# Reducing Disparities in Cardiovascular Care

#### Tuesday, December 14, 2021 | 4:30pm-6pm

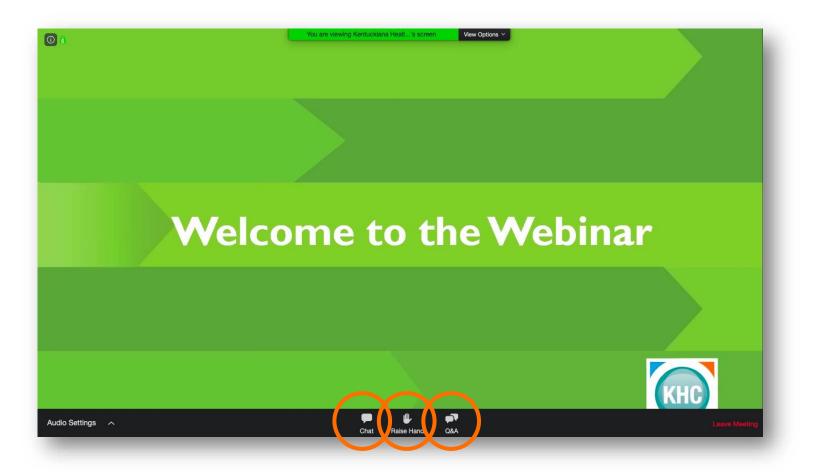
Part of *Bridging the Gap from Healthcare Disparities to Anti-Racist Clinical Encounters,* a healthcare equity learning series





### LOGISTICS

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### SOCIAL MEDIA

Twitter: @KHCollaborative LinkedIn: www.linkedin.com/company/ Kentuckiana-Health-Collaborative Facebook: www.facebook.com/Kentuckiana HealthCollaborative

#### #KHC



### AGENDA

- Cardiovascular Disease (CVD) Disparities in Kentucky
- Closing Gaps in Cardiovascular Care
- Panel: Stakeholder Priorities in Advancing CVD Equity



### THANK YOU TO OUR SPONSOR



**Kentucky Heart Disease and Stroke Prevention Program** 





### Cardiovascular Disease (CVD) Disparities in Kentucky Stephanie Clouser Data Scientist

Kentuckiana Health Collaborative

# What are we talking about today?

Cardiovascular Disease (CVD)

Heart Disease

**Coronary Artery Disease** 

Heart Attacks

Stroke/TIA

Hypertension

**Atrial Fibrilation** 

Heart disease is the **leading cause of death** for men, women, and people of most racial and ethnic groups in the United States.

659,000 deaths each year



One person dies every 36 seconds in the United States from cardiovascular disease.



Cost the United States about **\$363 billion** each year from 2016 to 2017.

### **1. HEART DISEASE**

- 2. Cancer
- 3. Chronic Lower Respiratory Diseases
- 4. Accidents
- 5. Stroke
- 6. Alzheimer's Disease
- 7. Diabetes
- 8. KIDNEY DISEASE
- 9. Septicemia
- 10.Influenza/Pneumonia

Leading cause of death in Kentucky



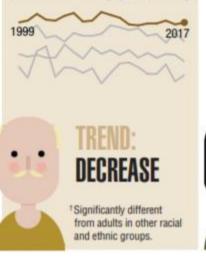
#### SOURCE

NCHS, National Health Interview Survey (NHIS).

#### NOTES

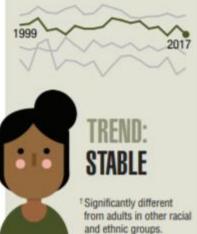
Prevalence was reported by respondents. In separate questions, they were asked whether a health professional had ever told them that they had: coronary heart disease, angina, a heart attack, or any other kind of heart condition or disease. **11.5%**<sup>†</sup>

of **non-Hispanic white adults** aged 18 and over had heart disease in 2017 (age adjusted).





of **non-Hispanic black adults** aged 18 and over had heart disease in 2017 (age adjusted).





of **Hispanic adults** aged 18 and over had heart disease in 2017 (age adjusted).





non-Hispanic black adults

**6.0%**<sup>‡</sup>

of non-Hispanic Asian adults aged 18 and over had heart disease in 2017 (age adjusted).





Significantly different from non-Hispanic white and non-Hispanic black adults.



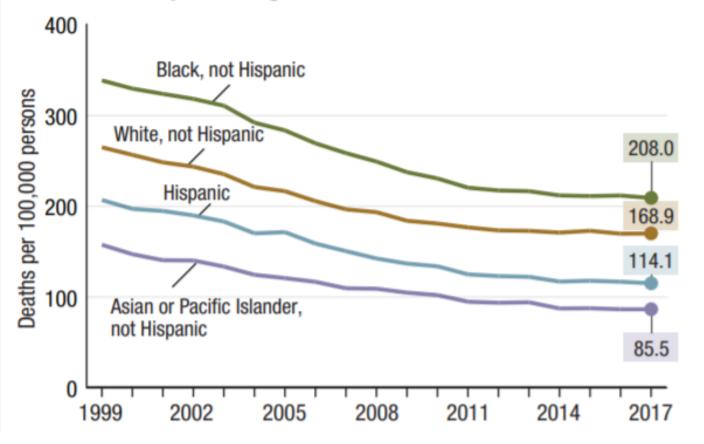
#### SOURCE

National Center for Health Statistics (NCHS), National Vital Statistics System (**NVSS**).

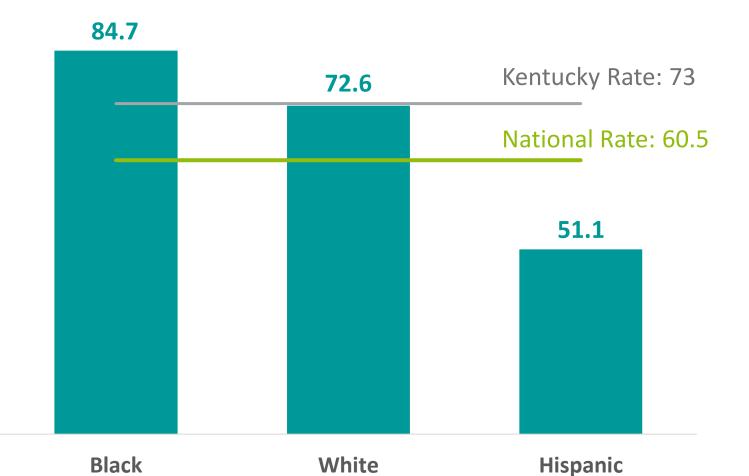
#### NOTES

Data for racial and ethnic groups, other than non-Hispanic white and non-Hispanic black, are subject to inconsistencies in reporting on the death certificate. However, misclassification is generally minor for Hispanic and non-Hispanic Asian or Pacific Islander groups.

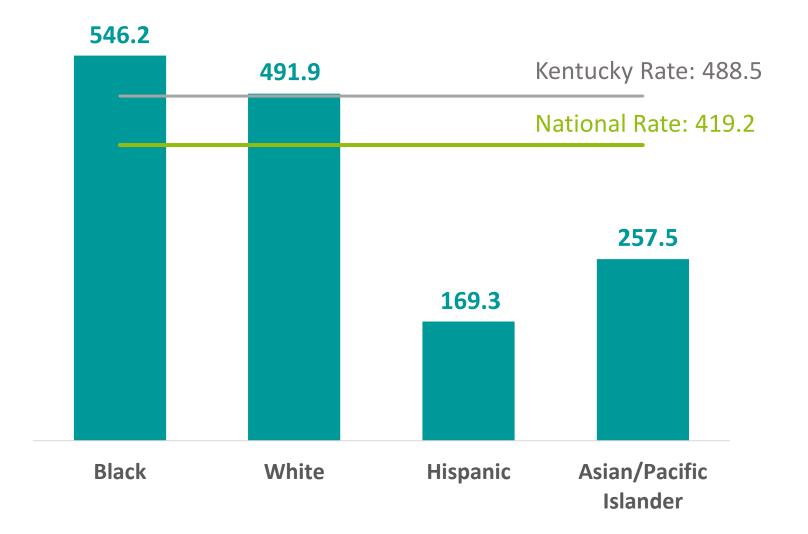
# Age-adjusted death rates for heart disease, by race and Hispanic origin: 1999–2017



### In Kentucky, Black Medicare beneficiaries (ages 65+) are hospitalized at a higher rate for cardiovascular disease per 100,000 persons.

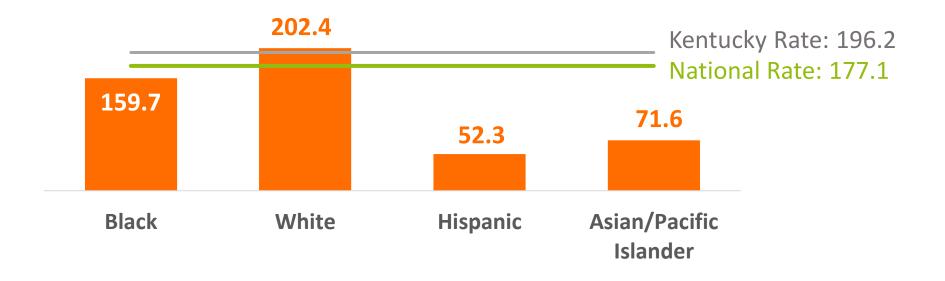


# Black individuals in Kentucky die at a higher rate per 100,000 persons (ages 35+) from cardiovascular disease.



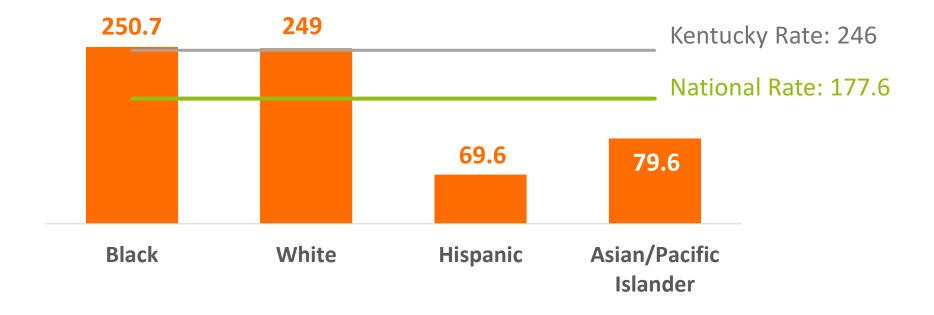
### **Kentucky Death Rates – Coronary Artery Disease**

(per 100,000 persons)



### **Kentucky Death Rates – Heart Failure**

(per 100,000 persons)

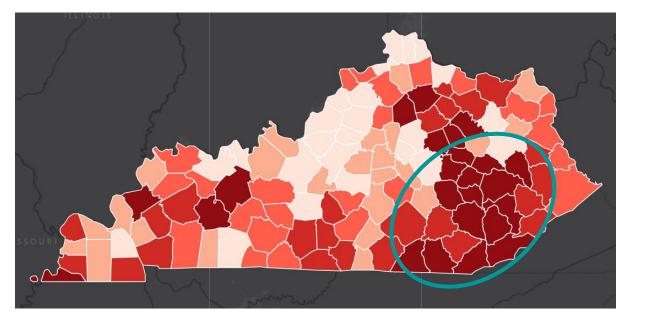


### **Kentucky Death Rates – Heart Attack**

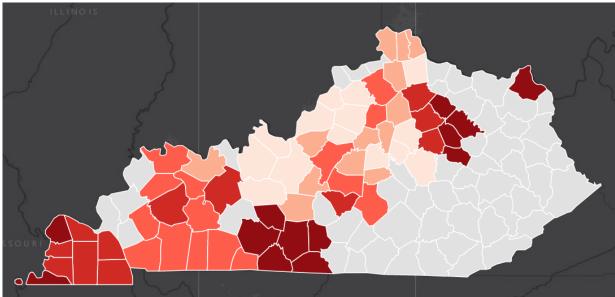
(per 100,000 persons)



### **Death Rates – Coronary Artery Disease**

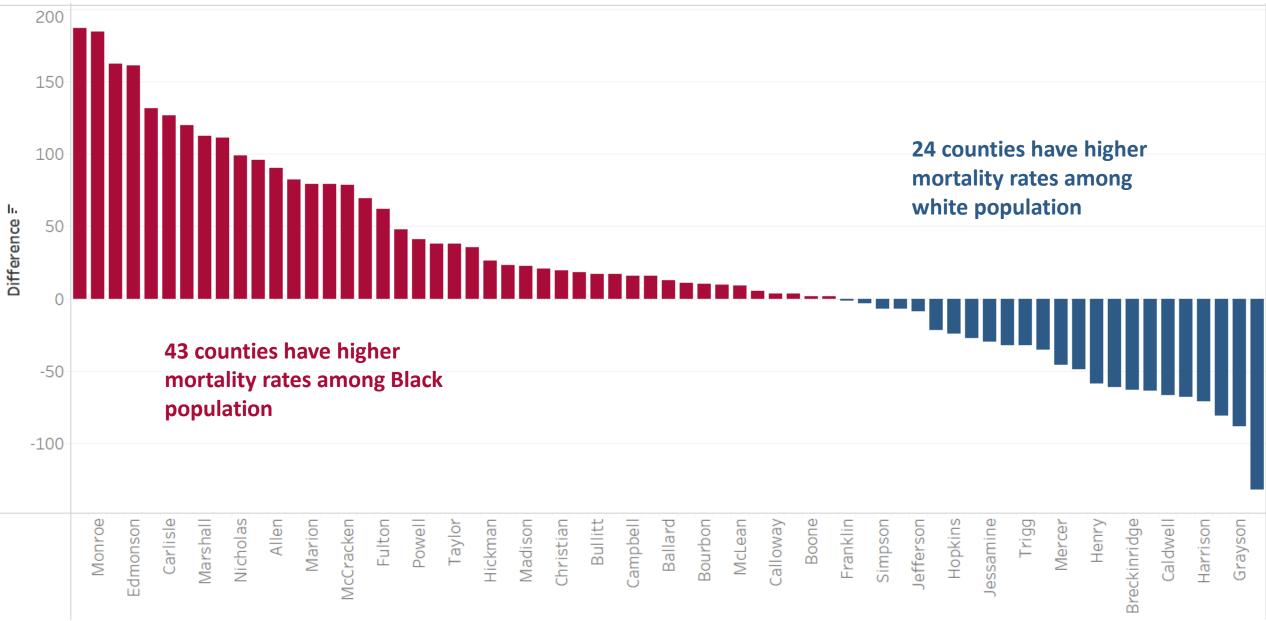


White, non-Hispanic

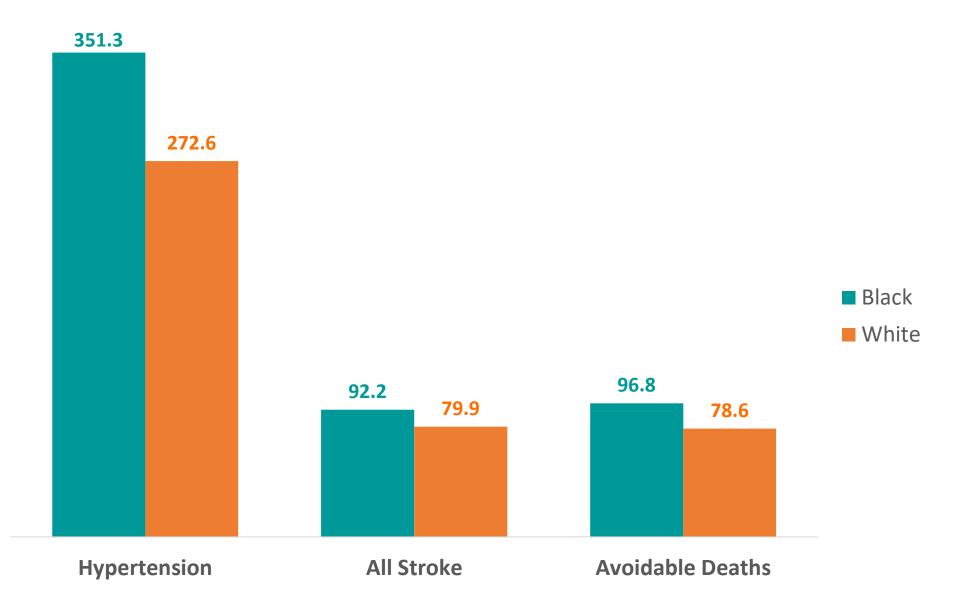


Black, non-Hispanic

### **Death Rates – Coronary Artery Disease**



### What is driving the overall gap?



# OINING THE FORUM



# Closing Gaps in Cardiovascular Care

### Michael Imburgia

Founder Have a Heart Clinic

### **Reducing Disparities in Cardiovascular Care**





#### Patient One

Hispanic/Nonenglish Speaking

45 yo Gentleman

CP for months

Legal Immigrant

Echocardiogram reveal inferior hypokinesis

Sent to ER



# **Patient Two**

50 yo Gentleman

# AntiPhospholipase Syndrome

# Pulmonary Emboli



### **Patient Three**

58 yo Gentleman

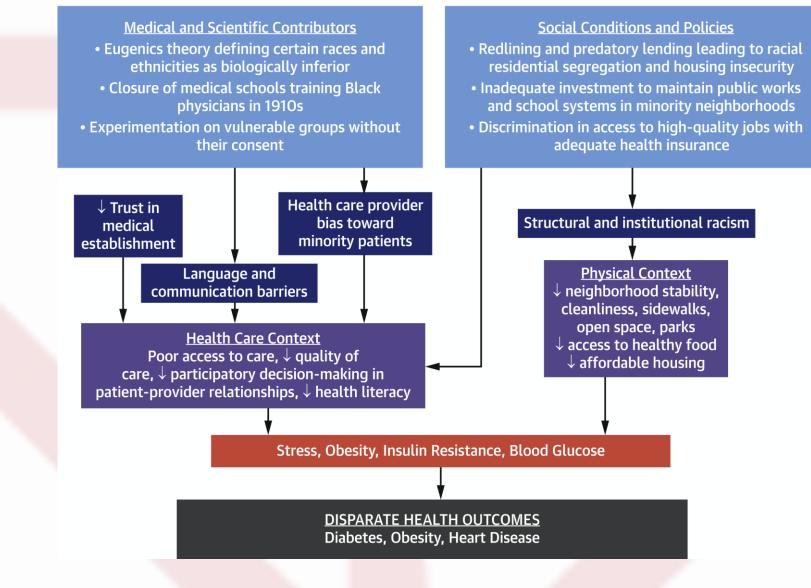
### Hypertension/heart failure/aortic insufficiency

### In and out of the hospital since 2018



#### JACC Dec 14, 2021; Vol78.Number24

#### HISTORICAL DISCRIMINATION AND RACISM DURING SLAVERY AND POST-CIVIL WAR

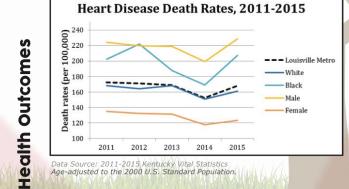




#### **HEART DISEASE**

s		Count	Age-adjusted rate (per 100,000)
Heart Disease Deaths Total 2011 - 2015	Black Male	699	257.84
	White Male	3,129	214.16
	Louisville Metro	7,400	166.43
	Black Female	605	154.98
	White Female	2,874	123.61
	Other Male	31	122.25
	Hispanic Male	27	80.43
	Other Female	18	69.92*
	Hispanic Female	17	53.99*

Data Source: 2011-2015 Kentucky Vital Statistics Age-adjusted to the 2000 U.S. Standard Population. \*The CDC defines rates as statistically unreliable when the numerator is less than 20. Racial categories are non-Hispanic.



HOUSING

**Root Causes** 

234.11 - 276.27

**Heart Disease** 

Age-adjusted death rate per 100,000

101.61 - 113.66 113.67 - 148.66 148.67 - 188.34 188.35 - 234.10

**EARLY CHILDHOOD** 

DEVELOPMENT

A

BC

Data Source: 2011-2015 Kentucky Vital Statistics Age-adjusted to 2000 U.S. Standard Population. Data are provisional and subject to change.

FOOD

**SYSTEMS** 

Heart disease is the second leading cause of death in Louisville Metro. Men die from heart disease at higher rates than women, and Black people die at higher rates than their White counterparts. Heart disease death rates are higher in the downtown core, Old Louisville and the Northwest core.

The median age of those who died from heart disease in Louisville Metro from 2011-2015 was 79.



Prognostic Impact of Race in Patients Undergoing PCI Analysis From 10 Randomized Coronary Stent Trials. JACC: CARDIOVASCULAR INTERVENTIONS VOL. 13, NO. 13, 2020

#### **Compared with White patients:**

- Black and Hispanic patients had higher rates of adverse clinical events
- Black patients had a higher risk of death.



### JACC: HEART FAILURE VOL. 6, NO. 5, 2018. African Americans Are Less Likely to Receive Care by a Cardiologist During an Intensive Care Unit Admission for Heart Failure

• African Americans Are Less Likely to Receive Care by a Cardiologist During an Intensive Care Unit Admission for Heart Failure

#### JACC: HEART FAILURE VOL. 6, NO. 6, 2018

• Heart Failure with poor LV function in outpatient clinical practice, women, Blacks and Hispanics, and lower-income patients had statistically significantly worse HF-specific health status.

#### **Circulation: Heart Failure. Oct 2019**

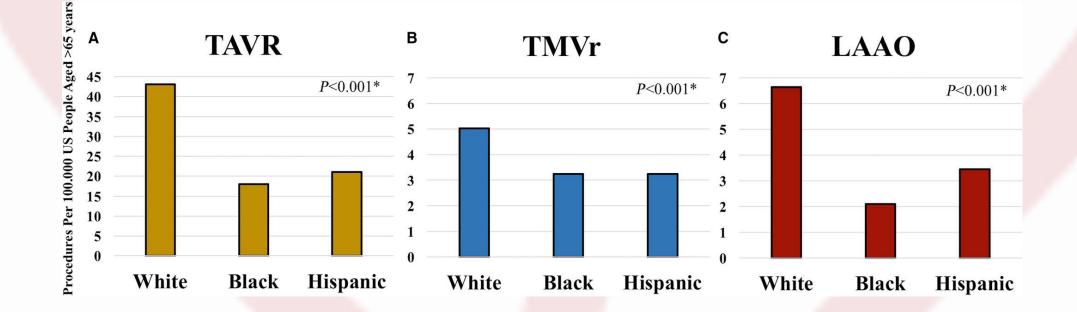
• Among nearly 2000 patients, Black and Hispanic patients had lower rates of admission to the cardiology service than white patients

• Admission to the cardiology service was independently associated with decreased readmission within 30 days, independent of race.



Racial Disparities in the Utilization and Outcomes of Structural Heart Disease Interventions in the United States. J Am Heart Assoc. 2019;8:e012125. DOI: 10.1161/JAHA.119.012125.

- The Nationwide Inpatient Sample (NIS) November 2, 2011 to December 31, 2016.
- Total 106, 119 patients with TAVR, TMVr, LAAO





Association of Race/Ethnicity With Oral Anticoagulant Use in Patients With Atrial Fibrillation Findings From the Outcomes Registry for Better Informed Treatment of Atrial Fibrillation II. JAMA Cardiology November 2018.

- First, Black patients were less likely to use any anticoagulation than White patients and were particularly less likely to use newer safer anticoagulants.
- Second, while we expected to see the difference in race mediated by socioeconomic status, differences between Black and White patients largely persisted despite inclusion of socioeconomic markers.
- Third, anticoagulation quality was poorer in Black patients and Hispanic patients.



### Sex and Race/Ethnicity Differences in Implantable Cardioverter-Defibrillator Counseling and Use Among Patients Hospitalized With Heart Failure

Circulation. Volume 134, Issue 7, 16 August 2016, Pages 517-526

- The GWTG-HF program.
- AICD's result in a 31% and 23% reduction in the hazard of death in comparison with conventional medical therapy.
- Eligible race/ethnic minority group patients were less commonly counseled than their White counterparts (White patients 24.3%): Black patients 22.6%, Hispanic patients 18.6%, and other race/ethnic minority patients 14.4%
- Race/ethnic minority group patients received or were prescribed an ICD less commonly than White patients (White patients 65.3%): Black patients 58.0%, Hispanic patients 56.3%





### **Patient Demographics**

Patient Visits	> 2500 in 2021			
Age	15 –96 yrs	48.6 yrs (mean)		
Gender	50% Male	50% Female		
Race	40% Black	21% Hispanic	4% Other	35% White
Language	17% Spanish	3% Other	80% English	
FPL	82% <u>&lt;</u> 200%	18% > 200%		
Referring Clinics	75% FQHC	17% Non for profit	8% other	
Chronic Illness	40 % < 2	60% <u>≥</u> 2		



# Cardiovascular Guideline Based Therapy (Threshold

<u>> 85%)</u>

CHF	Black	Hispanic	White
Beta Blocker	93%	75%	93%
ACE/ARB	88%	88%	93%
AICD	100%	100%	100%
CAD			
Beta Blocker	89%	88%	94%
Anti platelet	93%	100%	98%
Statin	95%	80%	93%
Atrial Fib			
Anticoagulation	100%	100%	100%



#### **Preventive Cardiology and Health Equity Center**

	Black pts (Initial)	Black pts (6 months)	White pts (initial)	White pts (6 month)	Hispanic pts (Initial)	Hispanic pts (6 month)	Total Initial	Total 6 month
Statin at Goal								
	59%	5 78%	69%	80%	50%	67%	61%	5 77%
BP at Goal								
	39%	48%	52%	5 100%	40%	100%	<b>42%</b>	60%
	3370	9 4070	SZ/0	100%	4076	10076	b 42/0	5 0076
Exercise at Goal								
	14%	5 15%	5 12%	<b>20%</b>	20%	33%	<b>5</b> 14%	5 17%
Diet at Goal								
	25%	<b>44%</b>	21%	60%	50%	67%	<b>26%</b>	<b>49%</b>
Medication Compliance								
	740	7.40	0.00		000	(70)	010	5 74%
Medication Compliance	25%							



<u>Health equity:</u> is achieved when every person has the opportunity to "attain his or her full health potential" and no one is "disadvantaged from achieving this potential because of social position or other socially determined circumstances."

Equal Access to Healthcare Equal Quality and Outcome Healthcare Address Social Determinants of Health Solve Racism and Bias in Healthcare



**Addressing the Problem** 

## Expand the Collection, Reporting, and Analysis of Standardized Data

### **Equal Access to Healthcare.**

- Expand Health insurance coverage
- Regardless of Type of insurance coverage



### **Equal Quality and Outcome Healthcare**

- Establishing accountability frameworks such as equity Dashboards/scorecards.
- Review clinical algorithms that rely on race.



### **Address Social Determinants of Health**

- Need structure within systems to evaluate and then address those needs.
- Break down barriers and create partnerships.
- New policies are needed to increase economic empowerment.



### **Address Racism and Bias in Healthcare**

- Investing in scholarships for students of color interested in health professions.
- Train leadership and staff in diversity, equity, inclusion, and antiracism principles.
- Listen to and learn from patients and health care professionals of color.



## **Panel: Stakeholder Priorities in Advancing CVD Equity**



**Yolanda Reed** Founder Yokie!



**Gretchen Leiterman** *Chief Operating Officer Baptist Health* 



**Tony Linares** *RVP Medical Director Anthem National Accounts* 



#### **Ranna Parekh** *Chief Diversity and Inclusion Officer American College of Cardiology*



#### Anne Stake

Head of Strategy, Innovation, & Technology Medtronic

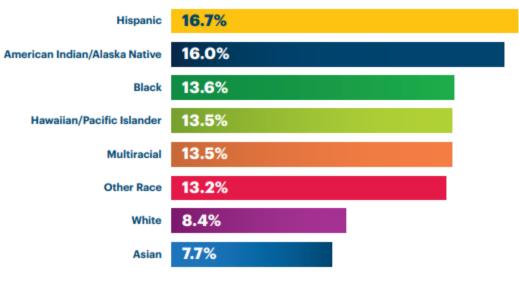


# Reducing Disparities in Cardiovascular Care

# Priorities in Advancing Health Equity at Baptist Health Louisville



### Impact of the Pandemic: Avoiding care due to cost was 2x higher among Hispanic and Black adults



Note: Hispanic is an ethnicity. All race groups are non-Hispanic.

ANNUAL REPORT www.AmericasHealthRankings.org



# Health Equity at Baptist Health Louisville

### • Community Investment

- Mental Health Services
- ≻Maternal/Child Health
- ➢Opioid Reduction
- ≻Heart Disease
- ➢ Health Screening
- Workforce diversity
- All staff, leadership and provider training
- Data-driven decision making



# **Reducing Disparities in Heart Disease**

- Clinical Support
  - >Partner with community providers
  - > Expand screenings for cardiovascular disease
- Direct to Consumer
  - ➢Online Risk Assessments and Follow Up
  - Community Education & Events
- Next Steps
  - ➢ Future additional partner investment
  - Primary data analysis of outcomes by determinants of health
  - National data sharing partnerships to allow benchmarking to best practice

### Anthem Foundation - Mission - Vision- Values

#### **OUR MISSION**

As the philanthropic arm of Anthem, Inc., the Anthem Foundation promotes the organization's commitment **to improving lives and communities**. Through strategic partnerships and programs, we are addressing the disparities and social determinants that will help create a healthier generation of Americans.



#### OUR VISION

Be the most innovative, valuable and inclusive partner to our stakeholders and communities.

#### **OUR VALUES**

**Leadership:** Redefining social responsibility through best-in-class program solutions.

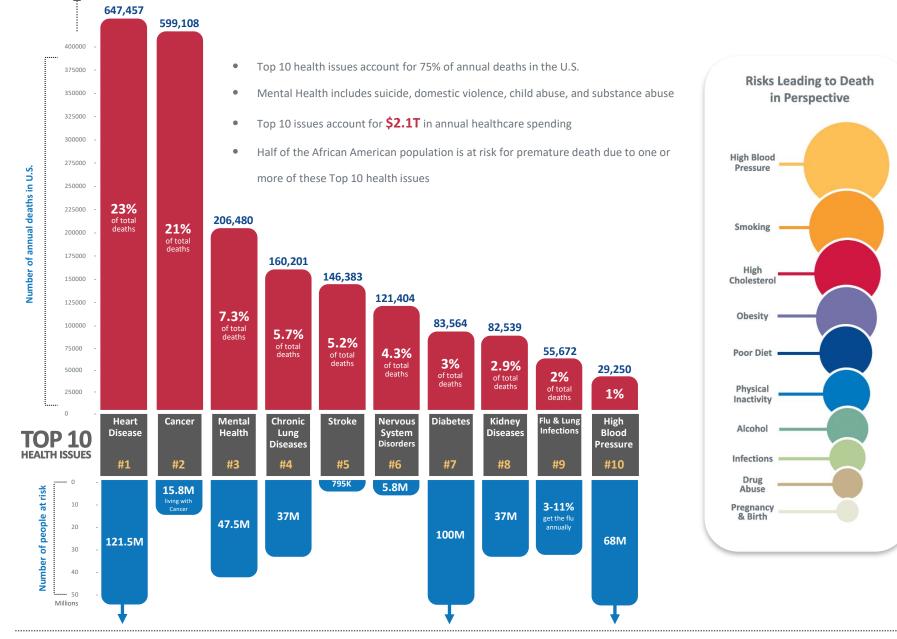
Community: Committed, connected, invested.

Integrity: Doing the right thing; being a good corporate citizen.

**Agility:** Adapting and transforming our work today to provide a safer tomorrow for our communities. **Diversity:** Expanding access for those most in need; inherently addressing health disparities through our Healthy Generations strategy.

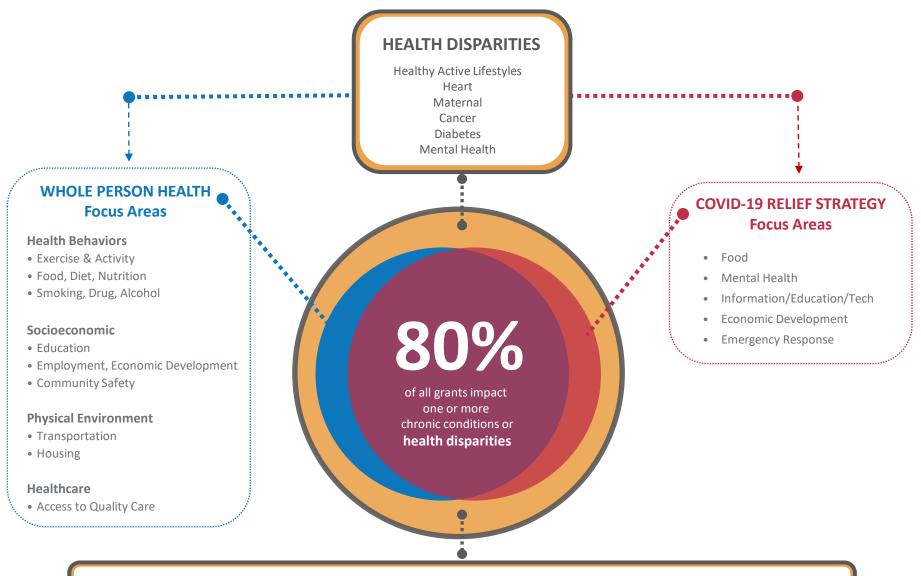


#### Leading Health Issues in the U.S.



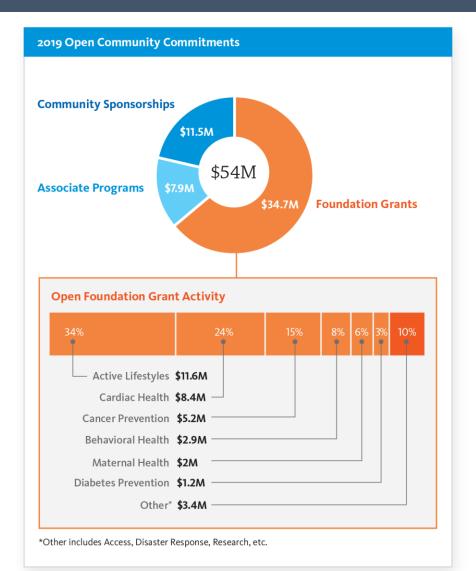
#### Anthem 2020 Strategy anchored in Health Disparities .....

The Healthy Generations strategy enables us to consistently and directly improve measures for the most critical health issues including those exacerbated by COVID-19.



Collective focus areas are anchored in the proven Healthy Generations scientific approach to improving community health measures.

### Anthem Foundation: Open Community Commitments



#### **Responding** to the Research.....



For 20 years, Anthem Foundation has been committed, connected, and invested in communities across the country through our Healthy Generations Program - a multigenerational initiative to improve public health. Through strategic partnerships and programs, our approach is inherently addressing the social drivers that are barriers to health and COVID-19 recovery within underserved communities.

Most Pressing Community Health Issues in the U.S.		
HEART DISEASE	CANCER	MENTAL HEALTH
<ul> <li>Coronary Artery</li> <li>Blood Thinners</li> <li>Disease</li> <li>Congenital Heart</li> <li>Heart Failure</li> <li>Disease</li> </ul>	COVID-19 COMPLICATIONS  Cancer Cancer Immunosuppressant medications Cancer Treatment Organ Transplant	<ul> <li>Isolation/Anxiety</li> <li>Substance Abuse</li> <li>Domestic Violence</li> <li>Suicide</li> </ul>
<ul> <li>WHOLE PERSON HEALTH</li> <li>Smoke-free environment</li> <li>Physical Activity</li> <li>Access to Healthy Food Options</li> <li>Access to Stress Support Systems</li> <li>Health Literacy</li> <li>Access to Healthcare</li> <li>★ ★ ★ ★ ★ Healthy Generations ★ ★ ★ ★ ★ ★</li> </ul>		
\$7M in programming to support vulnerable individuals affected by heart disease. Trained more than 10.5M Americans in Hands-Only CPR, increasing the likelihood of people performing it by 7%.	<ul> <li>\$6.8M in programming to bring SDOH solutions to vulnerable individuals predisposed or affected by cancer.</li> <li>Efforts include providing education/awareness, prevention programs, and support for families impacted.</li> </ul>	\$3.5M in programming supporting individuals predisposed or affected by mental health challenges. Efforts include mental health screening and support, substance abuse prevention and youth programming.
		*

\*Estimated by the Centers for Disease Control and Prevention and National Institute for Health

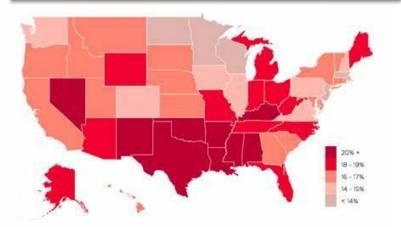
# Food Insecurity and Heart Disease: Consequences

- Increased number of chronic conditions (1)
- Comorbidities included CAD, DM, HT, Stroke, CHF, Cancer and Asthma (2)
- Increase in all cause cardiovascular mortality (3)
- Increased mortality remained prominent even when correcting for health conditions, lifestyle factors, race and ethnicity (3)

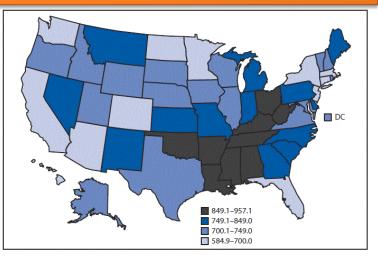
1- Liu, et al
 2 – Palakshappa et al
 3- Sun et al

them

#### Food Insecurity Overall Population

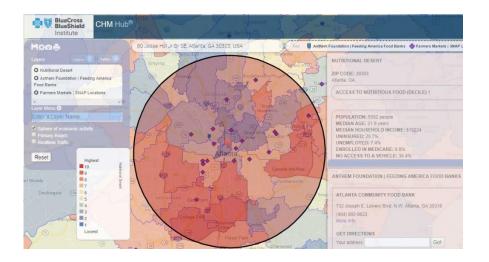


#### Age Adjusted Mortality US



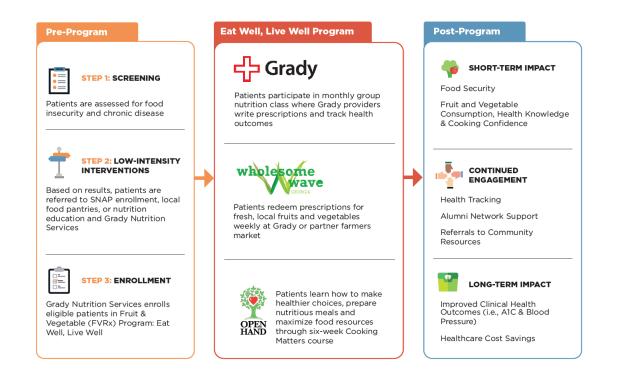
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## Food is Medicine (partnership with Feeding America food banks and Essential Hospitals)



- Example: Atlanta Community Food Bank and Grady Hospital
- Over 40% of Grady patients screened positive for food insecurity vs. 13% in the Metro Atlanta area
- Grady serves a largely low-income population with high rates of chronic disease due to health disparities
- Provide healthy food based on individuals' needs at the site of care

- Expand from 7 to 14 markets; increase food insecurity screening, programming, and SNAP/WIC enrollment
- Advance access to nutritious food at the site of care
- Innovate and disseminate best practices



# **Consumer-facing tools to address heart disease**

These free, **interactive websites** are focused on eliminating health disparities in African American/Black and Hispanic/Latino communities across **heart disease**, **prediabetes**, **chronic kidney disease**, **cancers** and **depression-risk** 





TakingActionforOurHealth.org (in English and Spanish)

Created in collaboration with leading national organizations, including 100 Black Men of America, the National Urban League, Golden State Medical Association, and the National Hispanic Medical Association, they help individuals: LEARN about their increased risks and how to protect their health and well-being ACT by getting screened (*with searchable tools to find help for addressing barriers to getting screened*) MONITOR their progress SHARE their results with their healthcare providers and family

Share these websites with your patients and empower them to TAKE ACTION

# Whole Health Index: Framework

Framework is adapted from the National Academy of Medicine's Vital Signs



Provider Resources on Health Disparities: www.MyDiversePatients.com

### Four domain areas

Social drivers: e.g., socioeconomic status, housing, transportation, food insecurity (25%)

•Affordability: e.g., % of out-ofpocket spending over household incomes (25%)

•**Global health:** e.g., number of chronic health conditions (25%)

•Clinical quality: e.g., screening, appropriateness of care, secondary prevention, well-child and maternity care (25%)

### Anthem

# **Reducing Disparities in Cardiovascular Care**

Kentuckiana Health Collaborative

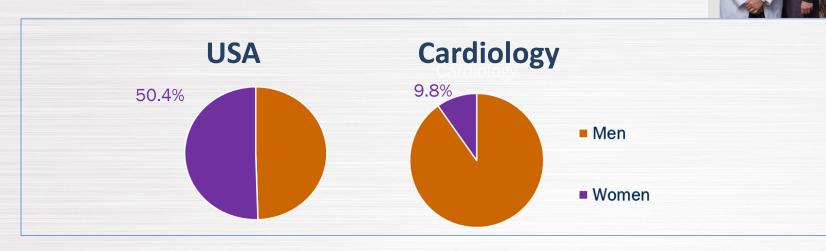
December 14, 2021

Ranna Parekh, MD, MPH

Chief Diversity and Inclusion Officer



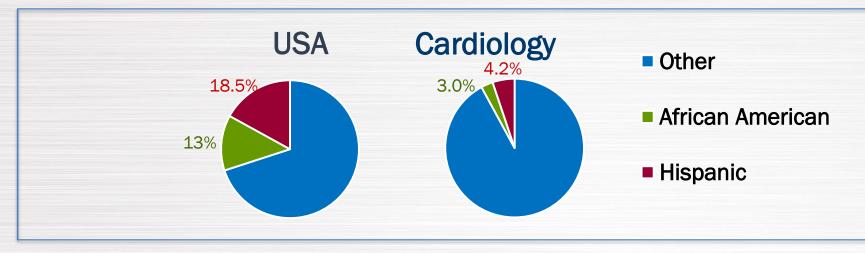
# In comparison to U.S. <u>medicine</u>, adult cardiology is far less diverse.



- In 2015, only 9.8% of FACCs who are U.S. board certified in adult CV are women
- About half of IM residents are women, compared with 13% adult cardiologists and 21% of adult cardiology fellows. Even so, women are underrepresented in CV fellowships compared to almost every other specialty in the House of Medicine



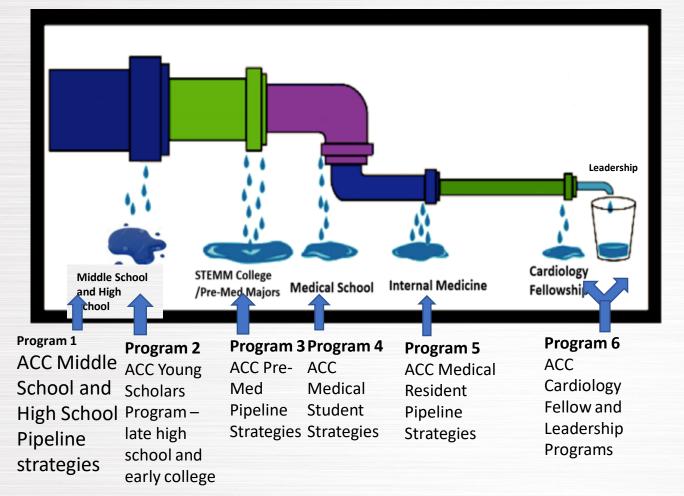
In comparison to the U.S. <u>population</u>, Adult cardiology has fewer African Americans and Hispanics...



Source: Racial Diversity Among American Cardiologists: Implications for the Past, Present, and Future (Circulation, June 2021)



# ACC's Programs to address the Leaky Pipeline for Underrepresented in Cardiology (URCs)





# Implicit Bias Training and Workshops

- Led by member workgroup
- BOT first group trained in January 2020
- Goal to train 2,000 ACC Member Leaders
- Virtual Train the Trainer Sessions in 2021 with plans for in person in 2022



# Joint Statement May 2020







Release Date: May 30, 2020

Dear Members, Friends and Concerned Citizens,

The Association of Black Cardiologists and our cardiovascular partners know that these are difficult and disturbing times for you, your families, patients and our communities. We know that at the forefront of your distress are concerns about preventable causes of death, illness and disease. Like cardiovascular disease, acts of violence and racism are core causes of psychosocial stress that promote poor well-being and cardiovascular disease, acts of violence and racism are core causes of heart disease and stroke are the leading causes of death for communities of color, particularly African-Americans who have the lowest life-expectancy of all racial/ethnic groups living in the United States, we are extremely disturbed by violent acts that cut to the core of the lives of our community. Therefore, along with other leading health organizations, we DENOUNCE incidents of racism and violence that continue to ravage our communities.

Health equity is our mission. George Floyd and other black men and women who remain nameless and faceless are "At the Heart of the Matter" for the ABC and our cardiovascular partners. Mr. Floyd's death comes on the heels of other recent incidents caught on camera. In another 2020 incident, Ahmaud Arbery was shot and killed while jogging in his hometown of Brunswick, Georgia. Christian Cooper is fortunately alive and well to speak to the Memorial Day incident in New York's Central Park where he was accused of threatening the life of a woman while bird watching. Although the woman apologized for calling 911 to make this false claim, justice does not always follow these filmed incidents. Another senseless death involves officers entering the Louisville, Kentucky home of emergency medical technician Breonna Taylor.

The profound grief and stress triggered by these events, as well as the consequences for black lives, contribute significantly to cardiovascular risk. Each episode has emotional and physiological effects on individuals and <u>all</u> communities. ABC and our partners have been at the forefront of addressing cardiovascular disparities in our communities for decades and it is crucial, now more than ever, that our efforts help to mitigate the <u>unacceptable disparities</u> among our most vulnerable populations. We have the unprecedented opportunity to address these issues through policy and by working with affected communities and the healthcare providers who serve them.

Thus, we stand and link arms in solidarity with efforts to dismantle systems that maintain excess morbidity and mortality, especially among vulnerable populations and those historically oppressed. Indeed, our collective vast membership, many of whom are at the frontlines of clinical healthcare, has taken an oath to decisively and with kindness, compassion and grace act to relieve suffering related to "can't breathe" in order to preserve life.

Stay safe, healthy and connected,

Whitelle A- Albert

Michelle A. Albert, MD, MPH President, Association of Black Cardiologists

Robert N- Eno

Robert A. Harrington, MD President, American Heart Association

(htt Dows

Athena Poppas, MD President, American College of Cardiology

# The Business Case for Health Equity

Health disparities are costly and there would be a positive economic impact if health equity is better implemented \$135 BILLION total economic gain per year if health disparities removed

\$175 billion

economic impact of shortened life spans

\$42 BILLION

> untapped productivity due to health disparities

3.5 MILLION lost life years

associated with premature deaths

\$93 BILLION excess health care

excess health care costs due to health disparities

\$230 BILLION

projected economic gain per year if health disparities eliminated by 2050

https://altarum.org/sites/default/files/uploaded-publication-files/WKKellogg\_Business-Case-Racial-Equity\_National-Report\_2018.pdf https://cmelearning.com/resources/the-case-for-health-equity/#business https://www.astho.org/Programs/Health-Equity/Economic-Case-Issue-Brief/ https://link.springer.com/article/10.1007/s11606-016-3604-7





# Perspectives on Health Equity from Medtronic LABS

Global Health, Local Solutions







Our mission is to expand access to healthcare for underserved patients, families, and communities across the world.





### **Our work** at Medtronic LABS

We design and implement tech-powered healthcare delivery models that strengthen and extend health systems into local communities, delivering sustainable outcomes for underserved patients worldwide.

Our current focus is transforming care for chronic diseases including hypertension, diabetes, mental health, and disabilities.

#### Why chronic disease?

5B+ low- and middle-income people lack access to healthcare globally.

Urbanization and standard-of-living improvements are driving an epidemiological shift towards Non-Communicable Diseases (NCDs) which now account for >70% of mortality in this population.

### Our programs at-a-glance



#### Impact (Since 2014)

C PEOPLE SCREENED

1M+

LIVES IMPROVED

Health workers trained 2,400

#### Partners (\*not a comprehensive list)

#### GOVERNMENTS

Ministry of Health, Kenya County Governments, Kenya Government of Kerala Government of Bhutan

#### HEALTH SYSTEMS

#### Christian Hospital Association of Ghana (CHAG) Christian Hospital Association of Sierra Leone (CHASL)

#### **FUNDERS**

GIZ World Diabetes Foundation Novo Nordisk Novartis

#### NGOs

Path Red Cross Kenya Defeat Diabetes Association (KDDA)

### Our approach integrates 3 core elements

We deliver health outcomes in low-resource settings by leveraging cutting-edge digital technologies to enable last mile healthcare delivery.



Software solutions designed for patients, community health workers, and healthcare providers operating in low-resource settings



**Community-based teams** integrated with health systems to expand screening, diagnosis and treatment; and direct patient engagement



**Partnerships** 

### Build trust with integration with community-based structures





Medtronic LABS programs are fully integrated into the public health system in partnership with Ministries of Health and local governments.

At the community level, we engage with local structures, like churches, social support groups, NGOs, and other organizations.

Our community health programs are driven through robust community health worker networks. We equip and train community health workers and provide support through our hyper-local operations teams.

- Who holds trust in the communities where you work?
- How are you engaging with community-based organizations?

### Design with proximity to population served





We design programs with and for the communities we are serving. Over 95% of our team are based in and are from the places where we operate. Our design and product teams are embedded directly in the community and work alongside stakeholders at every level, from the government to the clinicians to the patients and families we serve. We often employ human centered design and co-creation methods to ensure that all voices are heard.

- Does your team in the organization represent the population served?
- How proximate are you to the problems or challenges in the daily lives of the beneficiaries or those being served?
- Could design based methods or design principles apply to health equity work?

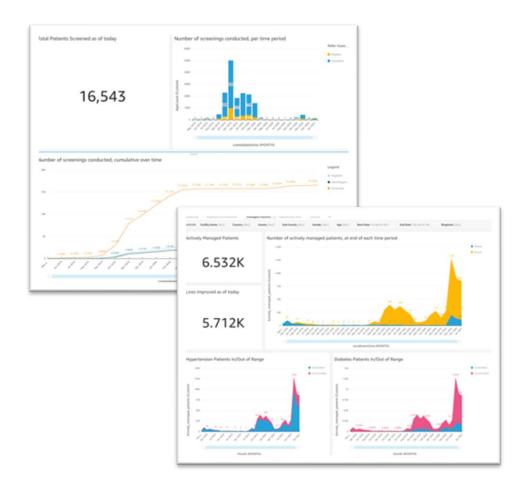
### Expand the definition of "healthcare" to focus on health



We design programs that address the social determinants at the root of poor health. We leverage telecounselors and health coaches to provide personalized feedback and strategies based on real time data. (e.g. transportation, healthy eating, exercise, mental health, stress...)

- What are the social determinants in the US context for the populations you are serving?
- How might partnerships with social services or local organizations enhance healthcare delivery?

### Measure outcomes that matter to patients and stakeholders



Each stakeholder values different outcomes. At Medtronic LABS we track longitudinal clinical outcomes in real time and align with specific Ministry of Health standards. However, we also focus on what patients care about: quality of life, healthy days, etc.

- What do clinicians care about
- Patients?
- Administrators?
- Payors?



# Medtronic LABS

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Global Health, Local Solutions

# OINING THE FORUM



# Closing

# Natalie Middaugh

Community Health Program Manager Kentuckiana Health Collaborative

# **UPCOMING KHC EVENTS**

# The Quest for Value and Equity KHC 8<sup>th</sup> Annual Conference April 12-13, 2021 https://khcollaborative.org/2022-conference/



# Reducing Disparities in Cardiovascular Care Thank you for attending!



