Redesign of Cardiovascular Health Care Delivery: Integrating the Tenets of Diversity, Humanism and Health Equity to Improve Outcomes

Jennifer H. Mieres, MD, FACC, MASNC, FAHA
Associate Dean for Faculty Affairs
Professor of Cardiology
Zucker School of Medicine at Hofstra/Northwell
Senior Vice President & Chief Diversity Officer Northwell Health

@DrJMieres
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Agenda

The Why for an Expanded model of Health care Delivery
At the conclusion of this presentation participants should be able to recognize:

- The connection between determinants of health and adherence to a CV treatment plan
- The need for a redesign of the health care delivery with the model of the patient as a partner in improving CV health outcomes
- The importance of integrating the components of cultural awareness, health literacy, humanism and preferred language into the treatment plan for the patient with CV disease
- A Framework for DEI: Northwell Health’s approach to Diversity and Health Equity

The Evidence to Support an Expanded model of Health Care Delivery
### Lessons From Covid 19: Need for a Focus on Prevention in Medicine

- "The dual pandemics of our times; one biological (Covid-19) and the other cultural was a catalyst for the urgent need to redesign a model to address inequities and disparities in healthcare. A holistic framework for embedding the tenets of diversity, inclusion and health equity into our healthcare delivery systems is critical for improving health outcomes for all."

- Richard Levin, MD. President & CEO Arnold Gold Foundation dedicated to Humanism in Healthcare

### A New Health System for the 21st Century: The Epidemic of Chronic Disease

**Domains of Healthcare Quality**

1. Efficient
2. Effective
3. Safe
4. Timely
5. Patient-Centered
6. Equitable

- Improve Quality and Safety in Care

<table>
<thead>
<tr>
<th>Domain</th>
<th>Requirement</th>
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<tbody>
<tr>
<td>Efficient</td>
<td>Provide care based on scientific knowledge to all who can benefit</td>
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<tr>
<td>Effective</td>
<td>Eliminate waste including ideas, equipment, supplies &amp; energy</td>
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<tr>
<td>Safe</td>
<td>Avoid injuries to patients</td>
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<tr>
<td>Timely</td>
<td>Reduce waits &amp; delays for those receiving &amp; providing care</td>
</tr>
<tr>
<td>Patient-Centered</td>
<td>Provide care that is respectful &amp; responsive to individual patient needs &amp; preferences</td>
</tr>
<tr>
<td>Equitable</td>
<td>Provide consistent quality of care regardless of characteristics like gender, age, ethnicity, location or SES</td>
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Impact of Chronic Conditions: A National Health Concern

90% of the nation’s $4.1 trillion in annual health care expenditures are for people with chronic and mental health conditions.1,2

HEALTH CARE REDESIGN: THE EPIDEMIC OF CHRONIC DISEASE

Social Determinants of Health:
A broad array of factors within & beyond the health care system drive disparities in health and health care delivery

Health Disparities are Driven by Social and Economic Inequities

Source: Institute for Clinical Systems Improvement, Going Beyond Clinical Care: Solving Complex Problems (October 2016)
Adapted from The Brindis Group
The Epidemic of Chronic Disease

Health Disparities in Chronic Diseases

- 50% of African Americans have some form of cardiovascular disease
- 44% African American women
- 44% African American men
- 33% hypertension
- 29% projected increase from 2016-2030
- 34.3% Hispanic & 37% African American men are considered obese
- 43% Hispanic & 56.7% African American women are considered obese
- Diabetes: Type 2
- Cancer

The National Impact of Health Disparities and Equity of Care Delivery Disparities

Receipt of Evidence-Based Care

Early Non-Small Cell Lung Cancer
64% of black patients received curative surgery, compared to 76.7% of white patients (n=10,984)

End-Stage Renal Disease
35.3% of black men were placed on a waiting list for renal transplantation, compared to 60.6% of white men (n=654)

Life Expectancy in Years by Race/Ethnicity, 2019-2021

Source: AHRQ, 2014 National Healthcare Quality and Disparities Report and KFF 2023
21st Century Healthcare

An Expanded Approach to Health Care Delivery to deal with the epidemic of chronic diseases

Call to action for a focus on Health Equity and Patient Centered Care: Integration of the Determinants of Health

Expanded model of Health Care Delivery to include the tenets of Diversity, Equity, & Inclusion

The Why for Addressing Health Disparities: The Business Case for Health Equity

- Health disparities are costly and there would be a positive economic impact if health equity is better implemented

- It has been estimated by the Institute of Healthcare Improvement, that health inequities cost the United States $83 billion, and this is anticipated to grow to $300 billion by the year 2050

https://cmelearning.com/resources/the-case-for-health-equity/#business
https://www.astho.org/Programs/Health-Equity/Economic-Issue-Brief/
https://www.commonwealthfund.org/blog/2021/any-medicare-solvency-effort-must-include-advancing-health-equity
PAVING THE WAY FOR HEALTH

Health Equity: A human right that allows everyone to achieve the best attainable health and outcomes, by overcoming all avoidable barriers.

Health Disparities: Adverse health outcomes and/or health status that is attributable to systemic, avoidable, and unjust societal factors, structural practices, including racism.

Health Inequities: Systemic, avoidable, and often unjust societal factors, structural practices, including racism that create barriers to opportunity and result in avoidable adverse health status and outcomes.

Health equity ensures that all people have full and equal access to opportunities that enable them to lead healthy lives regardless of their background.

Source: RWJFoundation

Essential Components for Achieving Health Equity and Excellent Patient Outcomes

The dual pandemics of our times; one biological (Covid-19) and the other cultural was a catalyst for the urgent need to redesign a model to address inequities and disparities in healthcare. A holistic framework for embedding the tenets of diversity, Inclusion and health equity into our healthcare delivery systems is critical for improving health outcomes for all.

Richard Levin, MD. President & CEO Arnold Gold Foundation dedicated to Humanism in Healthcare
Importance of Cultural and Linguistic Competence in Medication and Lifestyle Adherence

45-year-old Alaskan man with a 10-year history of uncontrolled Type 2 diabetes and HTN

Vital Signs:
- BP: 145/90 mmHg
- Waist circumference: 38"
- BMI: 28.3 kg/m²

Social History:
- Lives in rural Alaska with a wife and 2 kids
- Nearest clinic is over 50 miles away
- High school diploma

Source: http://rxfilm.org/
**Improved Outcomes in CVD: Address Barriers to Adherence in Medication and Treatment Strategies**

**Contributing Factors in Cardiovascular Disease Care and Outcomes Disparities**

- **PATIENT**
  - Health Literacy
  - Cost
  - Culture Norms
  - Language
  - Religious Beliefs
  - Risk Factor Awareness
  - Non-Traditional Risk Factors
  - Symptom Variability
  - Genetics

- **Health Care Team**
  - Suboptimal risk assessment
  - Under recognition of non-traditional risk factors
  - Implicit bias
  - Inconsistent patient education
  - Untrained in culturally competent care

- **SYSTEM**
  - Lack of diversity in clinical research
  - Lack of diversity in leadership
  - Poor infrastructure
  - Limited technology
  - Systemic racism
  - Fragmented Care

Source: modified from Brown MT et al Mayo Clinic Proceedings 2011

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**Everyday Discrimination & Health Outcomes**

**Original Article**

Discrimination and Hypertension Risk Among African Americans in the Jackson Heart Study

Alfred T. Fidelew, Mario Sore, Paul Muntner, Texas Lewis, Amanda Ouwala, Karl Moore, Ann V. Diaz Rios

**OUTCOMES**

- ↑ C-Reactive Protein
- ↑ Diastolic Blood Pressure
- ↑ Coronary Artery Disease
- ↑ Hypertension
- ↑ Cortisol Levels
- ↑ Norepinephrine Levels

Social Determinants of Health and the Impact on the Biology of Adversity

Pathway to Chronic Inflammation

CVD Development and Progression

Social Determinants of Health: A Multi-Hit Cascade

Impact of Race on the In-Hospital Quality of Care Among Young Adults With Acute Myocardial Infarction

- N = 2846 young adults with AMI (median age 48 years, 67.4% women, 18.8% Black race)
- Black individuals, especially women, exhibited a higher prevalence of cardiac risk factors and social determinants of health and were more likely to experience a non-ST-segment-elevation myocardial infarction than White individuals.
- Black individuals with AMI received lower in-hospital quality of care and exhibited a higher rate of cardiac readmissions than White individuals. Black individuals had a lower quality of care if unemployed, highlighting the intersection of race and social determinants of health.

Table 2. In-hospital Quality of Care Indicators for Young Adults with AMI Stratified by Race

<table>
<thead>
<tr>
<th></th>
<th>White (n=1577)</th>
<th>Black (n=1279)</th>
<th>P Value</th>
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<tbody>
<tr>
<td>In-hospital CVD tertiles</td>
<td></td>
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<tr>
<td>≤50%</td>
<td>729 (46.7)</td>
<td>594 (46.0)</td>
<td>0.003</td>
</tr>
<tr>
<td>50%–60%</td>
<td>720 (46.0)</td>
<td>597 (46.3)</td>
<td></td>
</tr>
<tr>
<td>&gt;60%</td>
<td>727 (46.3)</td>
<td>598 (46.7)</td>
<td></td>
</tr>
</tbody>
</table>

- Black individuals with AMI had a lower quality of care if unemployed, highlighting the intersection of race and social determinants of health.

Source: Raparelli V et al. J Am Heart Assoc. 2021 Sep 7; 10 (17)

Mortality Rates 2008 to 2018: Race and Ethnicity

Impact of Race on the In-Hospital Quality of Care Among Young Adults With Acute Myocardial Infarction

New: Clinical Perspective:
- Black individuals with acute myocardial infarction received lower in-hospital quality of care and exhibited a higher rate of cardiac readmission than White individuals did.
- Black individuals had a lower quality of care if unemployed, highlighting the intersection of race and social determinants of health.

Clinical Implications:
- Suboptimal in-hospital quality of acute myocardial infarction care is of immediate concern among young Black individuals, especially Black women.
- Beyond addressing traditional cardiovascular risk factors, social interventions such as facilitation of employment might mitigate racial disparities in the quality of acute myocardial infarction care and improve cardiovascular outcomes in young Black adults.

CV Health Care Delivery Redesign to include Diversity, Equity and Inclusion: The Patient as a partner

A patient is an individual to be cared for, not a medical condition to be treated. Our patients are our partners and have knowledge that is essential to their care. Patient-Family Centered Partnership Care is the core of a high-quality healthcare system and a necessary foundation for safe, effective, timely and equitable care.

- 80% of a population’s well being: quality of life factors and social determinants of health
- 20% of health and well being: actions in health care

Cardiovascular Health Care Delivery Re-design/ Expansion: Including the Patient as a Team Member

Interdisciplinary and Interprofessional

PHYSICIAN TEAM
NURSES
SOCIAL WORKERS
DIETICIANS
PHARMACISTS
PATIENT & FAMILY /SUPPOTERS
COMMUNITY HEALTH WORKERS
PATIENT ADVOCATES
PATIENT CASE WORKERS

Integrating Social Care Into the Delivery of Health Care

- Routinely ask about social needs and cultural preferences
- Check your assumptions, judgements and bias
- Don’t forget using an interpreter
- Incorporate a patient’s social needs into your treatment plan
- Finish with teachback
- Leverage your power, you are in a position to advocate for your patient

Source: from Karazivan P et al. Academic medicine 2-2015 and AFP Health Equity tool kit

Expanding Cardiovascular Health Care delivery: Integrating Diversity, Equity and Inclusion In Cardiovascular Care
Research on the Impact of Humanism: Better Health Outcomes

“Health has been put front and center for the entire world by the COVID pandemic. The Quintuple Aim and its focus on health equity; clinician well-being; and the pursuit of better health, improved outcomes, and lower costs is an investment that has the potential to be a game changer, not just for society, but for the economy as well.”


Recommendations for Academic Medical Centers: Mission-Specific Strategies for Advancing Health Equity

<table>
<thead>
<tr>
<th>Education</th>
<th>Research</th>
<th>Care Delivery</th>
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<tbody>
<tr>
<td>Shaping the Providers and Culture of Care of the Future</td>
<td>Advancing the Knowledge Base on Effective Strategies to Eliminate Disparities</td>
<td>Dismantling Inequities in Access, Quality, Experience and Outcomes of Care</td>
</tr>
<tr>
<td>a. Invest in educational pathways</td>
<td>a. Invest in the science of health disparities intervention</td>
<td>a. Embed health equity metrics into quality improvement strategy and set bold goals on eliminating disparities</td>
</tr>
<tr>
<td>b. Bring an equity lens to the admissions process</td>
<td>b. Engage in community trust-building activities to achieve greater diversity in clinical trials</td>
<td>b. Eliminate race-based adjustments that have no medical basis from clinical decision support algorithms</td>
</tr>
<tr>
<td>c. Support people who are underrepresented in medicine in funding their training</td>
<td>c. Engage in community-based participatory research and codesign</td>
<td>c. Bring an equity lens to care delivery processes and access strategies (sites of care, payer contracting strategies)</td>
</tr>
<tr>
<td>d. Bring an equity lens to the curriculum</td>
<td>d. Screen patients for unmet social needs and connect to community resources</td>
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</tr>
<tr>
<td>e. Support the retention and advancement of diverse faculty (see Internal Strategies  People and Culture  (b))</td>
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### Recommendations for Health Systems / Academic Medical Centers:
#### Internal Strategies for Advancing Health Equity

<table>
<thead>
<tr>
<th>Leadership and Governance</th>
<th>People and Culture</th>
<th>Data and Analytics</th>
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<tbody>
<tr>
<td>Setting the Tone for Combating Structural Racism and Advancing Health Equity</td>
<td>Building and Supporting a Diverse, Culturally Competent Workforce</td>
<td>Measuring Progress and Impact</td>
</tr>
</tbody>
</table>

**Board and leadership team to:**
- Define, and affirm importance of, health equity for the organization
- Adjust performance dashboards and compensation models to promote equity
- Diversify the board and leadership teams
- Ensure leaders of equity initiatives are appropriately recognized and resourced

- Strengthen diversity recruitment efforts *(See External Strategies → Purchasing Power)*
- Enhance diversity retention and leadership development programs
- Shape an inclusive culture through mandatory training and facilitated conversations about cultural competency, humility and implicit bias

**a.** Refine the data collection and reporting tools to support goal setting and tracking of equity measures in support of other strategies, e.g.,
- Care Delivery Strategy *(a) Embed health equity metrics into quality improvement strategy*  
- Governance Strategy *(b) Adjust performance dashboards and compensation models to promote equity*  
  - Harness the power of big data, AI and ML to root out bias in health care

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### ESSENTIAL COMPONENTS FOR ACHIEVING HEALTH EQUITY AND EXCELLENT PATIENT OUTCOMES

Adapted from AAMC Strategic plan 2011
Humanism in healthcare

- **Integrity**: the congruence between expressed values and behavior
- **Excellence**: clinical expertise
- **Collaboration & Compassion**: the awareness and acknowledgement of the suffering of another and the desire to relieve it
- **Altruism**: the capacity to put the needs and interests of another before your own
- **Respect & Resilience**: the regard for the autonomy and values of another person
- **Empathy**: the ability to put oneself in another’s situation, e.g., physician as patient
- **Service**: the sharing of one’s talent, time and resources with those in need; giving beyond what is required.

Source: https://www.gold-foundation.org/

The Urgent call for Culture Change in HealthCare

The Need for a Culture Change in Healthcare

No better time than now: ACC, AHA share new guidance on ethics and professionalism in cardiovascular care

The American College of Cardiology (ACC) and American Heart Association (AHA) have collaborated on a new guidance focused on medical ethics and professionalism in cardiovascular medicine.

The report, published simultaneously in the Journal of the American College of Cardiology and Circulation, represents an update on a previous guidance that dates back to 1994.
Evidence to Support the 2022 ACC Health Policy Statement on Building Respect, Civility and Inclusion in the Cardiovascular Workplace

**Uncivil behavior is common**

**Prevalence:** Reported by 25-75% of cardiologists, regardless of race/ethnicity, sex or country

**Impact:** Negatively affects targets, patient care & healthcare organizations

Adverse effects on individuals, teams, institutions and patients

**Risks:** Legal, regulatory, funding, wellbeing

**Building a culture of respect requires:**

Institutional leadership, resources, policies

Individual education and upstander practice

Continuous improvement/culture change

Hostile CV Work Environments Are Common Across the Globe


ACC Health Policy Statement on Building Respect, Civility and Inclusion in the Cardiovascular Workplace

- BDBH is common, harmful and must be addressed with intention, transparency and consistency
- Cardiovascular organizations and individuals are responsible for ensuring a safe, supportive, and respectful workplace environment
- Leadership commitment is key to success of efforts to
  - Promote civility, diversity, equity and inclusion as system values
  - Create a resourced, dedicated anti-BDBH structure and operations
  - Raise BDBH awareness; provide anti-BDBH education
  - Assure accountability by charging individuals, upstanders, and leaders to modify behaviors and perform objective evaluations
  - Insure confidential, protected reporting for targets
NORTHWELL’S APPROACH TO RAISING HEALTH FOR ALL: EQUITY, DIVERSITY, INCLUSION, AND BELONGING - ADVANCING HEALTH EQUITY

THE WHY FOR A FORMALIZED APPROACH TO DIVERSITY AND HEALTH EQUITY: NORTHWELL HEALTH: THE LARGEST PROVIDER OF HEALTHCARE IN THE NEW YORK METRO AREA AND FIRST INTEGRATED HEALTH SYSTEM IN NEW YORK

NORTHWELL'S PLATFORM FOR ADVANCING DIVERSITY, HEALTH EQUITY AND INCLUSION: CENTER FOR EQUITY OF CARE

12-YEAR TRACK RECORD OF EMBEDDING & SUSTAINING THE TENETS OF DIVERSITY, INCLUSION AND HEALTH EQUITY FOR THE ORGANIZATION, PATIENTS AND COMMUNITIES SERVED EQUITY AND INCLUSION

Our mission is to advance the delivery of culturally-inclusive health care and effective communication in partnership with our communities to achieve health equity.

Strategic Partners: CMO’s Office, Katz Institute for Women’s Health, CLI, Patient Experience, Clinical Service Lines, Health Solutions, Community & Population Health, HR / FEP, Schools of Medicine and Nursing, Procurement, Quality, Feinstein Institute for Medical Research, Clinical Trials, OCIO, Institute for Nursing, Graduate Medical Education, Ambulatory and In Patient Sites, Business Development

Center for equity of Care: Improving the Delivery of Health Care to Communities Served By Northwell Health

Established a formalized approach to Diversity, Inclusion & Health Literacy in Health Care Delivery

Expanded to include Health Equity
National commitment to Equity of Care

37
Performance Improvement - Language other than English as an indicator of length of stay in the ER

**ER : LIJ at Forest Hills**
Performance Improvement Opportunity:

- Looked at top 5 languages spoken – identified Russian and Spanish as linked to increased stay in Emergency Room by 30 minutes
- Education – all staff and community and increased Video Remote Tablets (VRI) in Emergency Room

Result:
- After 3 months – length of stay decreased by 50%

Developing a Culture of Health Equity

Shared Decision Making and Advancing Health Equity at the Bedside

**Culture of Health Equity**

- Understand Patient’s Communities
- Learn How SDOH Work
- Address Implicit Bias
- Empowered Health Care Team
- Improve Health Literacy
- Language Access

Source: adapted from AAFP’s SDOH toolkit. www.Aafp.org/EveryOne
Essential Roles & Concrete Actions: Providers can play essential Roles and enact concrete Actions to put the Principles into practice.

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<thead>
<tr>
<th>PROVIDER ROLE</th>
<th>Provide Whole-Person Care to Achieve Health Equity</th>
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<tr>
<td>Action 1</td>
<td>Actively promote and facilitate access to care for all in ways that accommodate diverse life circumstances and needs.</td>
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<tr>
<td>Action 2</td>
<td>Establish and sustain a trusting environment where everyone feels they are welcomed and treated with dignity and respect.</td>
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<tr>
<td>Action 3</td>
<td>Provide holistic, effective, high-quality care responsive to plans co-created with individuals, families, and caregivers.</td>
</tr>
</tbody>
</table>

Source: RWJFoundation

THANK YOU!

We are at a landmark moment and critical juncture in US healthcare. The health disparities unmasked by COVID-19 made it abundantly clear that when we do not take care of everyone in our society, all of society suffers. It is a hard-earned lesson that must forever reshape our traditional healthcare delivery model and catapult a much-needed redesign aimed at ensuring equitable care for all. As demonstrated by the dedication shown by our healthcare professionals during the pandemic, human connections will be instrumental in rebuilding trust within communities that bore the brunt of the pain and suffering.”

Michael J Dowling, President CEO Northwell Health

Reigniting Humanism in Health care: https://youtu.be/J91WTDTK5sg