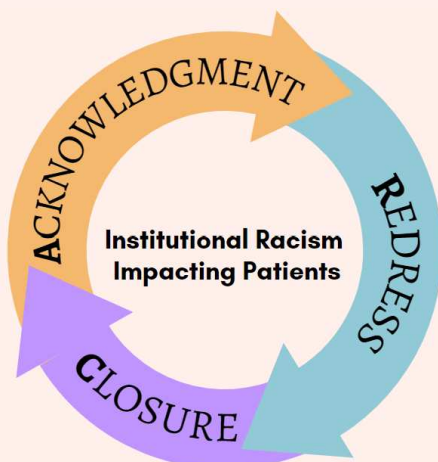
RACE

## An Antiracist Agenda for Medicine

Colorblind solutions have failed to achieve racial equity in health care. We need both federal reparations and real institutional accountability.

BRAM WISPELWEY, MICHELLE MORSE

# Healing ARC

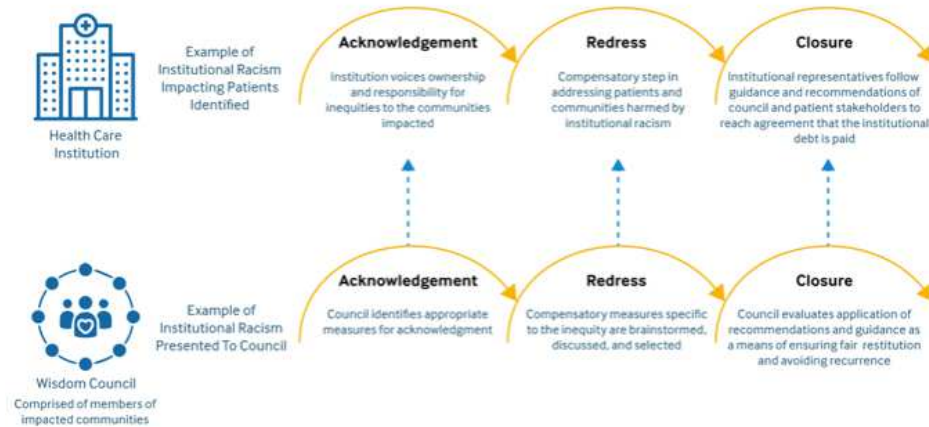


### A Reparative Approach

- 1** **Acknowledgment**  
Voice responsibility
- 2** **Redress**  
Take compensatory action
- 3** **Closure**  
Ensure community agreement and oversight

## Wisdom Councils Guide Healing ARC Implementation for Institutional Accountability

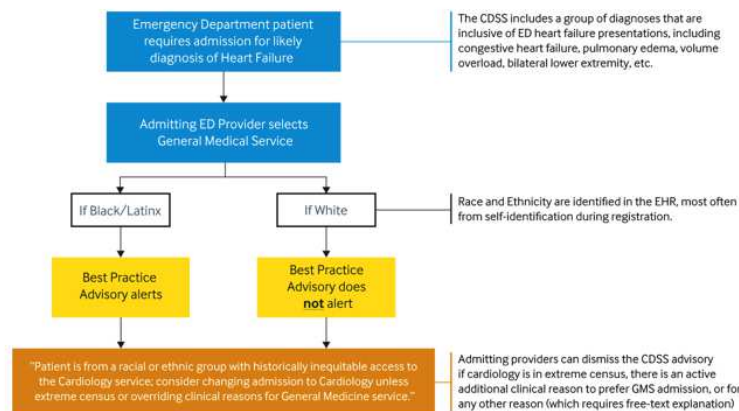
This figure shows how the Wisdom Council facilitates the implementation of the Healing ARC model of addressing institutional racism.



Source: Content supplied by A. Kirsten Mullen, William A. Darity, and authors  
NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society

## Best Practice Advisory Protocol to Redress Racial Inequities in Access to Cardiology Service

This use of the clinical decision support system is designed specifically to redress and mitigate institutional racism in heart failure admissions. The tool would trigger a Best Practice Advisory message to consider cardiology rather than the general medicine service. The clinician can decline the advisory if cardiology is in extreme census, if they specify clinical reasons that make general medicine preferable, or if they specify some other reason.



Source: The authors  
NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society

# Why Repair?

**As providers, we often take trust for granted.**

**Should we?**

Commonwealth Fund:  
<https://www.commonwealthfund.org/publications/newsletter-article/2021/jan/medical-mistrust-among-black-americans>

## Medical Mistrust and Its Impacts

**Trust in health care among Americans has declined in recent decades, and it's worse among Black Americans.**

Black Americans are more likely than whites to say they don't trust their physician

In an October 2020 poll, 7 of 10 Black Americans say they're treated unfairly by the health care system and 55% percent say they distrust it.

**Mistrust may prevent people from getting care.**

People who say they mistrust health care organizations are less likely to take medical advice, keep follow-up appointments, or fill prescriptions.

People who say they mistrust the system are much more likely to report being in poor health.