Social Justice--Disparities in Health Care

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Context: Racial Disparities in Health

- African Americans have higher death rates than Whites for 12 of the 15 leading causes of death.
- Blacks and American Indians have higher age-specific death rates than Whites from birth through the retirement years.
- Hispanics have higher death rates than whites for diabetes, hypertension, liver cirrhosis & homicide
- Minorities get sick younger, have more severe illness and die sooner than Whites

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Historical Perspective

- Health disparities between blacks and whites since first settlers arrived
- Tuskegee Syphilis Trials
- 1990's University study on "genetic etiology of aggressive behavior"
- 2002 IOM *Unequal Treatment* disparities in health care delivery—less likely to be given appropriate cardiac meds, CABG
- 2004—systemic review of angiography, angioplasty, CABG, and lytics—21/23 showed that African Americans were less likely to get CABG

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What is Race?

"Pure races in the sense of genetically homogenous populations do not exist in the human species today, nor is there any evidence that they have ever existed in the past… Biological differences between human beings reflect both hereditary factors and the influence of natural and social environments. In most cases, these differences are due to the interaction of both."

American Association of Physical Anthropology, 1996

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Racial and Ethnic Disparities

- Blacks have the highest rates of heart disease in the country
- Blacks are 2-3 times more likely to die from heart disease
- While the cardiovascular mortality rates have been decreasing, this is not seen for blacks
- Blacks were 42% less likely to receive an ICD in the Medicare population after a heart attack

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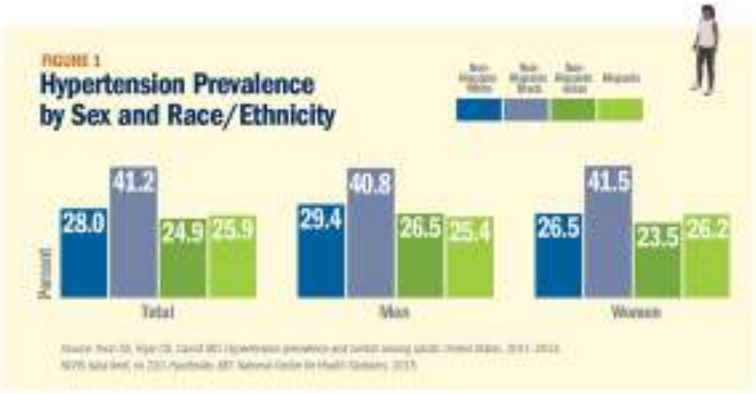

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TABLE 1

Disparities in Outcomes Between Blacks and Whites With Diabetes

	Blacks	Whites
Hospitalization rate	26.5 %	16.1 %
Well-controlled glycemia	37.6 %	44.0 %
Well-controlled cholesterol	39.5 %	46.8 %
Well-controlled blood pressure	29.0 %	35.4 %

Source: Friedrich MC, Nasser SA. Curr Med Res Opin 2015;31:913-21.

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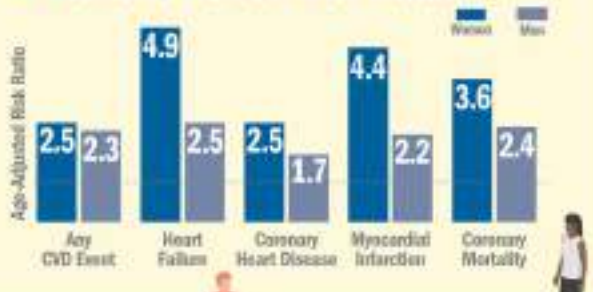
FIGURE 2

Relative Risk of Cardiovascular Events in Men and Women With Diabetes



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Black and Hispanic women have the highest rates of obesity in the country

Black and Hispanic women have the highest rates of diabetes and high blood pressure

Women and blacks are less likely to get a cardiac catheterization when they present with chest pain (then men and whites)

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Atrial Fib Outcomes

- Blacks and Hispanics have a lower incidence of atrial fib than whites
- However, blacks are less likely to be aware they have the condition
- Higher overall risk of stroke and stroke mortality in black patients
- Greater risk of major bleeding with warfarin
- No major difference noted with DOAC's (newer blood thinners)

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Heart Transplant Wait Times

2014 Outcomes:
- 19.8 months average wait time for African-Americans
- 12 months for white patients
- 12.3 months for Hispanic patients

2016 Outcomes:
- 10.4 months for African-Americans
- 8 months for white patients
- 7.4 months for Hispanic patients

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The Coalition to Reduce Racial and Ethnic Disparities in Cardiovascular Disease Outcomes (*credo*)

- Launched in 2009
- Help the cardiology community meet the needs of an increasingly diverse patient population
- Evidenced-based tools
- Performance improvement data
- Provider education including cultural competency training
- Patient education approaches
- Goal was equitable care and outcomes for all patients, regardless of race, ethnicity, sex, and age

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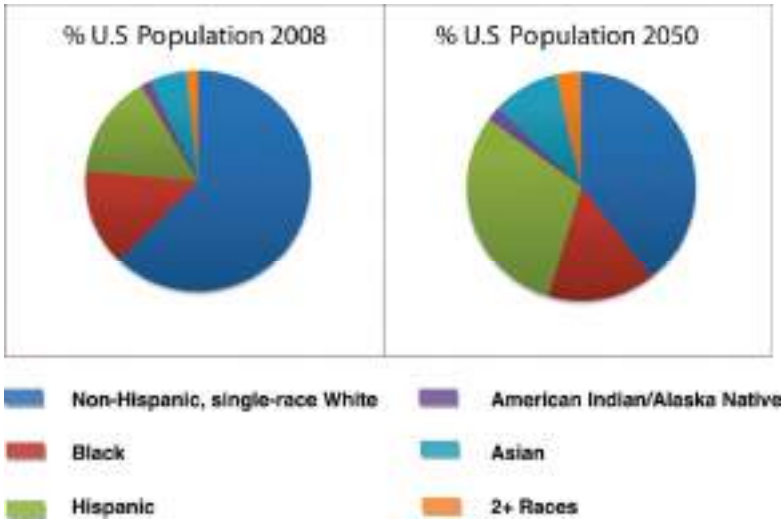

Clyde W. Yancy et al. JACC 2011;57:245-252

American College of Cardiology Foundation

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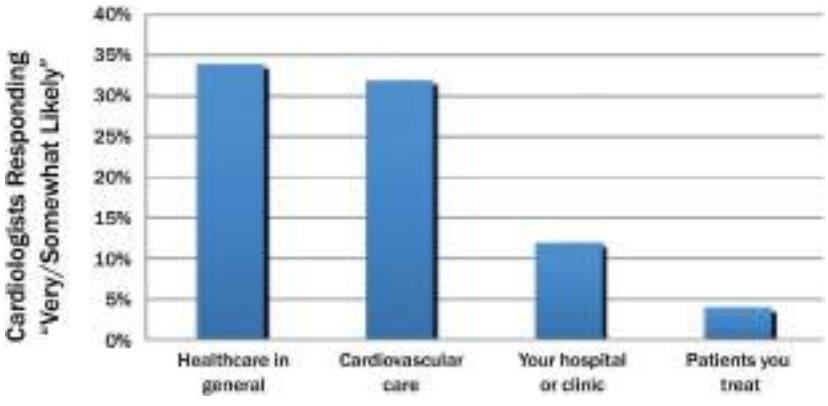
Do Patients Receive Different Care Based on Race/Ethnicity?



Clyde W. Yancy et al. JACC 2011;57:245-252

American College of Cardiology Foundation

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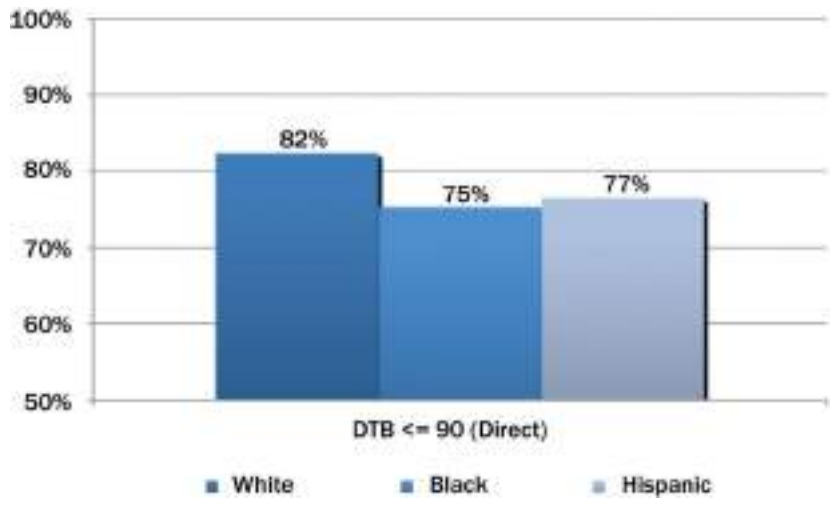

Clyde W. Yancy et al. JACC 2011;57:245-252

American College of Cardiology Foundation

JACC

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MN has had the best cardiovascular mortality rates since 1999….

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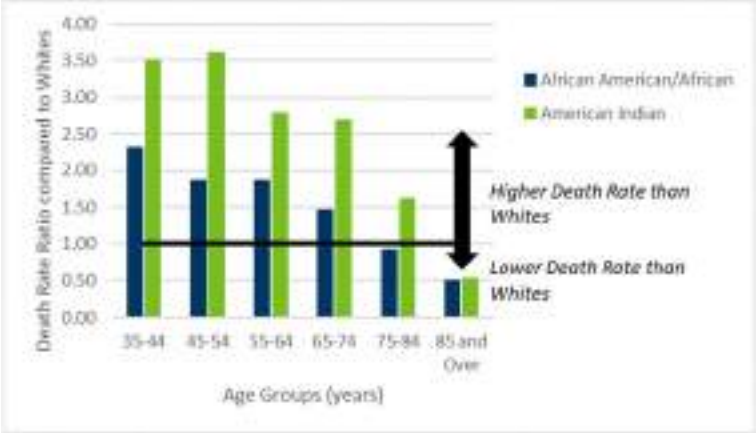
MN Cardiovascular Mortality Rates



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Cardiovascular Mortality Rates in MN

Age Group (years)	Crude Death Rate (per 100,000), Whites	Crude Death Rate (per 100,000), African Americans/ Africans	Rate Ratio of African Americans/Africans to Whites	Crude Death Rate (per 100,000), American Indians	Rate Ratio of American Indians to Whites
35-44	14.4	33.3	2.31	50.5	3.51
45-54	46.1	85.6	1.86	166.7	3.62
55-64	101.1	188.6	1.87	280.5	2.77
65-74	220.8	322.6	1.46	590.8	2.68
75-84	726.3	665.7	0.92	1175.3	1.62
85 and Over	3286.3	1637.5	0.50	1714.0	0.52

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Controlling High Blood Pressure by Race and Ethnicity, Minnesota Health Care Program Members, 2017

Race	Rate	Comparison to State Rate
American Indian/Alaskan Native	69%	No difference*
Black/African American	57%	Lower
Asian	72%	No difference*
White	74%	Higher
Ethnicity	Rate	Comparison to State Rate
Hispanic	74%	No difference*

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Optimal Vascular Care Goals among Minnesota Adults with Ischemic Vascular Disease by Race, 2017

Race/Ethnicity	% Meeting all four goals
American Indian	45%
Asian	68%
African American/African	45%
Multi-Racial	50%
Native Hawaiian/Other Pacific Islander	55%
White	63%

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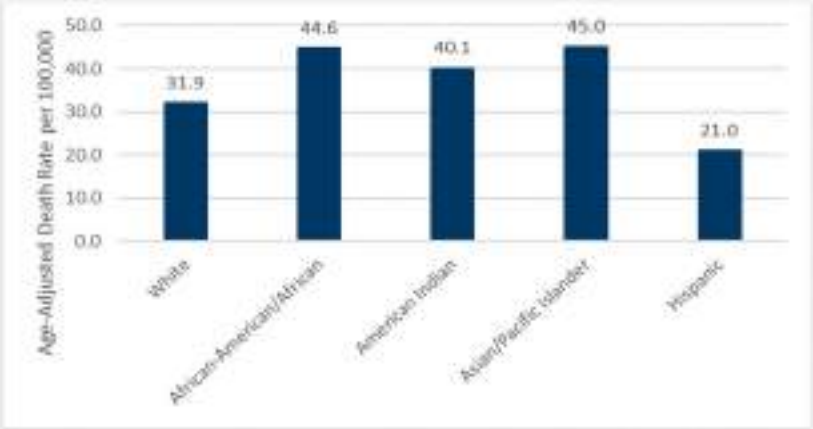
MN Death Rate due to Stroke by Race and Ethnicity, 2014-2018



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What is Health Equity?

"Health equity is a state where all persons, regardless of race, creed, income, sexual orientation, gender identification, age or gender have the opportunity to reach their full health potential without the limits of structural barriers."

- *Minnesota Department of Health, "Advancing Health Equity in Minnesota: Report to the Legislature." 2014.*

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Impacting the Twin Cities

Life expectancy at birth (years) by Tract, CDC and NCHS 2010 - 2015.

Life Expectancy at Birth
- Over 87 Years
- 84 - 87 Years
- 81 - 84 Years
- 78 - 81 Years
- 75 - 78 Years
- 72 - 75 Years
- 72 Years or Less
- No Data or Data Suppressed

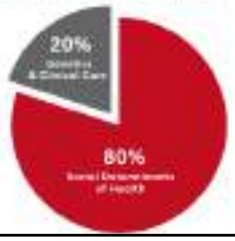
ZIP CODE DICTATES LIFE EXPECTENCY

16 Miles = 27 Years

METRO LIFE EXPECTANCY

St. Paul/Rondo = 65 Yrs
Mpls/Elliot Park = 67 Yrs
Medina/Suburb = 92 Yrs

HEALTH DETERMINANTS



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Statewide Goals

MDH directed by Legislature in 2013 to prepare a report on Advancing Health Equity in MN

1. To provide an overview of MN's health disparities and health inequities
2. To identify inequitable conditions that produce health disparities
3. To make recommendations to advance HE in MN

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Statewide Health Assessment

- Shows a picture of health and well-being across the state, including:
  - Who is healthy and who is not?
  - What conditions shape health for all the different populations in Minnesota?
  - What do we have, and what do we need, to assure that all people in Minnesota can enjoy healthy lives and healthy communities

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People: highlights

- About 14% of all children in Minnesota live in poverty.
- About 9% of Minnesotans 18-64 have a disability; almost 1 in 5 families with children have a child with special health needs.
- Racial and ethnic diversity is expected to increase to about 25% by 2035.
- The LGBTQ population in Minnesota faces many challenges and barriers to health.
- The population over 65 is growing rapidly.

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Opportunity

"Opportunity means having the chance to experience success at every stage of life, from our early childhood through our old age.

Our opportunity is shaped by the conditions that constrain or expand the choices available to us."

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Opportunity

"These conditions include what schools we can go to, what jobs are open to us, and even what kind of food is available to us.

Whether we have a permanent home, find work with good pay and health insurance, or have safe places to play creates or reduces our chances to be healthy."

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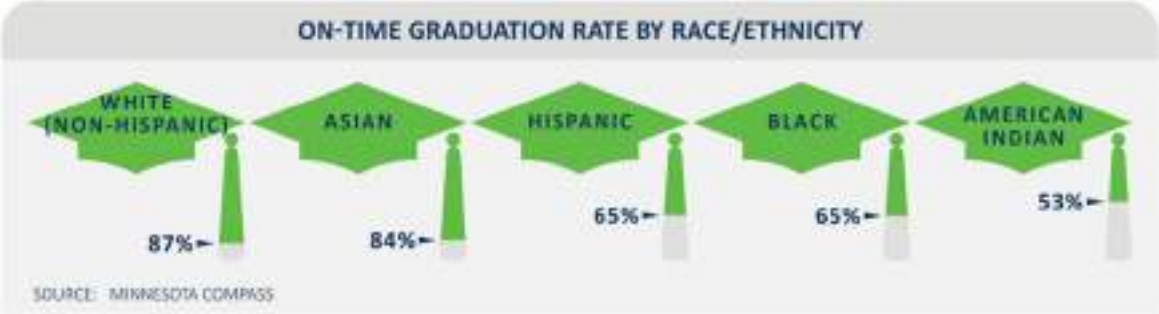
Opportunity: education

- Education is one of the clearest and strongest predictors of lifelong health.



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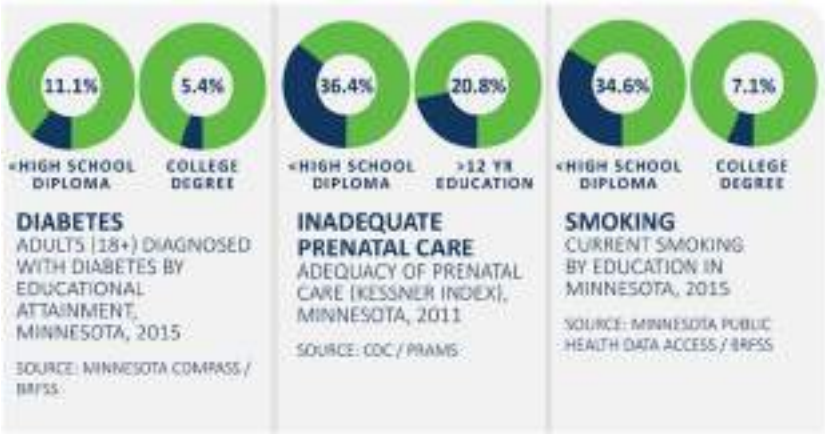
Connecting education to health



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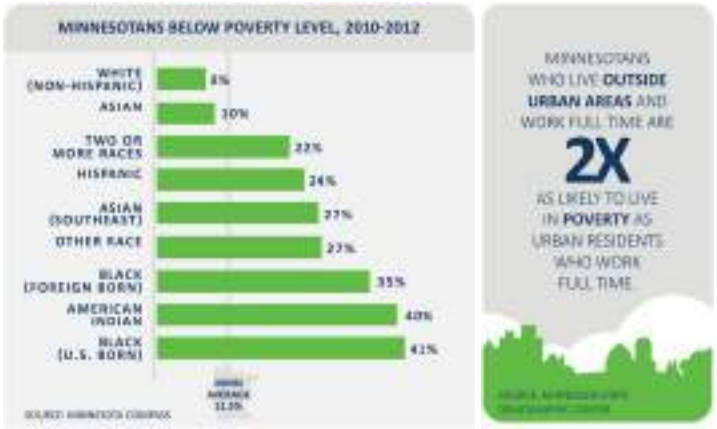
Opportunity: income



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Home ownership

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Connecting income, housing and health

Financial stress about housing, adults 18-64 only	Usually or always	Sometimes	Rarely or never
Ever had cancer (other than skin cancer)	8%	4%	4%
Ever had COPD1	10%	4%	2%
Ever had arthritis	29%	16%	14%
Ever had a depressive disorder	49%	24%	15%
Ever had diabetes	9%	5%	5%
Currently have asthma	14%	9%	6%
Currently smoke cigarettes	39%	23%	14%
Report binge drinking in past 30 days	25%	24%	22%
Are obese	35%	30%	24%

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Inequities in recreational opportunity

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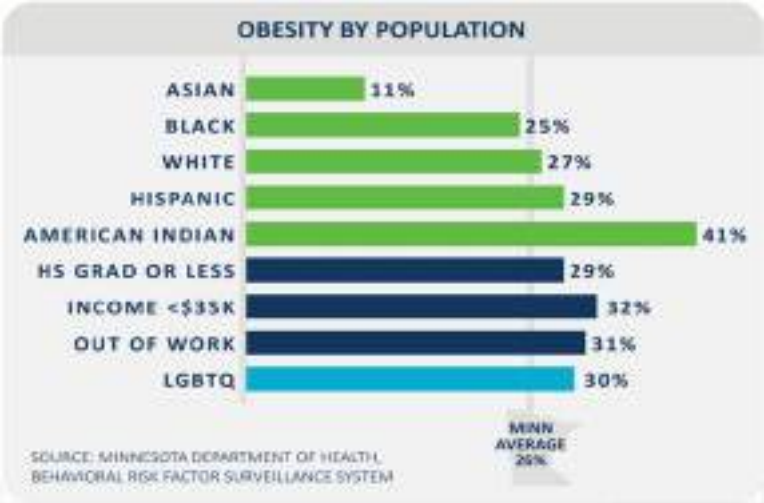
Connecting to health



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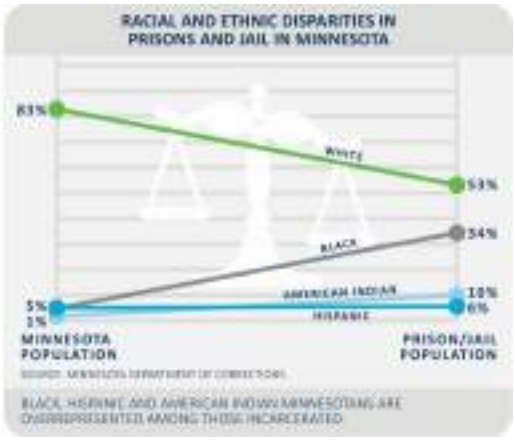
Connecting belonging and health



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Consistency in opportunity inequities

- Populations of color and American Indians in Minnesota experience consistently lower opportunities in education, employment, income, housing, transportation, paid leave, health insurance, health care

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Minnesota Maternal Mortality Review Committee

Work on behalf of the Commissioner of Health to review all pregnancy- associated deaths of Minnesota residents.

Purpose: The Minnesota Maternal Mortality Review Committee (MMMRC) is tasked with addressing maternal mortality in Minnesota. The MMMRC works to identify factors contributing to maternal deaths and the health inequities impacting maternal health in the state. Leads the charge of disseminating recommendations it improve maternal outcomes for our Minnesota mothers.

Vision: The vision of the Minnesota Maternal Mortality Review Committee is to eliminate preventable maternal deaths, reduce maternal morbidities, and improve population health and health equity for women of reproductive age in Minnesota.

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Identifying Racism and Discrimination as Contributing Factors

- Women of color report more experiences of discrimination, food insecurity, and depression
- Women of color experience higher levels of chronic stress during pregnancy - results in compromised endocrine and immune function
- Burden remains higher across all income and education levels
- Results in greater rates of hypertensive disorder, preterm birth, low birth weight neonates and perinatal mortality among Black women

Grobman W479-99.Am J Perinatol. 2016 Dec;33(14):1426-1432.; Slaughter-Acey JC. Womens Health Issues. 2013 Nov-Dec;23(6):e381-7.; Borders AE. J Perinatol. 2015 Aug;35(8):580-4.; Mendez DD. Ethn Health. 2014;19(5):

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NEW* Contributing Factors

- **DISCRIMINATION** Treating someone less or more favorably based on the group, class or category they belong to resulting from biases, prejudices, and stereotyping. It can manifest as differences in care, clinical communication and shared decision-making. (Smedley et al, 2003 and Dr. Rachel Hardeman)
- **INTERPERSONAL RACISM** Discriminatory interactions between individuals based on differential assumptions about the abilities, motives, and intentions of others and resulting in differential actions toward others based on their race. It can be conscious as well as unconscious, and it includes acts of commission and acts of omission. It manifests as lack of respect, suspicion, devaluation, scapegoating, and dehumanization. (Jones, CP, 2000 and Dr. Cornelia Graves)
- **STRUCTURAL RACISM** The systems of power based on historical injustices and contemporary social factors that systematically disadvantage people of color and advantage white people through inequities in housing, education, employment, earnings, benefits, credit, media, health care, criminal justice, etc. – (Adapted from Bailey ZD. Lancet. 2017 and Dr. Carla Ortique)

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Cardiovascular Risk Starts at Pregnancy…

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Circulation: Cardiovascular Quality and Outcomes

RESEARCH LETTER

Fourth Trimester: Assessing Women's Health Equity and Long-Term Cardiovascular Outcomes in a Large Midwestern Health System in 2021

Delaine Teabout Thomas, MPH; Gretchen Benson, BA; Anna Gan, BS; Sarah Schwager, BS; Brynn Okeson, MS; Courtney Jordan Baechler, MD, MS

Cardiovascular disease (CVD) is the leading cause of maternal death in the United States, responsible for >33% of all pregnancy-related deaths.[1] Conditions that emerge during pregnancy are increasingly recognized as contributing factors to lifetime CVD. Current estimates suggest that 2% to 10% of pregnancies are impacted by gestational diabetes (GDM) with trends suggesting an increase of GDM cases by 20% between 2016 and 2020.[2] Cases of gestational hypertension more than doubled from 2007-2018,[3] accounting for roughly 44% of postpartum deaths in the United States.[4]

The American Heart Association and the American College of Obstetricians and Gynecologists have advocated for modifications in care standards to include fourth-trimester follow-up, defined as care within the first 12 weeks after delivery and beyond. This study was conducted to (1) estimate the percentage of women who received guideline-directed care within 6 months postpartum, including blood pressure or blood glucose screening, (2) and if elevated, whether they were prescribed medication or referred to risk reduction resources, and (3) compare rates of care between racial groups to assess health equity.

The fourth-trimester study was a single-center retrospective review of patients who received postpartum care (defined as at least 1 visit in 6 months after delivery to an OB-GYN/primary care provider) and delivered at an Allina Health facility between January 1, 2021 and December 31, 2021. Eligible patients were identified using the local electronic medical record system. Data were filtered to exclude individuals who received prenatal care visits solely from Maternal Fetal Medicine and did not have a documented Minnesota Research Authorization. Institutional Review Board approval was received for this study from the Allina Institutional Review Board. Of 13218 total deliveries at Allina hospitals in 2021, 1929 patients were diagnosed with gestational HTN/GDM, and preeclampsia (≈16%).

Our study found low levels of guideline-directed care (Table). Overall, the majority of women (64%) received care from an OB-GYN postpartum. Only 29% of patients with GDM received blood glucose screening. Of those with an elevated result, 11% were prescribed glucose-lowering medications and 21% had a referral for risk reduction. Of those with an elevated blood pressure, 52% were prescribed medications and 8% had a referral for risk reduction. Of patients with preeclampsia with elevated postpartum BP, only 61% were prescribed medications and 12% had a referral for risk reduction to a cardiologist, primary care provider, dietitian or lifestyle behavior change program. The data that support the findings of this study are available from the corresponding author upon reasonable request.

Women who identified as American Indian/Native American with GDM were less likely to have their blood glucose screened. They were also less likely to have their blood pressure measured when diagnosed with gestational HTN. Black patients with gestational HTN were less likely to receive follow-up, have their blood pressure measured, have an active order for medications, and

Key Words: blood glucose ■ cardiovascular diseases ■ hypertension ■ postpartum period ■ pregnancy-induced ■ maternal health

Correspondence to: Courtney Jordan Baechler, MD, MS, Minneapolis Heart Institute Foundation 920 E 28th St, Ste 100 Minneapolis, MN. Email cjordanbaechler@mhf.org
For Sources of Funding and Disclosures, see page XXX.

Circulation: Cardiovascular Quality and Outcomes is available at http://www.ahajournals.org/journal/circoutcomes

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Challenges in Academia

- HTN—Salt Sensitivity Hypothesis, "gene"
- BiDil, 2005 U of MN, race specific indication
- GFR (glomerular filtration rate) and kidney disease
- AHA/ACC cardiovascular risk calculator

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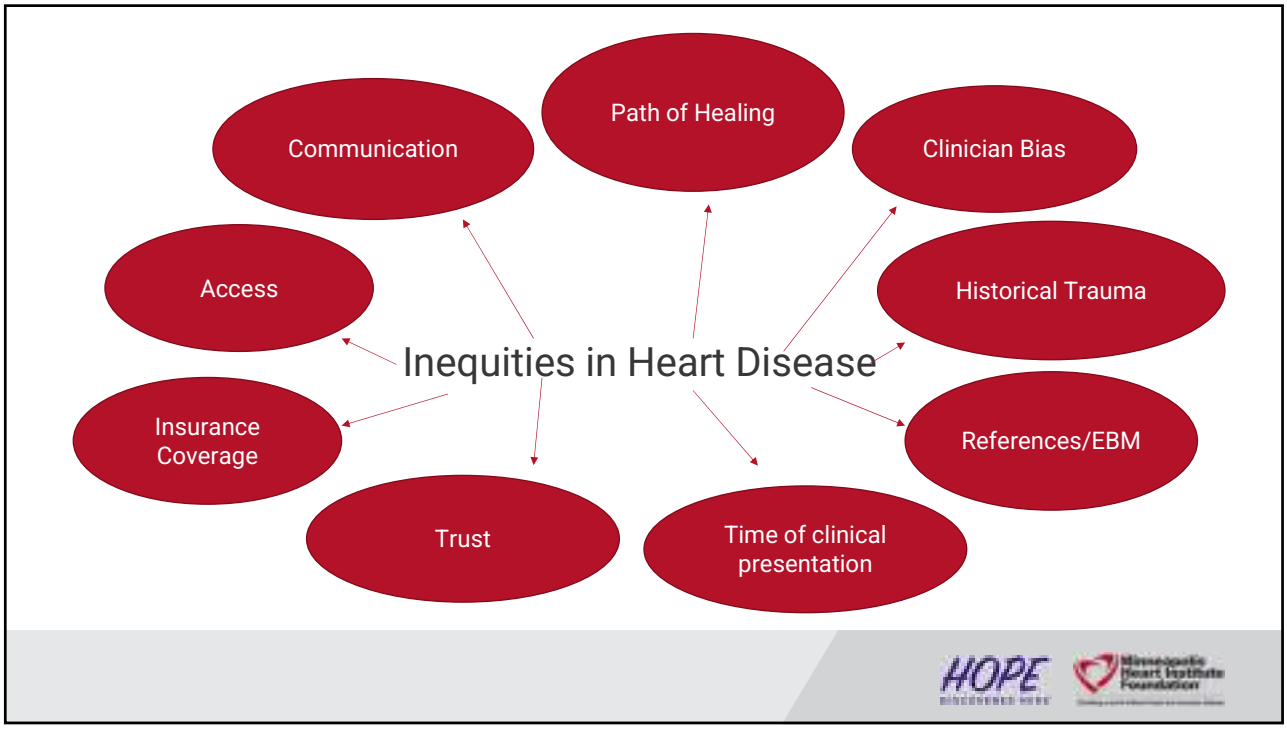

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Locking this “revolving door” or stopping this vicious cycle of inequality will require an integrative, multipronged, interdisciplinary approach that utilizes promising strategies aimed at closing clinical, research, and policy gaps.

Gladys Velarde. Journal *of the American Heart Association. Locking the Revolving Door: Racial* Disparities in Cardiovascular Disease, DOI: (10.1161/JAHA.122.025271)

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Findings and actionable items from the American Heart Association scientific statement on social determinants of risk and outcomes for cardiovascular disease.

Gladys Velarde. Journal of the American Heart Association. Locking the Revolving Door: Racial Disparities in Cardiovascular Disease, DOI: (10.1161/JAHA.122.025271)

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Promising strategies to reduce cardiovascular disease disparities and next steps.

Gladys Velarde. Journal of the American Heart Association. Locking the Revolving Door: Racial Disparities in Cardiovascular Disease, DOI: (10.1161/JAHA.122.025271)

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iHEAL

Insight Health Equity Lab

The Insight Health Equity Action Lab, is an action-oriented think tank working in partnership with communities and organizations across sectors, to develop and implement sustainable and measurable strategies that advance health equity. iHEAL will amplify evidence-based and transformative work that builds and supports healthy communities and puts people/community at the center of the process.

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Community Health
Neighborhood Health Screening Events/Activity Promotion
Summer Series Letting Community Guide the Strategy
Minneapolis Heart Institute and Community Clinic Partnership
Promoting Local Community Owned Businesses
Heart to Heart Educational Series
Neighborhood & Environment
Social & Community Context
Health Care
Economic Stability
Social Determinants of Health
Education
HOPE

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Heart to Heart Conversations
NEW DATE!
JANUARY 14, 2021
THURSDAY @ NOON
LIVE
Insight Health Equity Action Lab
Last week, we made the decision to postpo... See More
Heart-to-Heart Conversations:
What is a healthy community?
Join us on June 19
10am - 12:30pm
In Person
HEAL
HOPE

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What We Heard

- Trust is an issue
- Listen to us
- Recognizing the past embracing support and solutions for the future
- Lead alongside the community
- Prevention is the goal
- Community solutions that address risk factors (active living for blood pressure solutions, help address stress/mental health solutions that are also risk factors for heart disease, solutions in current grocery stores) for hypertension
- Community has LOTS of assets, strength, use culturally relevant tools
- Who are we solving for?
- Where are we enrolling?
- How do we find mutual interests that benefit more than just us?
- Do we need to keep asking or can we move to action?

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Principles to Stand By

- Splitting financial resources EQUALLY with community partners
- Having the courage to do it differently
- Being comfortable being in second position
- Physically showing up frequently in the communities experiencing the worst disparities
- When it comes to research, letting communities own the data and co-create what is measured, what matters
- Data collection, establishing trust
- Science is an art, it is changing
- Transparency
- Credible messages

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Reducing Disparities, Removing Barriers to Good Health, and Increasing Quality Care *Minnesota Cardiovascular Disease, Stroke, and Diabetes 2035 Plan*

- **Outcome #1: Invest in new, deeper, and longer partnerships to improve health and to provide quality care and treatment**
- **Outcome #2: Work toward health equity for all**
- **Outcome #3: Share power to affect change**
- **Outcome #4: Create systems that improve access to and integrate clinical and community health services**
- **Outcome #5: Improve data collection and enhance utilization**
- **Outcome #6: Expand and diversify health care and community health workforces, including leadership**
- **Outcome #7: Expand shared learning and education to build knowledge, skill, and health**
- **Outcome #8: Support the implementation of community-led programs and solutions in community settings**
- **Outcome #9: Enhance delivery of quality, whole-person care inside and outside the clinic**
- **Outcome #10 Ensure all people have access to resources and supports needed to support health, in policy and practice**

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