HEALTH EQUITY METRICS & TRAUMA

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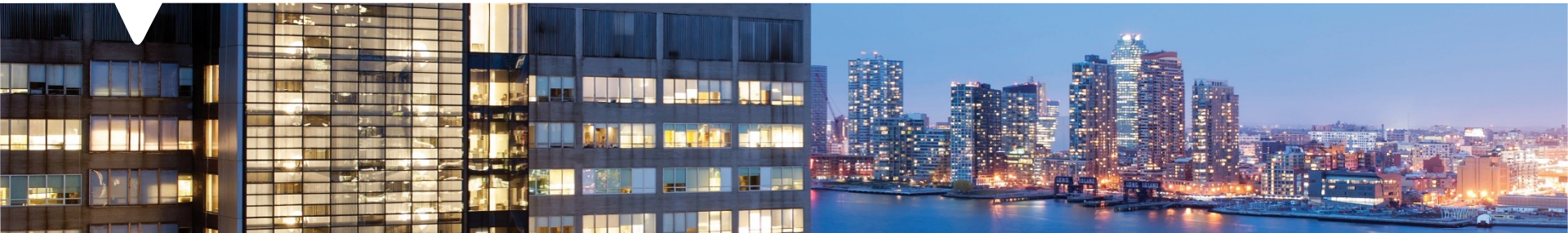
Associate Professor of Surgery

New York University Grossman School of Medicine

Design for Implementation: The Future of Trauma Research & Clinical Guidance Conference Series

2/21/2024



Objectives

- To describe the importance of achieving health equity within trauma
- To describe the historical policies and structural drivers leading to health inequities within trauma
- To describe health equity metrics within trauma

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Disclosures

I have no disclosures

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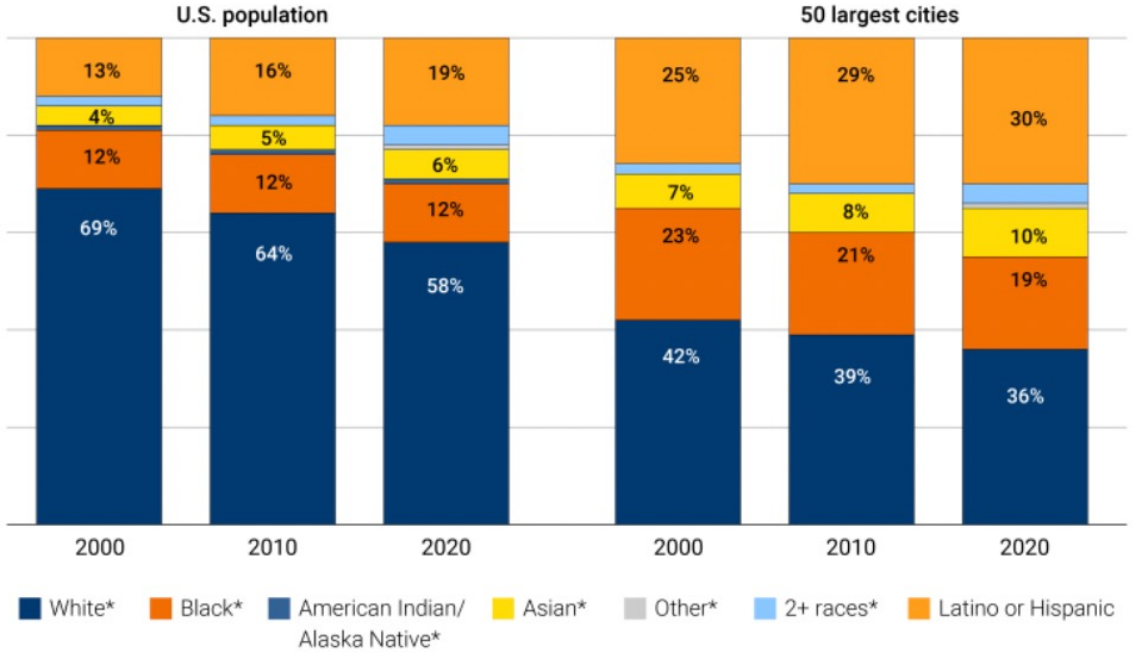
Figure 1. U.S. population and 50 largest cities: Race-ethnic profiles, 2000–2020



Source: William H. Frey analysis of 2000-2020 US decennial censuses

Metropolitan Policy Program at BROOKINGS

**non Latino or Hispanic members of race group*
Note: Hawaiians/Other Pacific Islanders were included as part of Asian category

The Changing Face of America

- Immigration to the U.S. has tripled in the last 30 years, representing the largest continuous wave of immigration in U.S. history

- Given the increased diversity of the U.S. population, migration, and globalization, health care providers **must be equipped to provide care in a cross-cultural context**

HHS Advisory Committee of Minority Health (ACMH)- 2011

Health Equity

The attainment of the highest level of health for all people, where **everyone has a fair and just opportunity to attain their optimal health** regardless of race, ethnicity, disability, sexual orientation, gender identity, socioeconomic status, geography, preferred language, or other factors that affect access to care and health outcomes

Centers for Medicare and Medicaid Services (CMS)

Why Health Equity is Important?

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ECONOMICS

There is a potential **economic gain of $135 billion per year** if racial disparities in health are eliminated

- ☐ $93 billion in excess medical care costs
- ☐ $42 billion in untapped productivity

https://altarum.org/RacialEquity2018#:~:text=Key%20Findings,already%20led%20to%20economic%20growth.

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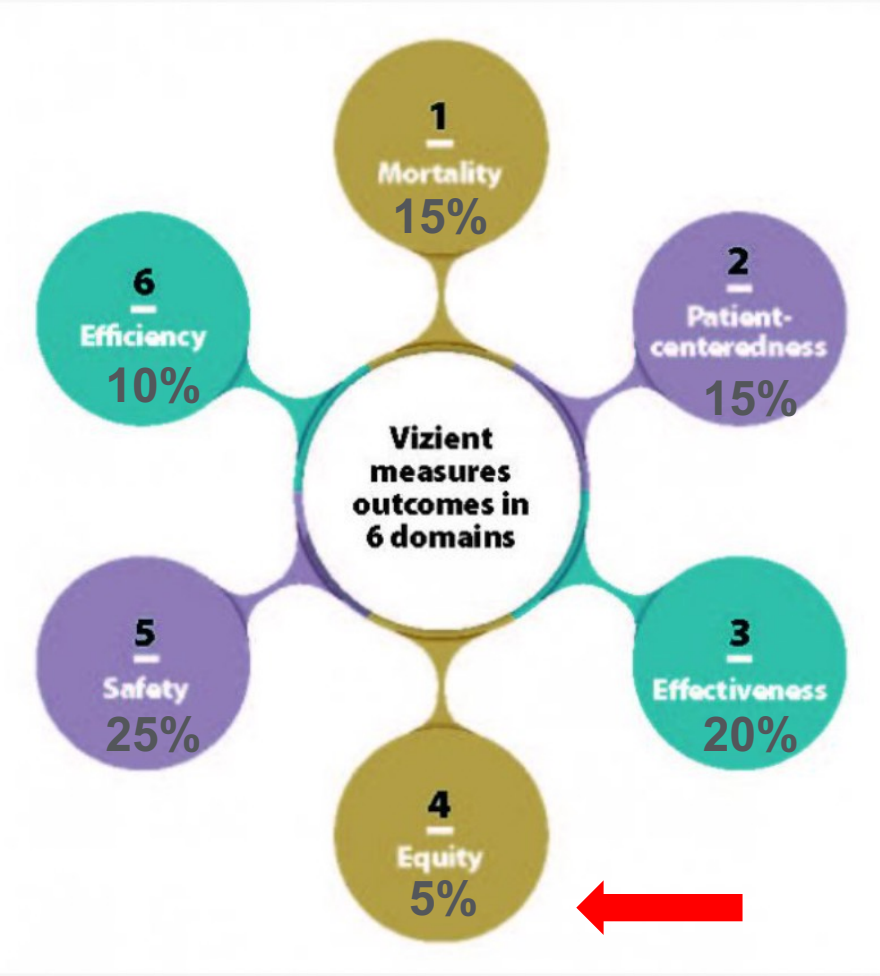
Vizient- 6 Domains of Quality

Equity **is often the forgotten domain of quality**



The Importance of Equity in Health Care

We share a common goal: to make high-quality health care available for everyone. Yet even today, economic, social and other factors create barriers that prevent access.

4x

Maternal mortality rate for Black women is 4x higher than that for non-Hispanic White women

20%

Hispanic women are 20 percent more likely to die from cervical cancer than non-Hispanic White women

8x

Asian Americans are eight times more likely to die from hepatitis B than non-Hispanic Whites

30%

Diabetes rates are more than 30 percent higher among Native Americans and Latinos than among Whites

https://www.jcrinc.com/our-priorities/health-care-equity/

QUALITY

- **Joint Commission** now mandates

  - strategies for **reducing health disparities**
  - **screening patients** for social determinants of health
  - developing an **action plan to address identified health disparities** within patient populations

Joint Commission- Health Equity Certification

Certification Domains

The Joint Commission

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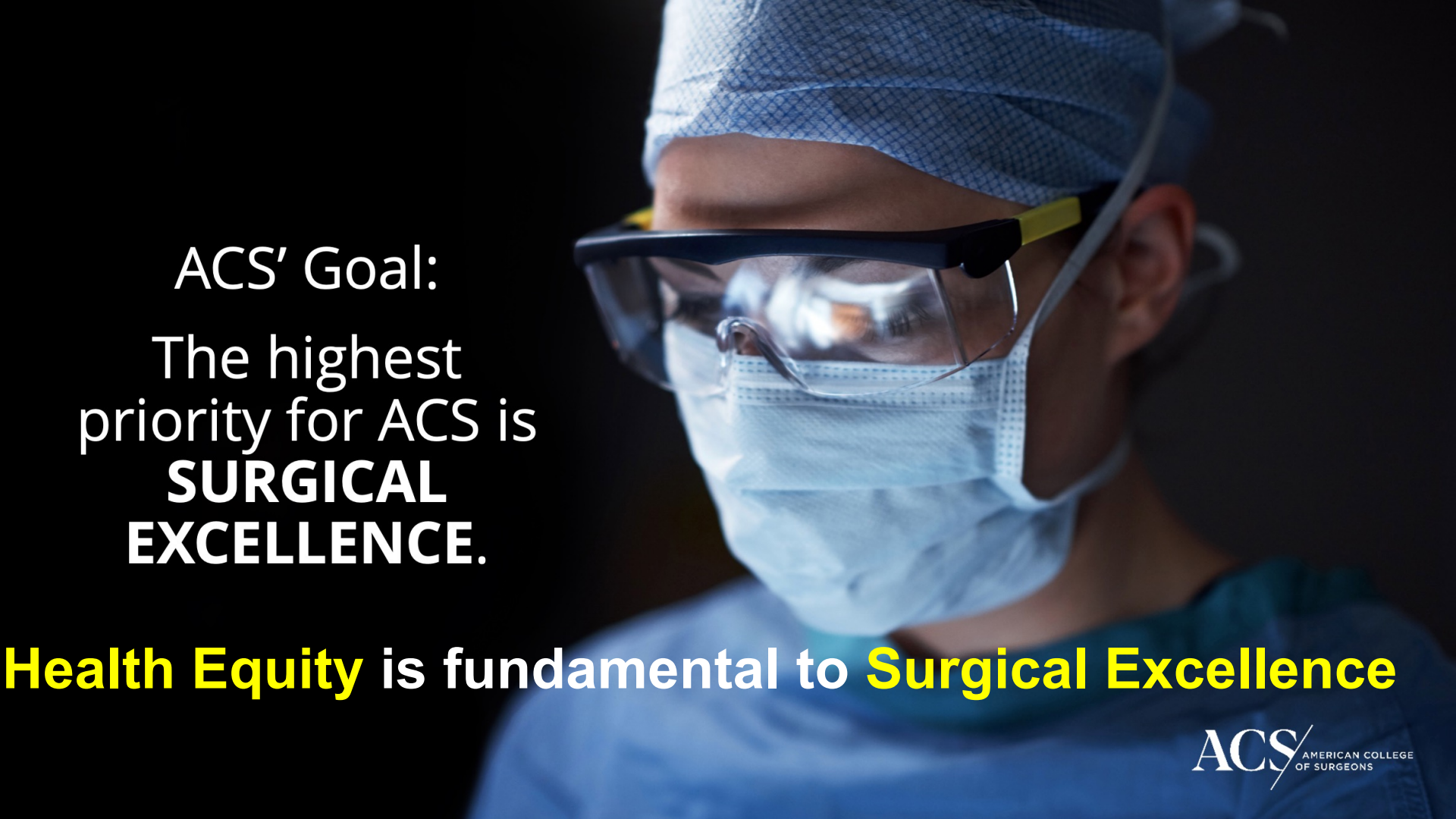
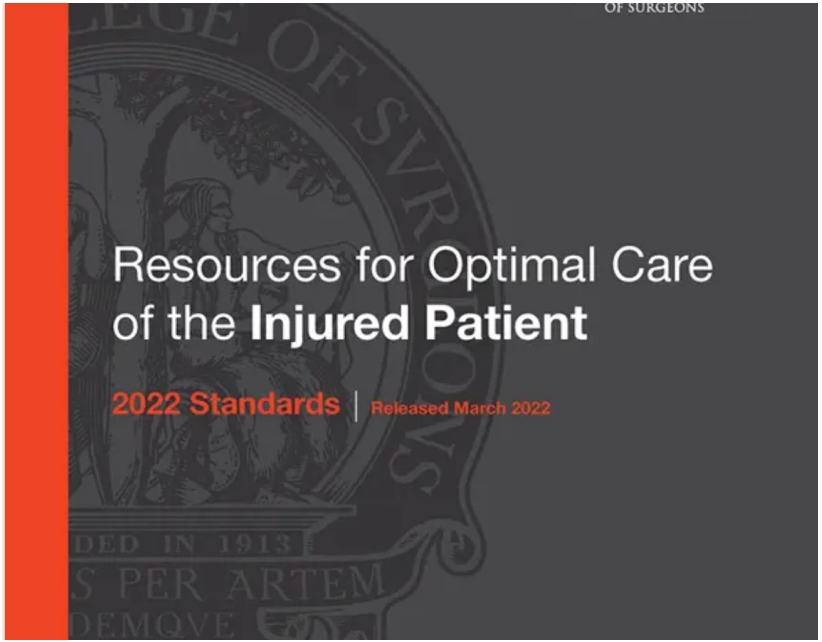
QUALITY

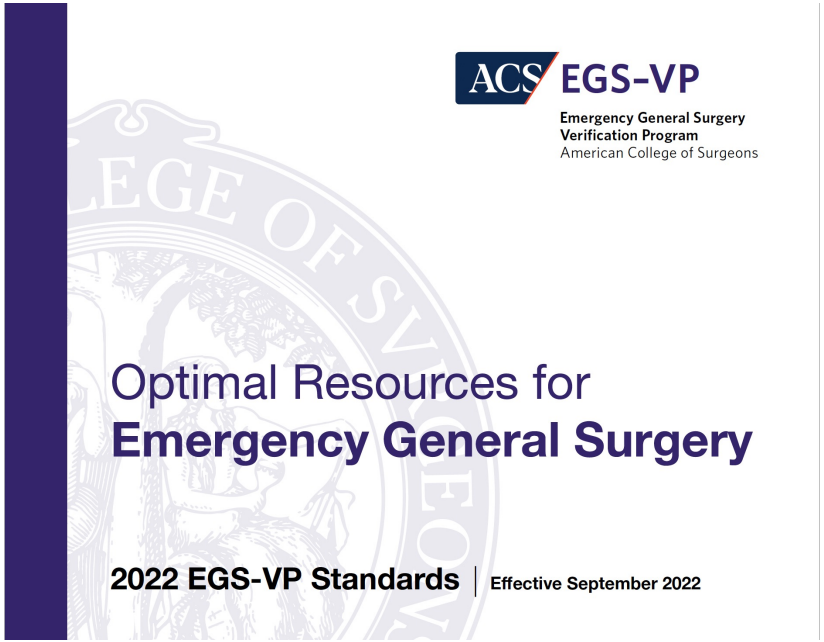
- ***Payment determination will be tied to mandatory reporting of social determinants of health***

  - Voluntary reporting in 2023
  - Mandatory reporting in 2024
  - Payment determination to be in place by 2026


ACS' Goal:
The highest priority for ACS is SURGICAL EXCELLENCE.
Health Equity is fundamental to Surgical Excellence
ACS AMERICAN COLLEGE OF SURGEONS

Achieving Health Equity & ACS Verification





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W
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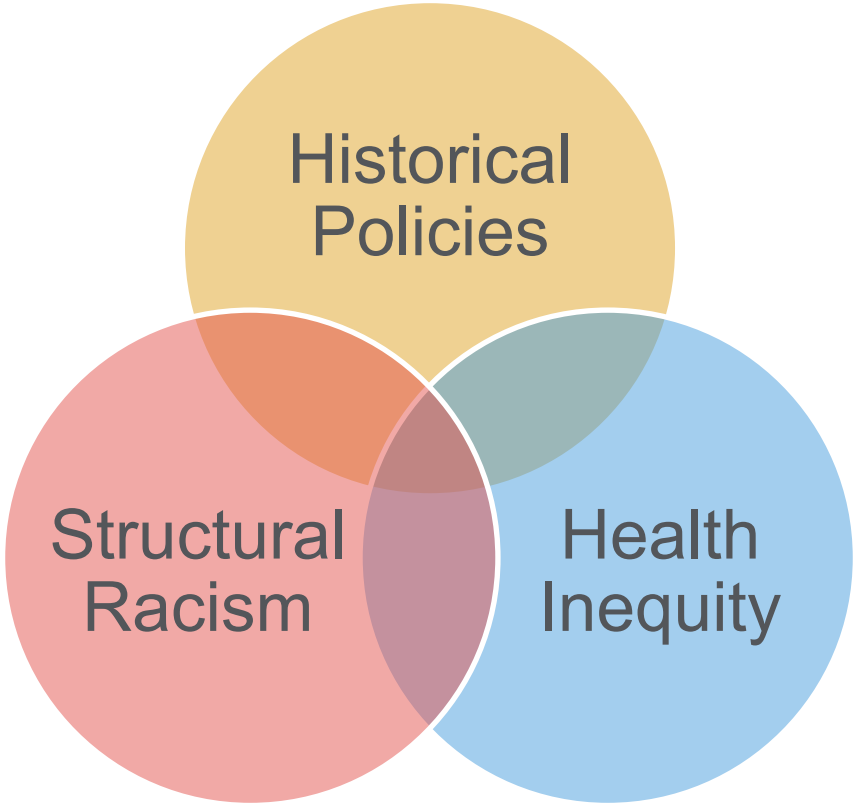
At the Intersection of Historical Policies, Structural Racism, and Health Inequity



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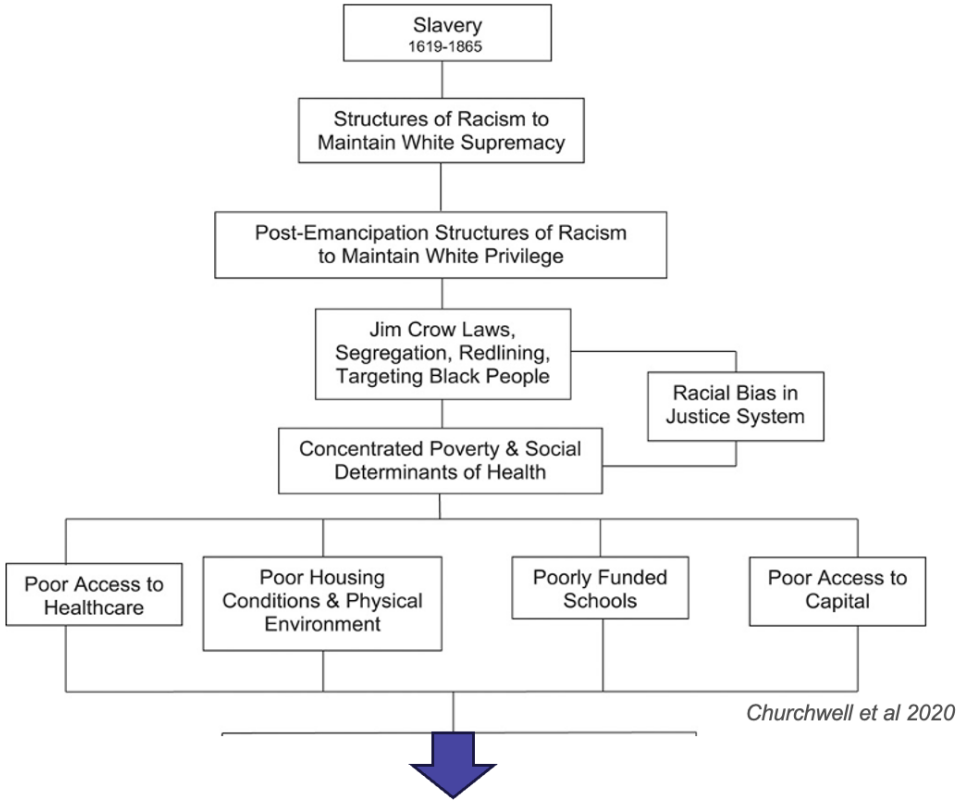
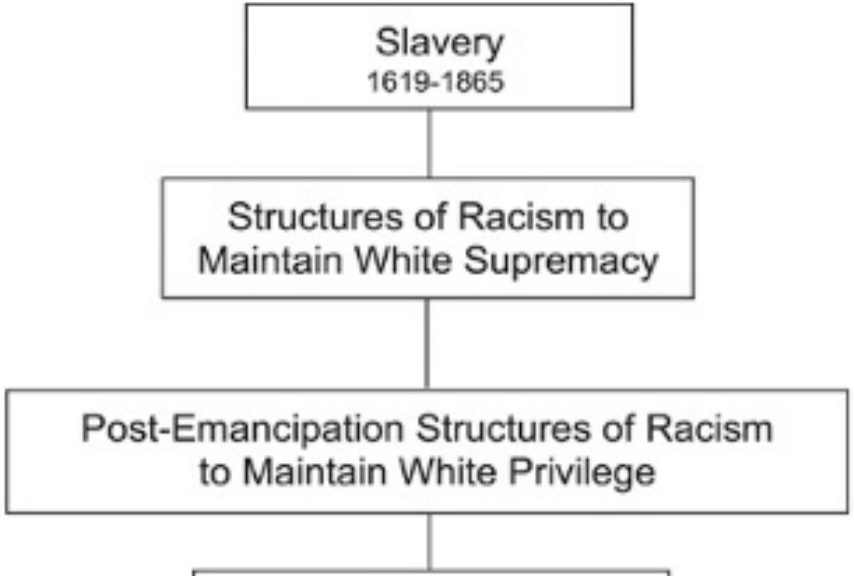
At the Intersection of Historical Policies, Structural Racism, & Health Inequity



HEALTH INEQUITIES AND POOR HEALTH OUTCOMES

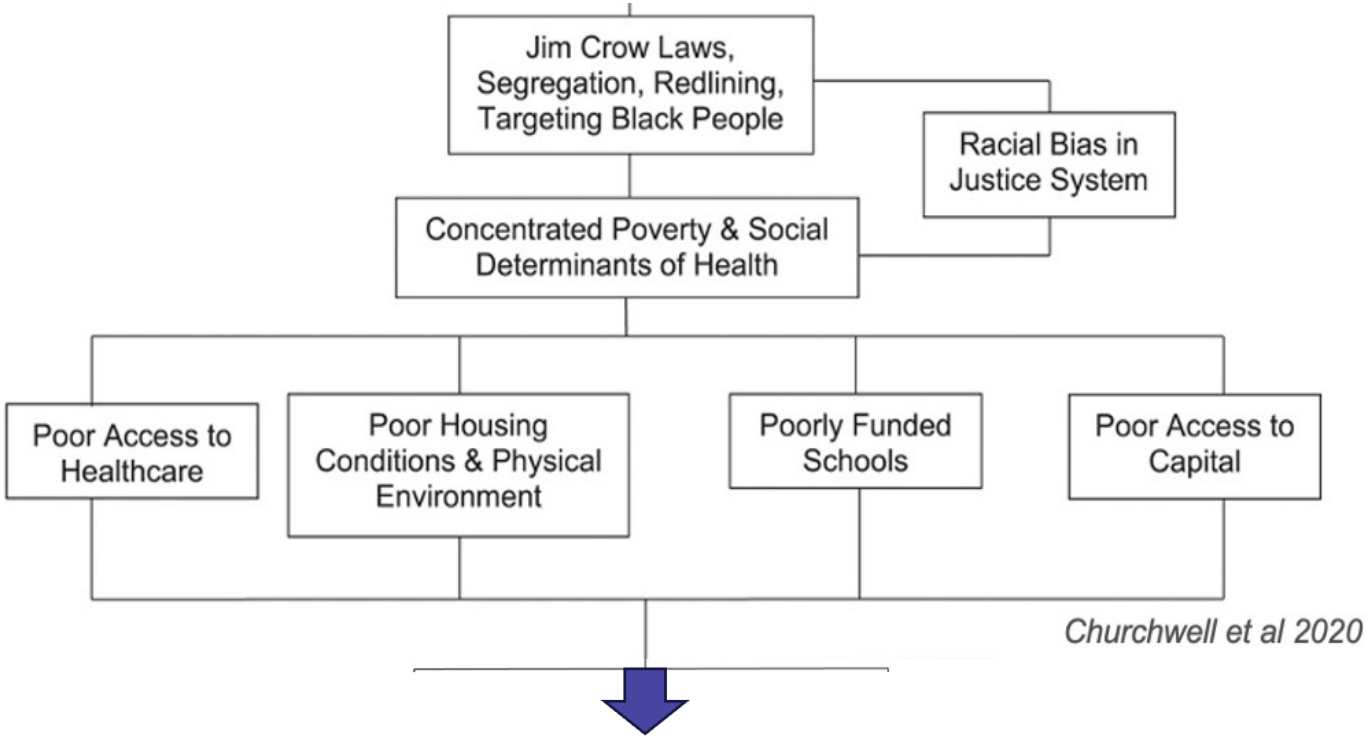
At the Intersection of Historical Policies, Structural Racism, & Health Inequity



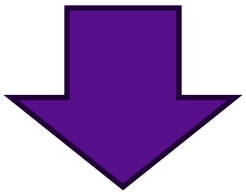
Churchwell et al 2020

HEALTH INEQUITIES AND POOR HEALTH OUTCOMES

At the Intersection of Historical Policies, Structural Racism, & Health Inequity



- **Structural racism** operates through laws and policies that allocate resources in ways that disempower and devalue members of racial and ethnic minority groups



Inequitable Access to High Quality Care

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Key Policies- Post Reconstruction

- Black Codes and Jim Crow Laws – 1870
- Plessy v Ferguson -1896 “**Separate but Equal**”
- Flexner Report of 1910
- **Redlining** – 1930s

Structural Determinants of Health Inequities

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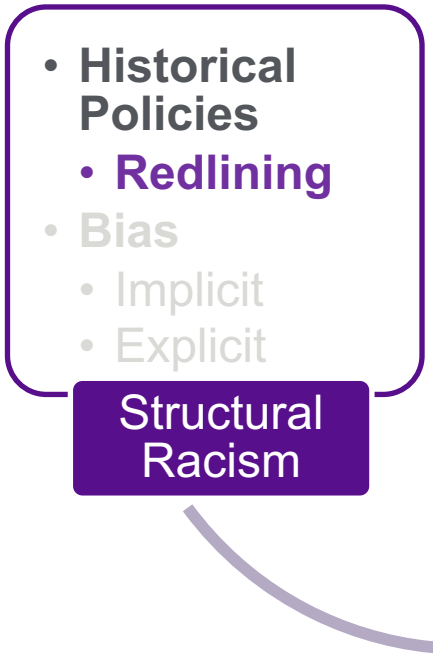
Structural Determinants of Health Inequities



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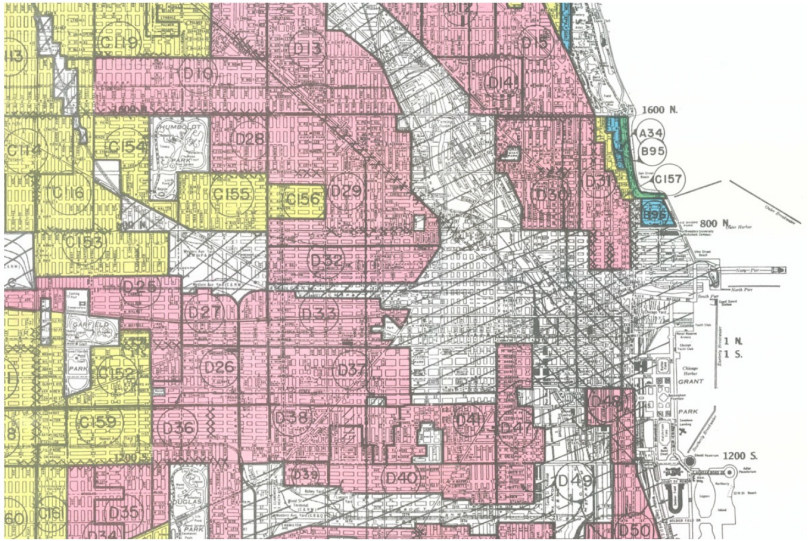
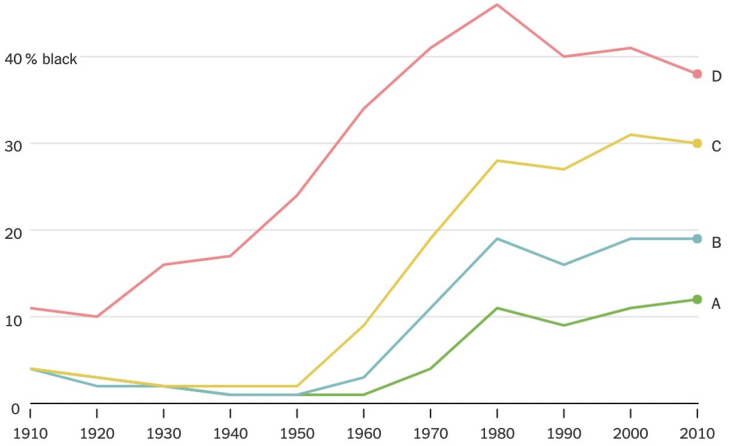
Policies – Redlining



A Home Owners' Loan Corporation map of Chicago
Source: Mapping Inequality: Redlining in New Deal America

Redlined Neighborhoods Have the Highest Share of Black Residents

D-rated neighborhoods were considered 'hazardous,' A-rated neighborhoods the 'best.'



Data from 149 cities mapped by the Home Owners' Loan Corporation in the 1930s.

Source: 'The Effects of the 1930s HOLC "Redlining" Maps' by D. Aaronson, D. Hartley, B. Mazumder.

https://www.nytimes.com/2017/08/24/upshot/how-redlinings-racist-effects-lasted-for-decades.html

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Research paper

Historic redlining, structural racism, and firearm violence: A structural equation modeling approach

Michael Poulson, MD MPH[a], Miriam Y Neufeld, MD MPH[a], Tracey Dechert, MD[a], Lisa Allee, MSW[a], Kelly M. Kenzik, MS, PhD[a,b,*]

[a] *Department of Surgery, Boston Medical Center, Boston University School of Medicine, Boston, MA*
[b] *Division of Hematology and Oncology, University of Alabama at Birmingham, Birmingham, AL*

- Redlining practices of the 1930s potentially contribute **to increased rates of firearm violence** namely through preclusion from homeownership, poverty, poor educational attainment, and **concentration or segregation of Black communities**

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Points on Care
A data brief series examining all aspects of primary care access
PRIMARY CARE DEVELOPMENT CORPORATION
Page 1 | Issue 5 | September 2020

Today's Health Inequities in New York City Driven by Historic Redlining Practices

- The Primary Care Development Corporation (PCDC) explored **historically redlined areas** and present-day health disparities in New York City
- Data on the most recent **demographic, healthcare access, and health status measures** were compared at the census tract level by historic security map grade

Health Inequities Driven by Redlining

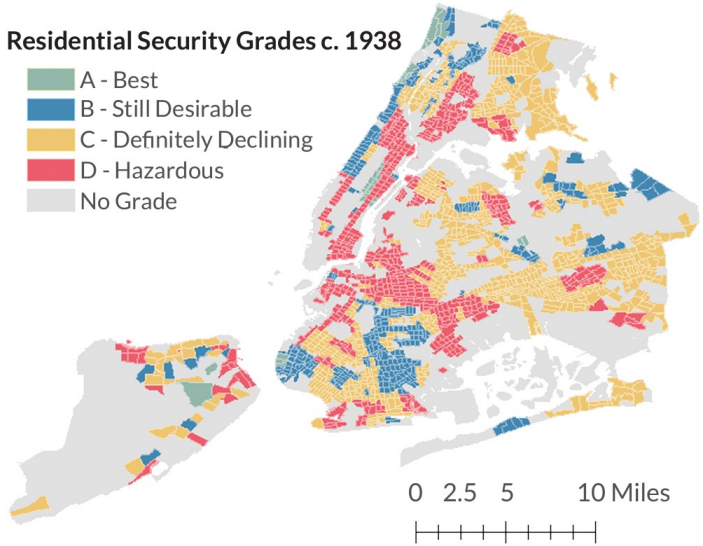

Figure 1. Redlining "Security Grades" by Home Owners' Loan Corporation c. 1938.

- **Poverty rates** in redlined areas are 3.6 times higher than A-rated census tracts.
- The **proportion of Black residents in redlined areas is 9.1 times higher** than in A-rated census tracts.
- Health disparities persist in redlined areas of NYC, with the **highest uninsured and obesity rates** still observed in historically redlined neighborhoods.

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.pcdc.org/wp-content/uploads/Points-on-Care-_-Issue-5-_-FINAL.pdf

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July 14, 2023

Associations Between Neighborhood-Level Racial Residential Segregation, Socioeconomic Factors, and Life Expectancy in the US

Sadiya S. Khan, MD, MSc[1,2]; Cyanna McGowan, MPH[2]; Laura E. Seegmiller, MPH[1]; et al

- Evaluated the associations between neighborhood level racial segregation, socioeconomic factors, and life expectancy in the US

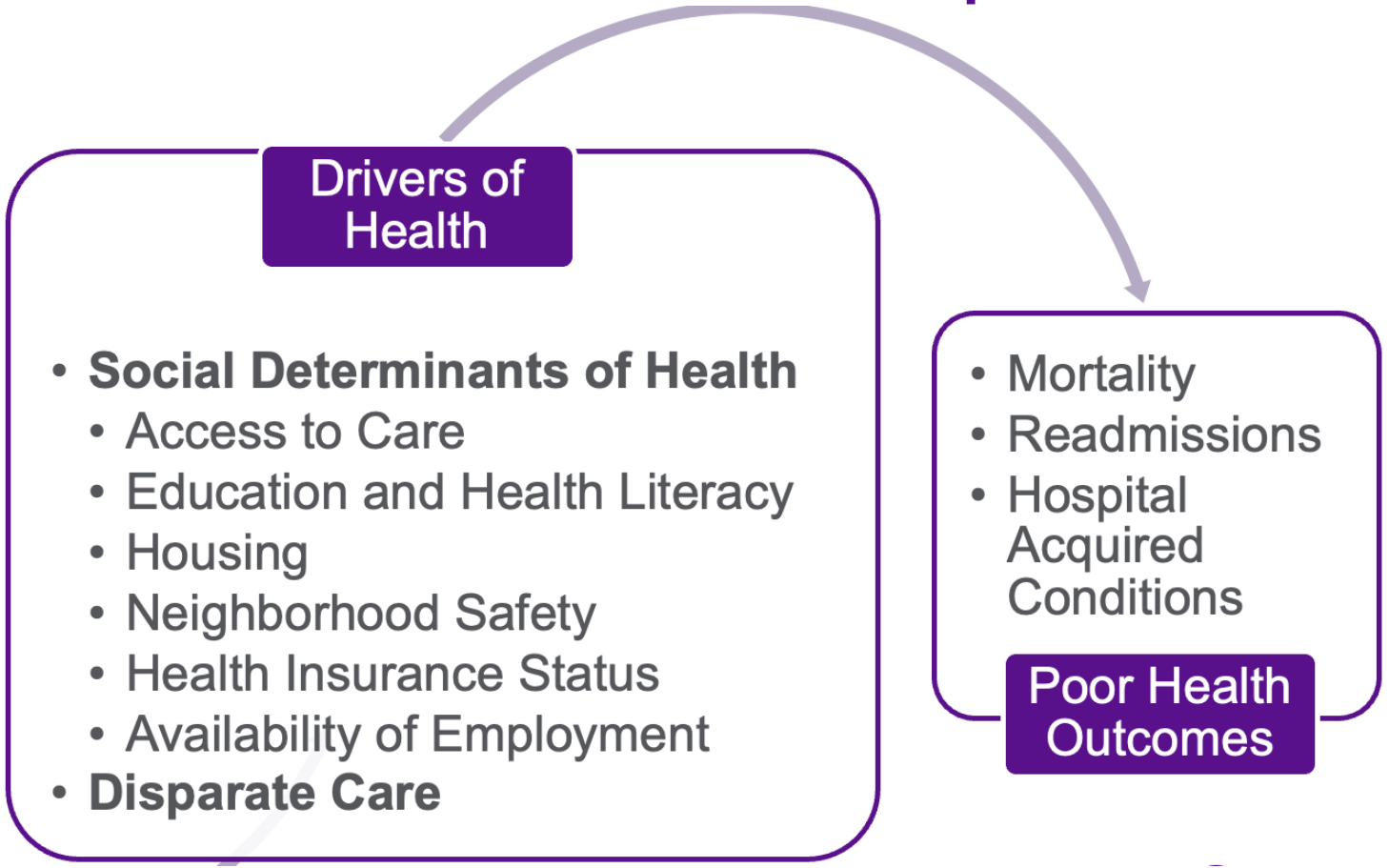
July 14, 2023

Associations Between Neighborhood-Level Racial Residential Segregation, Socioeconomic Factors, and Life Expectancy in the US

Sadiya S. Khan, MD, MSc[1,2]; Cyanna McGowan, MPH[2]; Laura E. Seegmiller, MPH[1]; et al

- Highly segregated neighborhood was associated with **statistically significantly lower life expectancy by 4 years**
- Residential segregation is a ***key structural driver*** of racial inequities

Structural Determinants of Health Inequities



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Call to Action: Identify Health Equity Metrics in Trauma

- Need to **identify** key health equity standards within trauma
- **Integrate** those standards within our databases, registries, practice management guidelines, research designs, and verification standards

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Joint Commission- Health Equity Certification

Certification Domains

The Joint Commission

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Leadership Domain

- Make health care equity is a **strategic priority** for all verified trauma programs, trauma organizations, and trauma societies
  - **Strategic plan for reducing health care disparities** and providing equitable care to all trauma patients

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Leadership Domain

- Make health care equity is a **strategic priority** for all verified trauma programs, trauma organizations, and trauma societies

  - **Allocate financial resources** to achieve and sustain its goals to reduce health care disparities and provide equitable care, treatment, and services

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Collaboration Domain

- Hold all verified trauma programs accountable for collaborating with patients, families, and caregivers **to identify patient-level needs** to address

- Hold all verified trauma programs accountable for collaborating with community organizations **to identify community-level needs** to address

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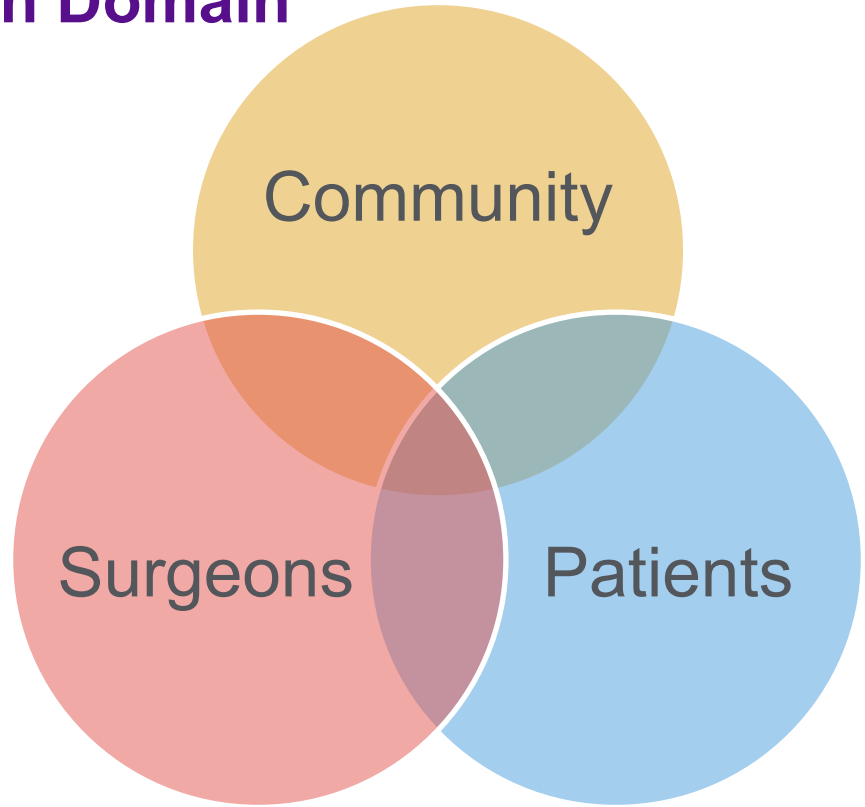
Data Collection Domain



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Community Health Equity Metrics

- All verified trauma programs review data about the **sociodemographic characteristics and health-related social needs** of the individuals in its community.

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Patient Health Equity Metrics

- **All verified trauma programs collect self-reported patient data to identify opportunities to improve health care equity**
  - Patient race and ethnicity data with expanded categories

SOGI

SEXUAL ORIENTATION
GENDER IDENTITY

Race
Ethnicity
and
Language preferred for medical encounters

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Patient Health Equity Metrics

- Documentation of patient's **preferred language and need for a language interpreter**
  - Document use of interpreter or if patient receives care from staff qualified to communicate in the patient's preferred language

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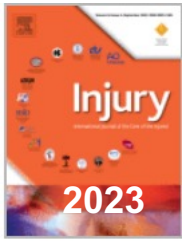

Centering patient perspectives to achieve injury-related health equity in trauma care systems: Improving trauma registry data

Kelsey M Conrick [a b], Brianna Mills [b c], Christopher St. Vil [b d], Danae Dotolo [a b], Esther Solano [b], Eileen M Bulger [b e], Saman Arbabi [b e], Madeline Herrenkohl [b], Monica S Vavilala [b f], Ali Rowhani-Rahbar [c], Megan Moore [a b]

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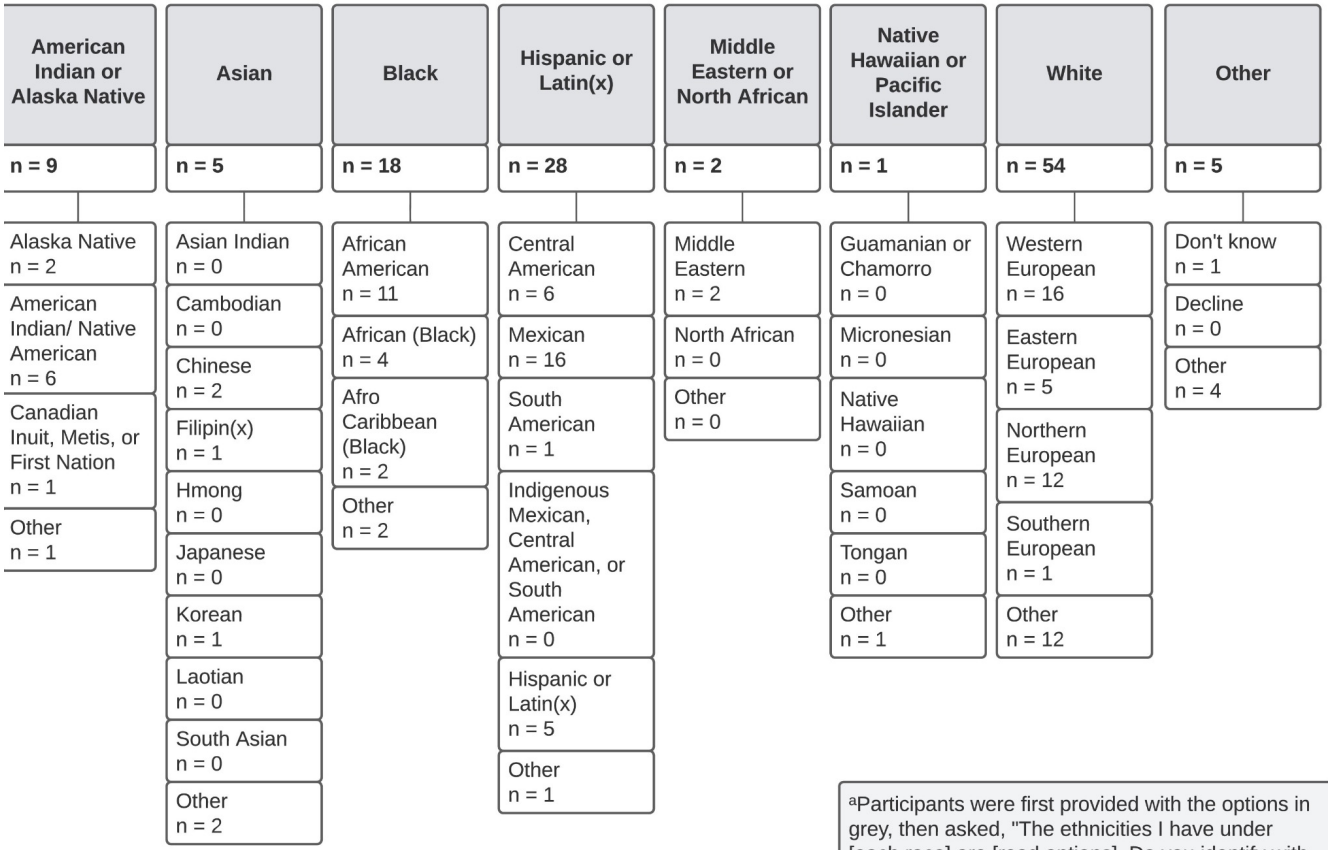
- Sought to develop and **test a culturally resonant system for collecting equity-related data elements** for racially and ethnically diverse patients being treated for traumatic injuries

- First study **to center the voices of a diverse group patients to understand their perspectives and preferences** on how equity-related data are collected and preferred indicators for this information

Conrick et al 2023

Race and ethnicity: *What is your race and ethnicity? Your options are:*[a]



[a]Participants were first provided with the options in grey, then asked, "The ethnicities I have under [each race] are [read options]. Do you identify with any of those?

Conrick et al 2023

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Language

- Participants recommended **asking about fluency** in addition to language spoken and many indicated they wanted the **option to receive medical information**, especially written information, **in more than one language.**

  – *How well do you speak English?*

  – *In what language do you prefer to hear or read medical information?*

Conrick et al 2023

Language

- What process does the trauma program have in place **to ensure patients with limited English proficiency** are receiving equitable care

  - **Interpreter** in trauma bay when patients arrive
  - Translation services used for every patient encounter
  - **Informed consent and discharge paperwork in patient preferred language**

Language

- Need to advance language access, language translation services, health literacy, and the **provision of culturally tailored services**

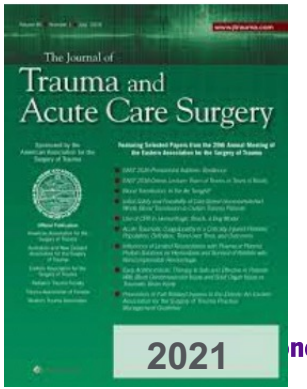
Advancing Health Policy to Improve Access to Care

The impact of Medicaid expansion on trauma-related emergency department utilization: A national evaluation of policy implications

Lisa Marie Knowlton, MD, MPH, FRCSC, Melody S. Dehghan, BA, Katherine Arnow, MS, Amber W. Trickey, PhD, MS, CPH, Lakshika Tennakoon, MD, M Phil, Arden M. Morris, MD, MPH, FACS, *and* David A. Spain, MD, FACS, *Stanford, California*

Acquisition of Medicaid at the time of injury: An opportunity for sustainable insurance coverage

Joshua D. Jaramillo, MD, Katherine Arnow, MS, Amber W. Trickey, PhD, MS, CPH, Katherine Dickerson, MD, Todd H. Wagner, PhD, Alex H.S. Harris, MSc, PhD, Linda D. Tran, PhD, Sylvia Bereknyei, PhD, Arden M. Morris, MD, MPH, FACS, David A. Spain, MD, FACS, *and* Lisa Marie Knowlton, MD, MPH, FACS, FRCSC, *Stanford, California*



Trauma Surgeon and Trauma Surgeon Leaders

- Implicit bias training
- Health equity curriculum for trainees, staff, and attendings
- Commitment to and advocate for **inclusive excellence**

Provision of Care Domain

- Increase **diversity within the acute care surgery workforce** and improve retention to reduce health & health care disparities

- **Advance health equity framework in research** and applying health equity lens to all study designs, trials, and peer-reviewed manuscripts

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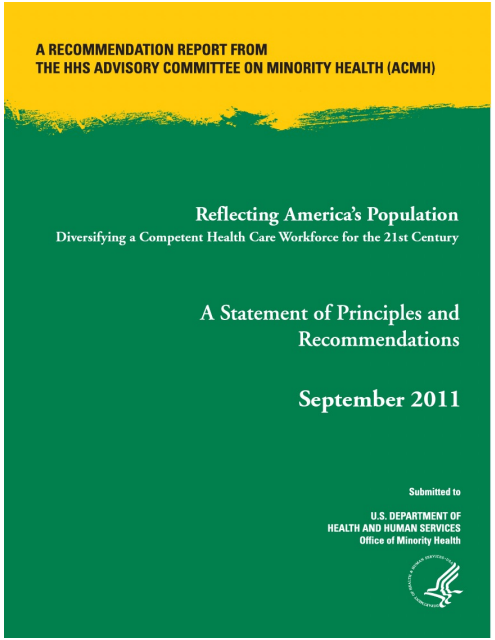
Diversifying the Workforce- Why?

- Under-represented health care providers are more likely to **serve underserved communities**
- Among racial/ethnic minoritized patients, **greater levels of satisfaction** with their care
- Reductions in **cultural and linguistic barriers** to quality care



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November 9, 2020

JAMA Network™

Association of Racial/Ethnic and Gender Concordance Between Patients and Physicians With Patient Experience Ratings

Junko Takeshita, MD, PhD, MSCE[1,2]; Shiyu Wang, MS[1]; Alison W. Loren, MD, MSCE[3]; et al

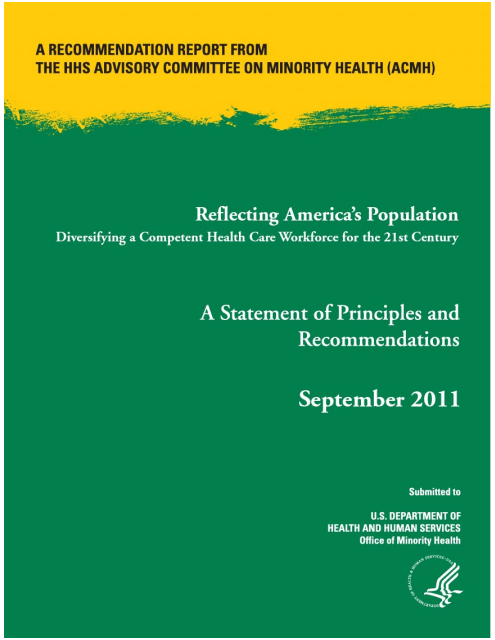
- Higher Press Ganey survey scores were associated with **racial/ethnic concordance** between patients and their physicians

Diversifying the Workforce

- **“Diversity and excellence are not mutually exclusive**. They go hand-in-hand.

- We need to address this like we do all issues with passion, determination, and persistence…

Dr. Rubens Pamies



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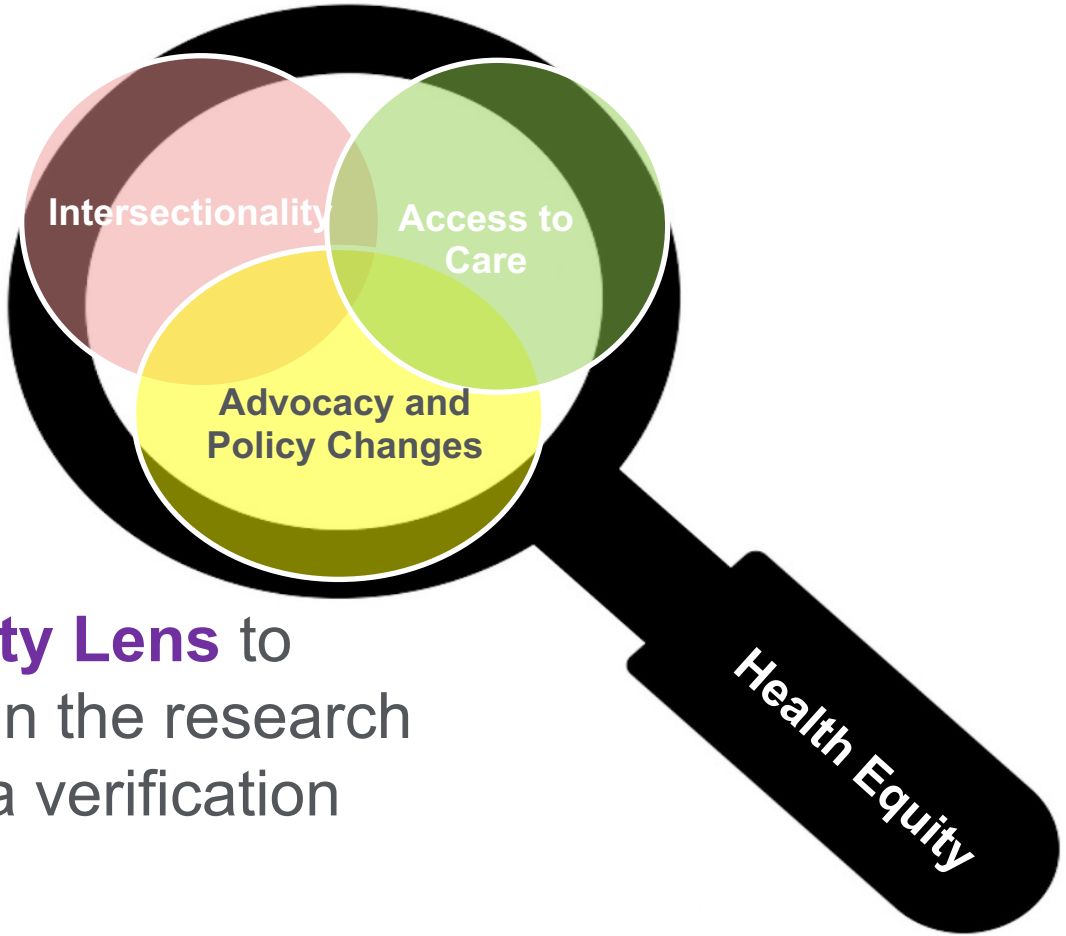
Research



Apply a **Health Equity Lens** to all research and include in the research requirement for trauma verification

Health Equity in Trauma- Funded Research

Increasing Medicaid Acquisition and Sustainment among the Uninsured

Project Number	Contact PI/Project Leader	Awardee Organization
5R01MD018773-02	KNOWLTON, LISA MARIE	STANFORD UNIVERSITY

Health Equity in Emergency Trauma Care: Analysis of disparities in the pre-hospital emergency trauma care system

Project Number	Contact PI/Project Leader	Awardee Organization
1R01MD018177-01	BERRY, CHERISSE D.	NEW YORK UNIVERSITY SCHOOL OF MEDICINE

Summit on the Advancement of Focused Equity Research in Trauma (SAFER-Trauma)

Project Number	Contact PI/Project Leader	Awardee Organization
1R13HS029444-01	HO, VANESSA P	COALITION FOR NATIONAL TRAUMA RESEARCH

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Performance Improvement Domain

- Create **health equity dashboard** to capture data and define benchmarks for health equity metrics
- Define compliance rate in **capturing social determinants of health data** within trauma registries, TQIP, & NSQIP
- **Define health equity goals** within Joint Commission domains and implement process for OFI

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Performance Improvement Domain

- **Culture and Environmental Assessment Requirement for Trauma Program Verification**
  - Assess causes of disparities (access, quality, and outcomes) within trauma programs and address inequities in policies and operations to close gaps

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Performance Improvement Domain

- Trauma-Informed Care
- Social Needs Screening Tool
- Post-Discharge Patient Care Plan
- Violence Intervention Programs
- Leadership Response to Health Inequities

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Summary

- **Described the importance of health equity and eliminating health disparities within trauma**

  - **Quality**
    - Mandated by **Joint Commission**
    - CMS **payment determination tied to mandatory reporting** of social determinants of health
  - **Economics**
    - Potential **economic gain of $135 billion per year** if racial disparities in health are eliminated

Summary

- Described the importance of health equity and eliminating health disparities within Surgery

- **Described the historical policies and structural drivers leading to health inequities and poor patient outcomes within trauma**

Summary

- Described the importance of health equity and eliminating health disparities within Surgery
- Described the historical policies and structural drivers leading to health inequities within Surgery
- **Described health equity metrics within trauma**

Joint Commission- Health Equity Certification

Certification Domains

The Joint Commission

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Next Steps

- Convene a **Delphi consensus panel of stakeholders** to **identify** and come to consensus on health equity standards within trauma that CMS will pay for and develop a plan to **integrate** those standards within our databases, registries, practice management guidelines, research designs, and trauma ACS verification standards

Details for this event are forthcoming

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THANK YOU

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