CMS Quality 2023 Conference

Building Resilient Communities:

Having an Equitable Foundation for Quality Healthcare

Interactive HEARTS Program Takes Deep Dive into Improving Hypertension

Karen Southard, RN, MHA, CPHQ
VP, Quality Improvement

Donald DiPette, MD, FACP, FAHA
University of South Carolina
SOM, HEARTS Advisor

Vicky Kolar, EMT-P, CPHQ
Quality Specialist












Welcome

Stacy Harper, RDH, MPH
Commander, U.S. Public Health Service
Centers for Medicare and Medicaid
iQuality Improvement and Innovation Group
Division of Community and Population Health

AGENDA

- Review the quality improvement process for selecting HEARTS in America to improve hypertension and reduce disparity
- Detail the development of HEARTS in the Americas: an international evidenced-based best practice led by physician advisors
- Explore empowering primary care to integrate a hypertension initiative

Quality Improvement Plan to Reduce Hypertension and Improve Disparities

Karen Southard, RN, MHA, CPHQ
Vice President, Quality Improvement
South Carolina QIO Program Director – CCME, a partner with Health Quality Innovators (HQI)

CMS Quality 2023 Conference
Building Resilient Communities:
Having an Equitable Foundation for Quality Healthcare

Health Quality Innovation Network

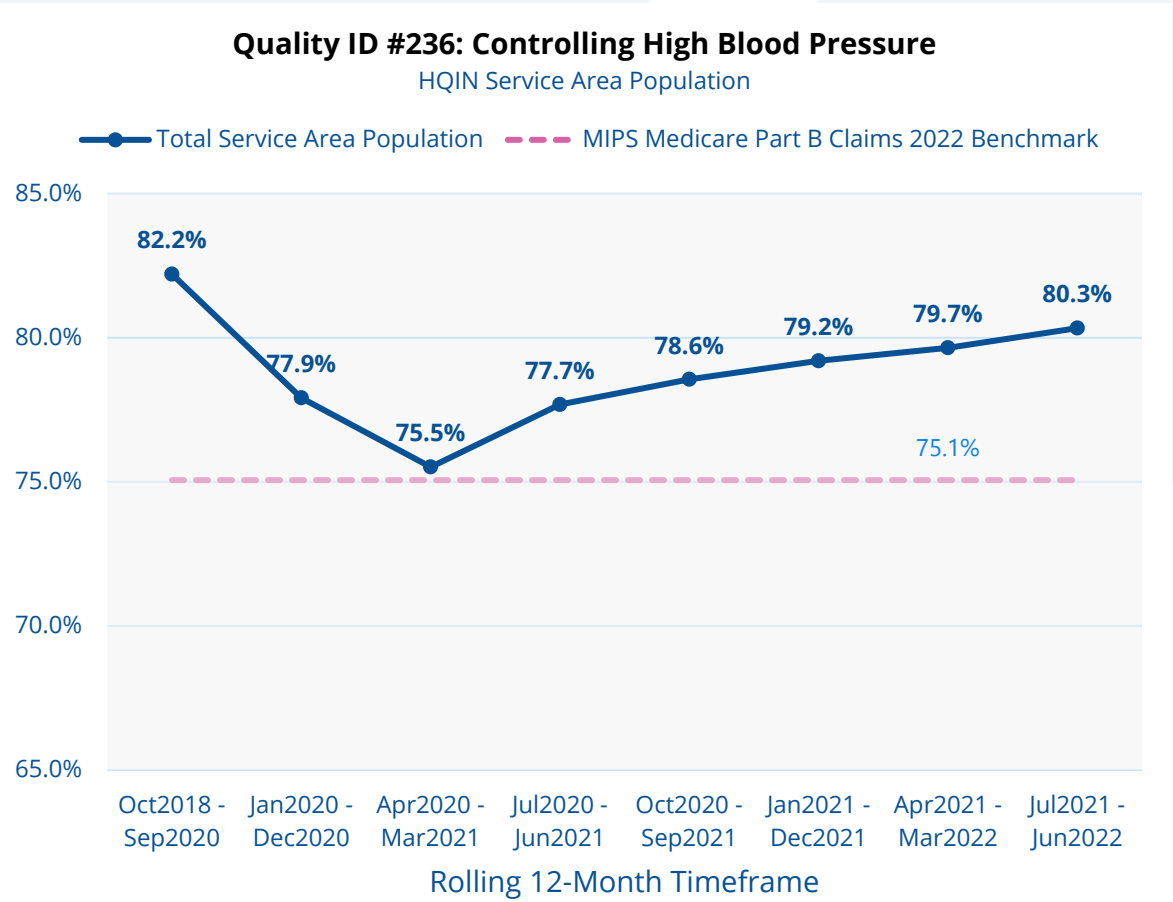
HQI
HEALTH QUALITY INNOVATORS

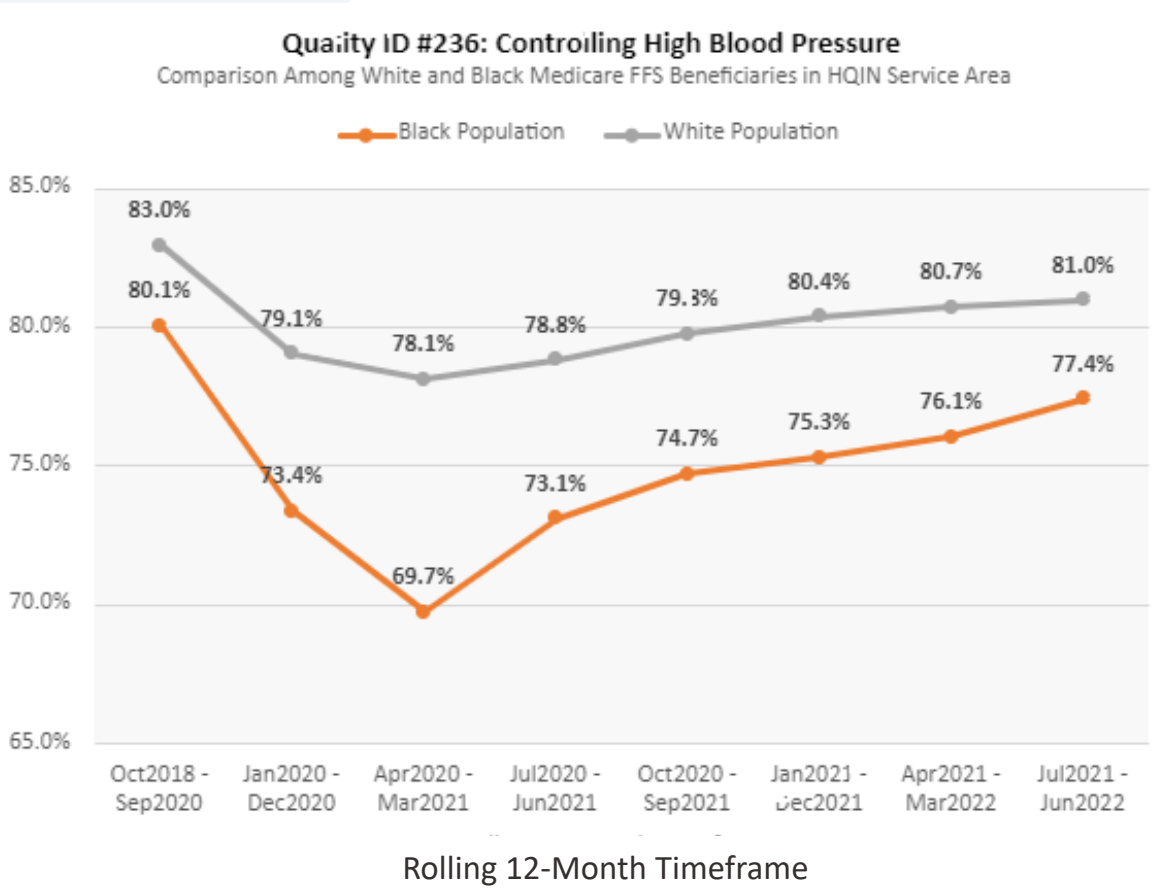
The Carolinas Center for Medical Excellence

kfmc
HEALTH IMPROVEMENT PARTNERS

Kansas Healthcare
COLLABORATIVE

Data Informed Decision to Act





Drivers Identified During RCA

EMR data was not being used to consistently track hypertension control

Variation in medication protocol

Team-based care was not always part of the practice culture

Research Driven Intervention

The U. S. Surgeon General issued a Call to Action to Control Hypertension in October 2020. The executive summary for the Surgeon General's call to action was poignant with three clear goals:

Goal 1	Make hypertension control a national priority
Goal 2	Ensure that the places where people live, learn, work, and play support hypertension control
Goal 3	Optimize patient care for hypertension

Drivers and scorecards to improve hypertension control in primary care practice: Recommendations from the HEARTS in the Americas Innovation Group

Standardized treatment to improve hypertension control in primary health care: The HEARTS in the Americas Initiative

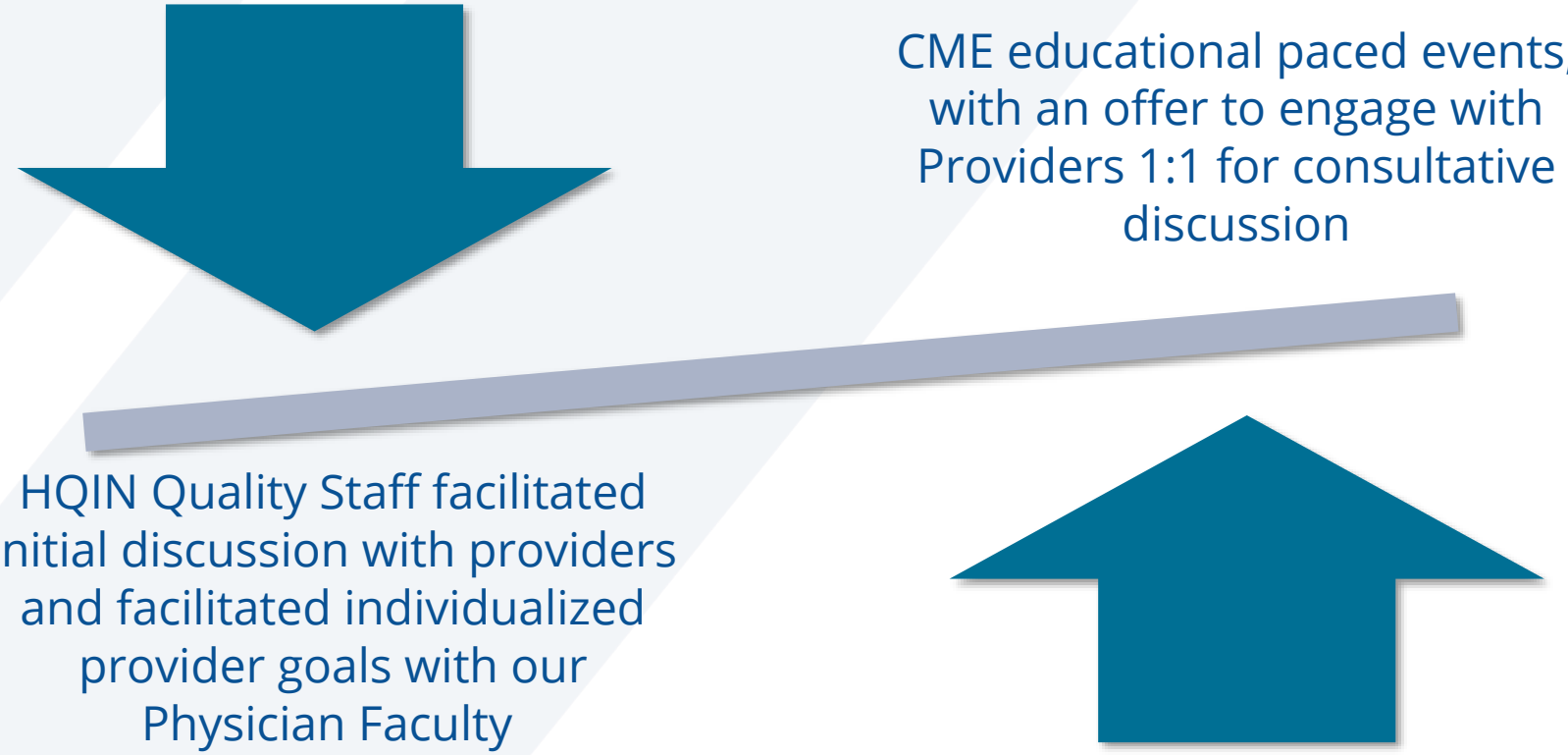
https://pubmed.ncbi.nlm.nih.gov/33045133/

https://www.thelancet.com/journals/lanam/article/PIIS2667-193X(22)00040-0/fulltext

Hypertension Control Programs

	HEARTS In America	Million Hearts	AMA BP	AHA Target BP	Heart Healthy Ambassadors
Measures Accurately	X	X	X	X	X
Treatment Algorithm	For hypertensives	For Statins			
Patient Education	X	X	X	X	X
Quick Tx. Intervention	X	X	X		
Healthy Lifestyle	X	X	X		X
Team- base Care	X	X	X		X
Risk-based CVD Management	X				
SMBP	Engaged	Engaged	Engaged		Engaged
Reimbursement	X	X	X		X
DM and CKD Integration	X		X		X
Evidenced-Based	X	X	X	X	X

Learning and Action Interactive Event



CME educational paced events, with an offer to engage with Providers 1:1 for consultative discussion

HQIN Quality Staff facilitated initial discussion with providers and facilitated individualized provider goals with our Physician Faculty

Measuring Reach and Impact

- 4 HQIN States - Kansas, Missouri, Virginia, and South Carolina
- 45 QIN-CMS Communities
- 2,720,924 QIN Medicare Beneficiaries
- 18 States and 3 countries reached with the LAN

HEARTS in the Americas

Donald J. DiPette, MD, FACP, FAHA
Health Sciences Distinguished Professor
University of South Carolina and University of South Carolina School of Medicine-Columbia
HEARTS Advisor

CMS Quality 2023 Conference
Building Resilient Communities:
Having an Equitable Foundation for Quality Healthcare

Change: “Sense of Urgency/Burning Platform”

- Cardiovascular disease (CVD) is the leading cause of morbidity and mortality globally, in the nation. **Hypertension is the leading risk factor for CVD.**
- **About half of adults (45%) with uncontrolled hypertension have a blood pressure of 140/90 mmHg or higher. This includes 37 million U.S. adults. 1 in 4 adults have their hypertension under control.**
- Safe, effective, and affordable pharmacologic treatment for hypertension is available.
- Start discussions regarding the efficacy of current practices.
- Examine opportunities to increase the control rates of hypertension.

- Centers for Disease Control and Prevention. Hypertension Cascade: Hypertension Prevalence, Treatment and Control Estimates Among U.S. Adults Aged 18 Years and Older Applying the Criteria from the American College of Cardiology and American Heart Association’s 2017 Hypertension Guideline—NHANES 2015–2018. Atlanta, GA: U.S. Department of Health and Human Services; 2021. Accessed March 12, 2021.

Where HEARTS in the Americas Began

- **CDC Noncommunicable Disease Division and PAHO start planning**
- **2013 First HEARTS Summit held in Miami Florida**
- **Barbados first country to implement HEARTS**
- **2016 First paper detailing HEARTS published**
- **HEARTS now**
  - 26 countries
  - 3 new implementing
  - Over 20 million lives impacted

H — Healthy-lifestyle counselling

Information on the four behavioural risk factors for CVD is provided. Brief interventions are described as an approach to providing counselling on risk factors and encouraging people to have healthy lifestyles.

E — Evidence-based treatment protocols

A collection of protocols to standardize a clinical approach to the management of hypertension and diabetes.

A — Access to essential medicines and technology

Information on CVD medicine and technology procurement, quantification, distribution, management and handling of supplies at facility level.

R — Risk-based CVD management

Information on a total risk approach to the assessment and management of CVD, including country-specific risk charts.

T — Team-based care

Guidance and examples on team-based care and task shifting related to the care of CVD. Some training materials are also provided.

S — Systems for monitoring

Information on how to monitor and report on the prevention and management of CVD. Contains standardized indicators and data-collection tools.

HEARTS IN THE AMERICAS

GUIDE AND ESSENTIALS FOR IMPLEMENTATION

PAHO

Pan American Health Organization | World Health Organization

PAHO 120th Anniversary

13

HEARTS in the Americas – Guiding Principles

Ownership	HEARTS is led by the Ministries of Health, with the participation of other stakeholders and PAHO's technical cooperation.
Simple and practical	The Initiative provides pragmatic, cost-effective, and feasible solutions to primary healthcare systems (PHC).
Evidence-based	HEARTS promotes the adoption of best practices in preventing and controlling CVD and improving health services organization.
Accountability	HEARTS is a data-driven initiative.
Continuous learning	Continuous learning cycles, peer-led teaching, dissemination of effective innovations, and lessons learned during implementation.
Long-term sustainability	Integrating elements into the existing PHC.
Increasing the PHC capacity	Recruiting more PHC facilities and increasing the speed of model institutionalization.

Ordunez P, et al. HEARTS in the Americas. Pan Am J Pub Health 2022 (in press)

Early Results

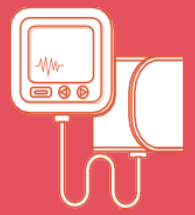
	BARBADOS	CHILE	COLOMBIA	CUBA
Secured political commitment	✓	✓	✓	✓
Demonstration site in place	✓ (2)	✓ (2)	✓ (2)	✓ (1)
Target (adult) population size	21,000	50,000	75,000	26,000
Staff, trained and certified in BP measuring & PAHO virtual course	✓	✓	✓	✓
Algorithm defined	✓	✓	✓	✓
Core set of medications	✓	✓	✓	✓
• **Fixed dose combination**	O **(LIS + HTZ)**	✓ **(VAL-AMP)**	✓ **(LOS-HTZ)**	0 **(ENA-HTZ)**
Registry	✓ (electronic)	✓ (electronic)	✓ (manual)	✓ (manual)
• **Registry completeness (%)**	45% & 49%	87%	73%	89%
Metrics M & E defined	✓	✓	✓	✓
Redistribution of Task well defined	✓	✓	✓	✓

Consensus Among Main Global Organizations

HEARTS in the Americas Technical Pillars

VISION: HEARTS will be the institutionalized model of care for cardiovascular risk management, with special emphasis on the control of hypertension and secondary prevention in primary health care in the Americas by 2025.

Standardized treatment protocols and medications



Blood pressure measurement: Regulations and validated BP devices

Training and education

Data standardization and innovation in data utilization

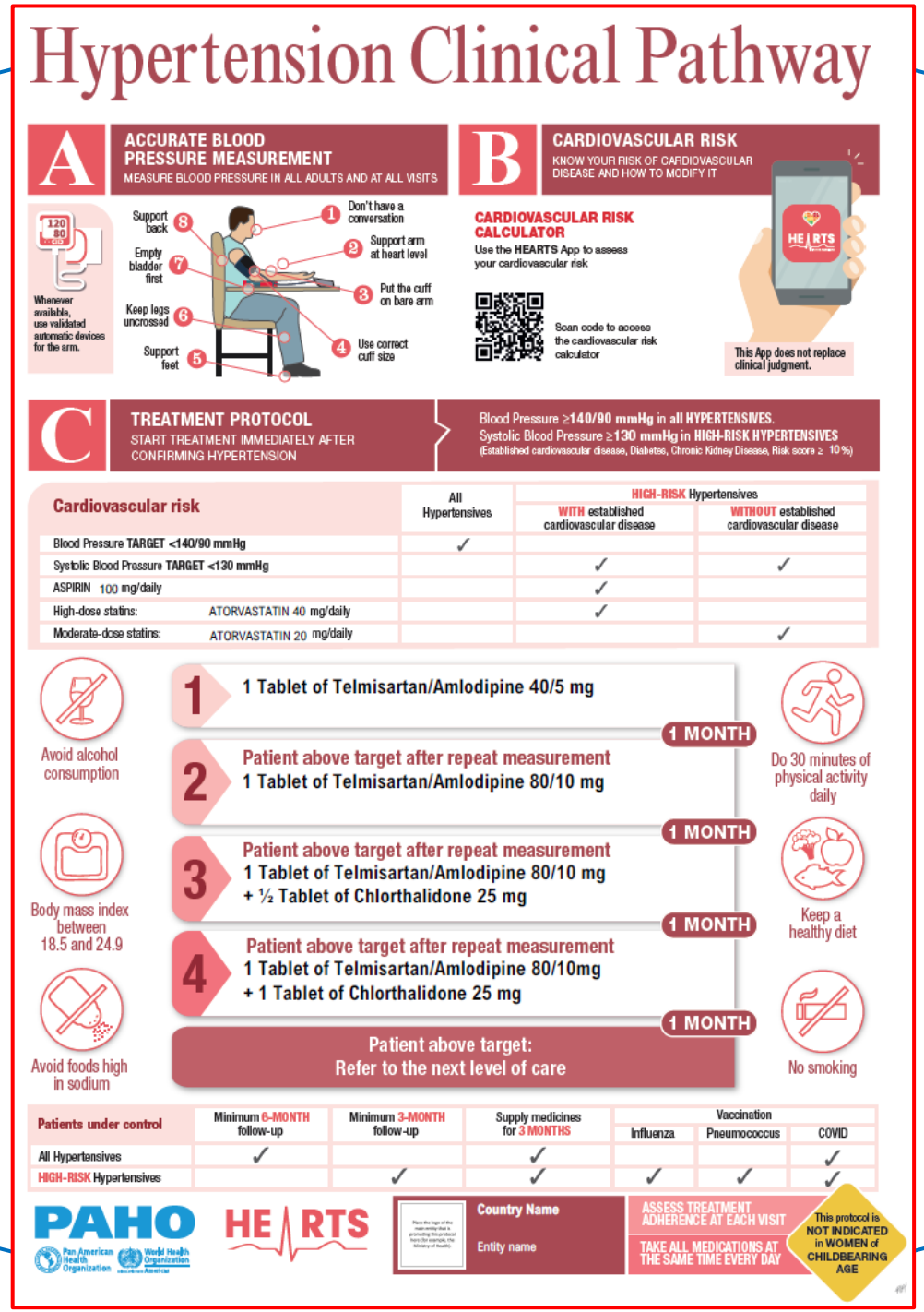
Implementation research and program evaluation

Innovation in organization of care and team based care

Brettler JW ate al. Lancet Reg Health Am 2022.https://www.thelancet.com/journals/lanam/article/PIIS2667-193X(22)00040-0/fulltext

Hypertension Clinical Pathway

1. BP measurement accuracy
2. CVD risk assessment
3. Standardized Treatment Protocol
4. Treatment intensification
5. Continuity of care and follow-up
6. Team-based care and task-shifting
7. Medication refill frequency
8. System for performance evaluation with feedback

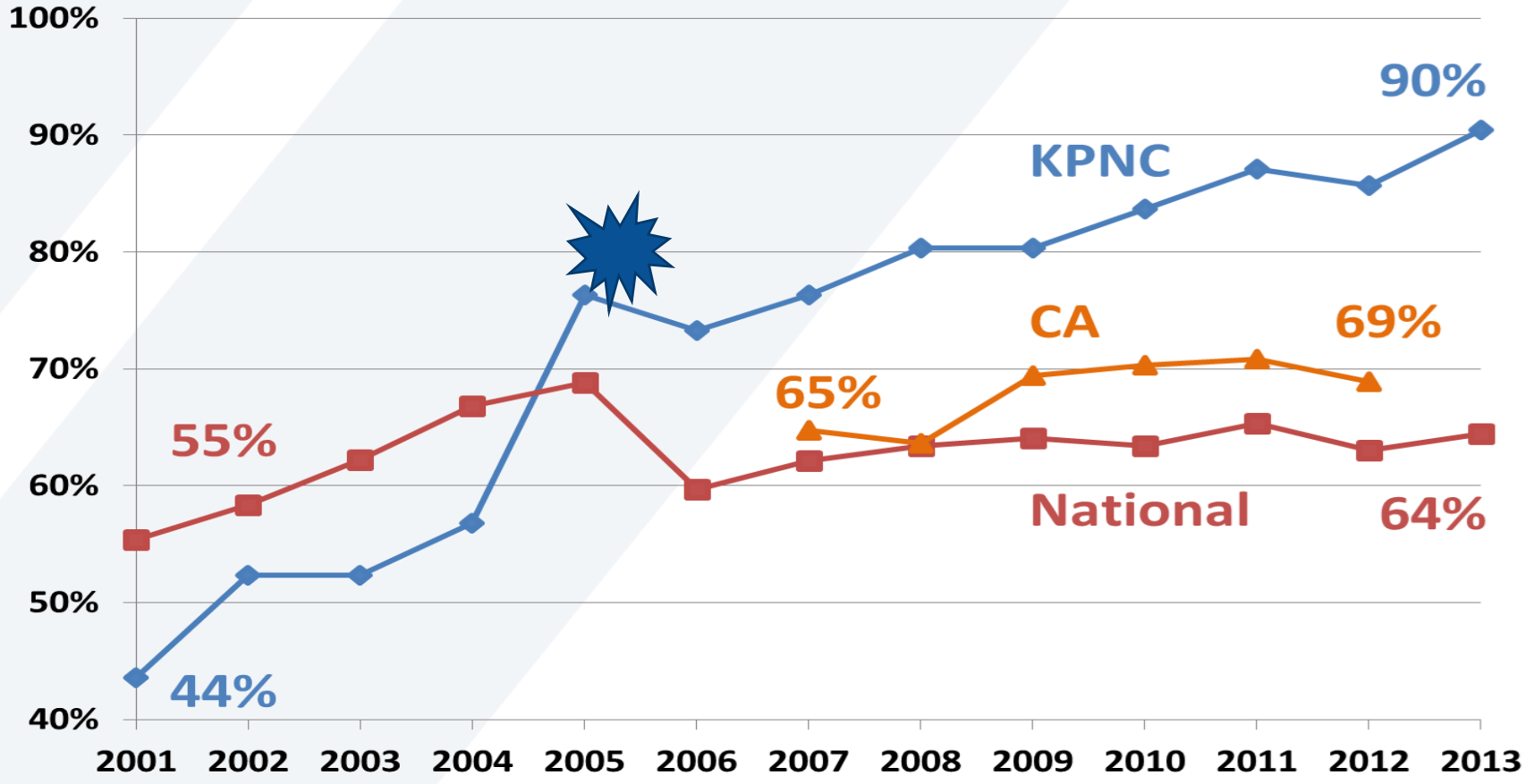


Traditional Model vs. HEARTS Model

Level of care	Specialty-based	Primary care-based
Provider model	Physician-centered	Team-based care with task shifting
Training and education	Not standardized and centered on specialist	Standardized and focused on the primary health care team
Decision making	Individualized and based on complex clinical guidelines	Standardized clinical pathway with a specific treatment protocol
BP measurement	Non-standardized technique. BPMDs may not be clinically validated and BP accuracy is not guaranteed	Adoption of standardized technique and regular training. Exclusive use of automated BPMDs clinically validated
Thereapeutic approach	Physician preferences and complex medication-based pharmacologic formularies	Standardized, simple, directive treatment algorithm using FDC and specific, timely follow-up intervals.
CVD risk evaluation	Discretionary	Integrated into the standardized clinical pathway and focus on CVD secondary prevention, including diabetes

Ordunez P, et al. HEARTS in the Americas. Pan Am J Pub Health 2022 (in press)

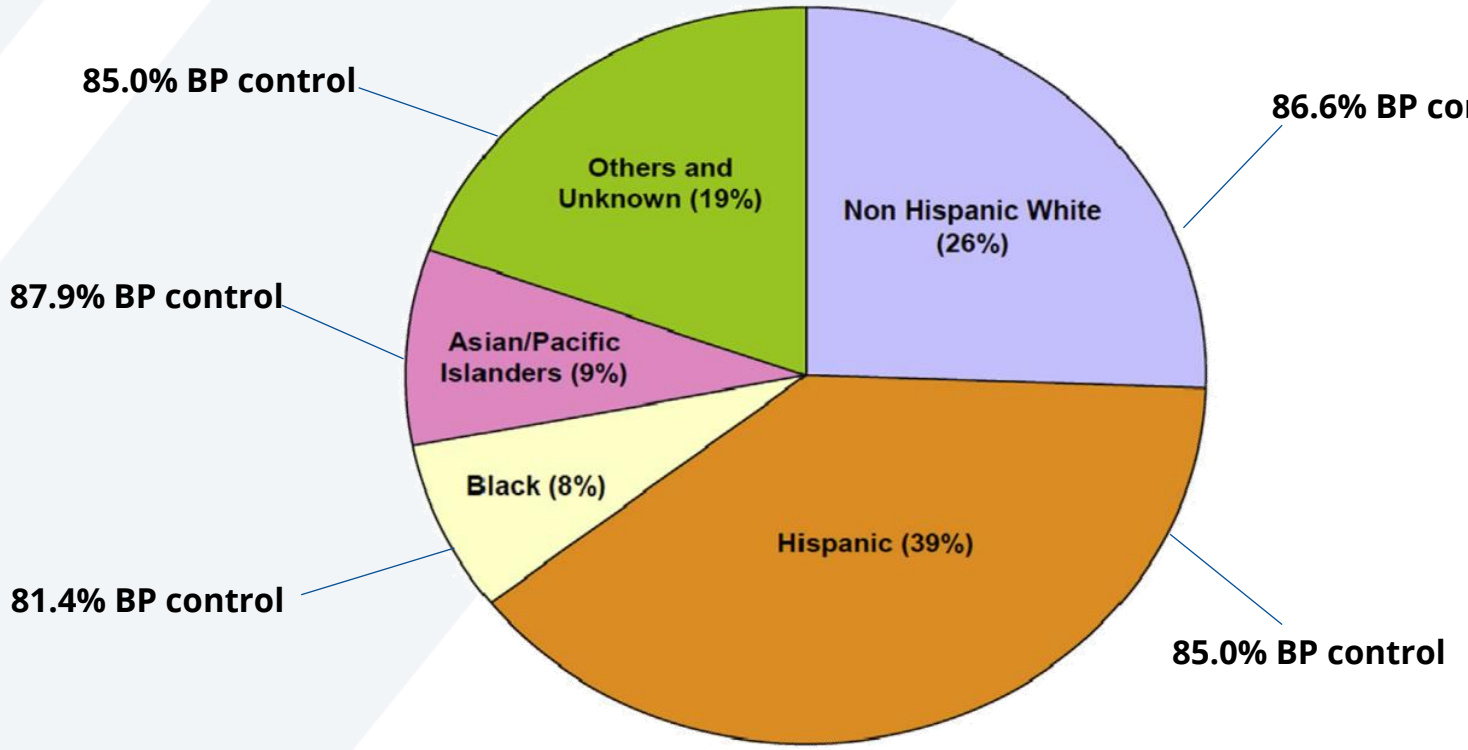
Kaiser Permanente Northern California vs. Statewide and National HTN Control



M Jaffe
The Permanente Medical Group, Inc. • Marc Jaffe, MD (3/20/2023)

Standardized Treatment Protocols Can Help Reduce Disparate Outcomes
Kaiser Permanente Southern California

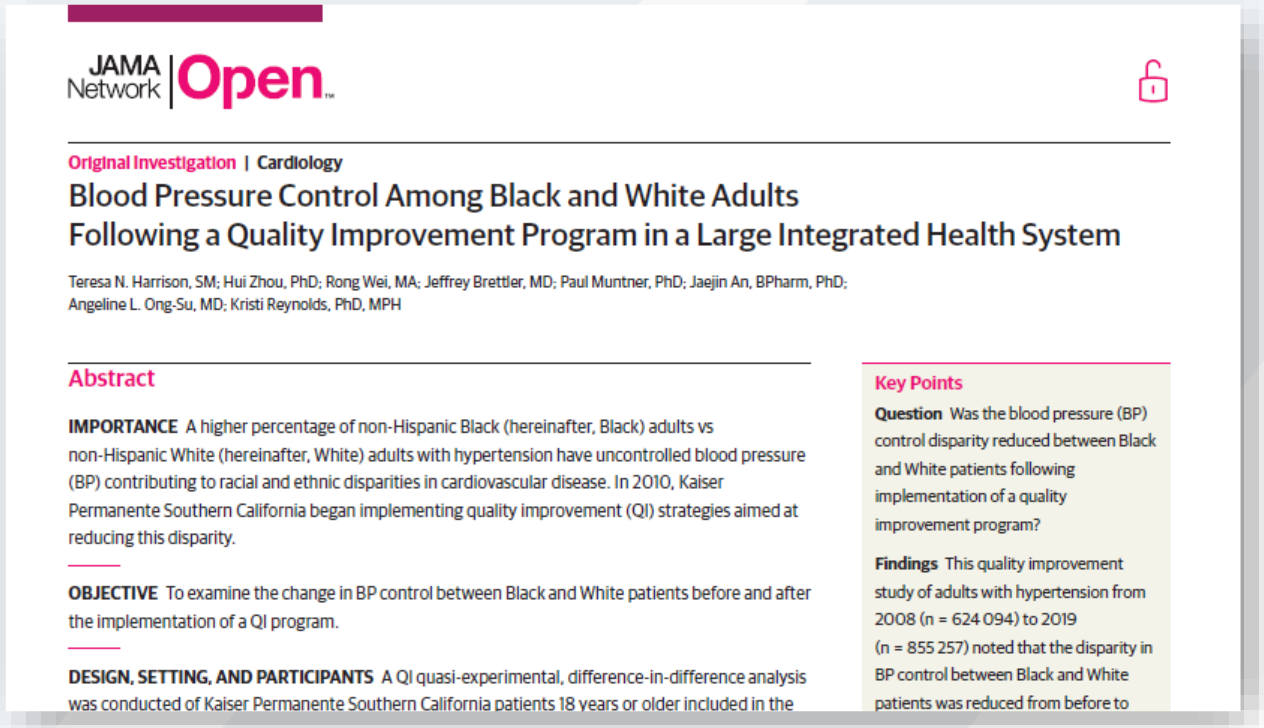
"Across all ages, races, and sexes, hypertension control exceeded 80%."



Shaw KM, Handler J, Wall HK, Kanter MH. Improving Blood Pressure Control in a Large Multiethnic California Population Through Changes in Health Care Delivery, 2004–2012. Prev Chronic Dis 2014;11:140173. DOI: http://dx.doi.org/10.5888/pcd11.140173

Kaiser Permanente Disparity Study

JAMA Open Network, Jan. 2023



JAMA Network | Open

Original Investigation | Cardiology

Blood Pressure Control Among Black and White Adults Following a Quality Improvement Program in a Large Integrated Health System

Teresa N. Harrison, SM; Hui Zhou, PhD; Rong Wei, MA; Jeffrey Brettler, MD; Paul Muntner, PhD; Jaejin An, BPharm, PhD; Angeline L. Ong-Su, MD; Kristi Reynolds, PhD, MPH

Abstract

IMPORTANCE A higher percentage of non-Hispanic Black (hereinafter, Black) adults vs non-Hispanic White (hereinafter, White) adults with hypertension have uncontrolled blood pressure (BP) contributing to racial and ethnic disparities in cardiovascular disease. In 2010, Kaiser Permanente Southern California began implementing quality improvement (QI) strategies aimed at reducing this disparity.

OBJECTIVE To examine the change in BP control between Black and White patients before and after the implementation of a QI program.

DESIGN, SETTING, AND PARTICIPANTS A QI quasi-experimental, difference-in-difference analysis was conducted of Kaiser Permanente Southern California patients 18 years or older included in the

Key Points

Question Was the blood pressure (BP) control disparity reduced between Black and White patients following implementation of a quality improvement program?

Findings This quality improvement study of adults with hypertension from 2008 (n = 624 094) to 2019 (n = 855 257) noted that the disparity in BP control between Black and White patients was reduced from before to

Process Measures and Health Equity Lessons Learned

- Black-White control gap of about 3% in KP vs 15% nationally, and control rate in Black patients of 79.4% vs 37.4%
- No difference in clinic visitation, treatment intensification or follow-up after elevated BP
- However, adherence lower in all medication classes – led to focus and training on communication skills for providers

Transitioning From Individualized to Population-Based Treatment for Hypertension

- Use a standardized, simplified approach to hypertension detection and treatment
- Few medication titration steps: linear with no branch points
- Develop a primary care-based approach for the patient “rule” not the “exception”
- HEARTS in the Americas including the HEARTS Technical Package is a comprehensive blueprint across a spectrum of populations: economic, geographic, racial, ethnic, and cultural
- The integration of HEARTS in the US can significantly improve the detection and treatment and importantly the control of hypertension in our state

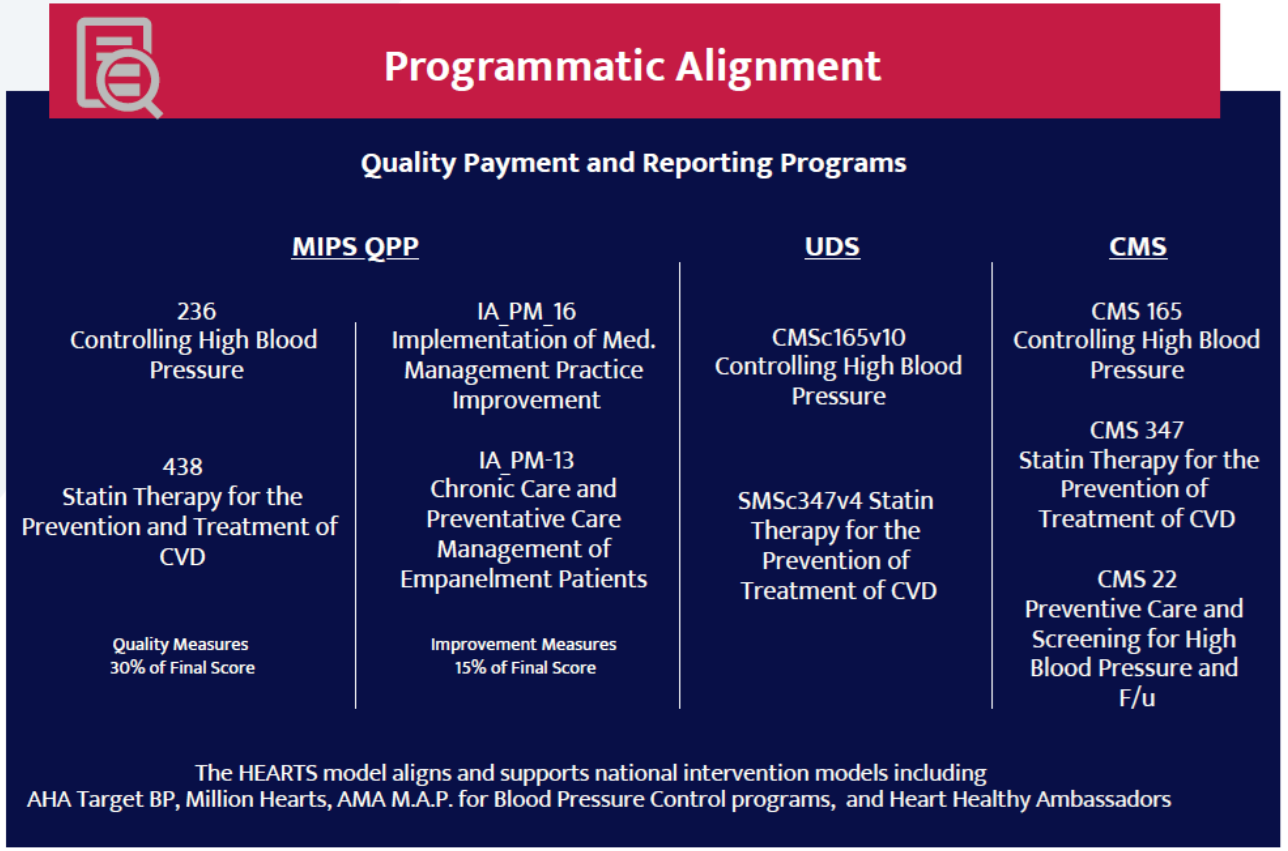
Empowering Primary Care to Implement a Hypertension Strategy

Vicky Kolar, EMT-P, CPHQ
Quality Specialist – CCME, a partner with Health Quality Innovators (HQI)

CMS Quality 2023 Conference
Building Resilient Communities:
Having an Equitable Foundation for Quality Healthcare

HEARTS Initiative Strategy

- Engage providers and organizations using motivational interviewing and assessing readiness for change by:
  - Review current hypertension and disparities rates
  - Introduce the HEARTS Technical Package
  - Discuss alignment with best practices already in place
  - Highlight opportunities for increased reimbursements and improvements to QPP, UDS, and HEDIS measures
  - Offer data analytics and PDSA support
- Promotional newsletters, infographics, and videos
- Lunch and Learn LAN
- Connect interested participants with HEARTS Advisors for peer-to-peer readiness discussions



HEARTS Lunch and Learn LAN
Strategy

PDSA pilot in SC to capture FAQs, lessons, and mitigate barriers before expanding to the HQIN region in August 2022

- Align didactics to QIN 12SOW, Chronic Disease and Disparities measures
- Invite SME faculty from across the world based on expertise and impact
- Partner with Southern Medical Association to develop series and offer continuing education

HEARTS Lunch and Learn LAN

550
HQIN participants attended the LAN Events

22
participants expressed interest in implementing HEARTS

99%
rated the quality of the information as excellent/useful

5
organizations met with HEARTS Advisors to assess readiness

5
practices implemented HEARTS
(expansion planned for Spring 2023)

HEARTS LAN Topics

- Call to Action and the Importance of Hypertension Control in Primary Care
- Standardized, Simple Pharmacologic Treatment Protocols: A Critical Component of Effective Hypertension Control
- CVD Risk Assessment and Monitoring
- Critical Drivers of Hypertension Control
- HEARTS in the Americas Alignment and Cohesion with National Best Practices
- Chronic Care Disparities within Primary Care

HEARTS IN AMERICA

Kansas • Missouri • South Carolina • Virginia

Distinguished SME Faculty

Pedro Ordunez, MD, PhD*
PAHO Regional Lead and HEARTS Technical Advisor, Buenos Aires

Andres Rosende, MD*
PAHO HEARTS Pillar Lead and Advisor, Argentina

Ben Broome, MD
Nephrologist, Ascension Health, Alabama

Jeffrey Brettler. MD*
Hypertension Lead, Kaiser Permanente Southern California

Donald J. DiPette, MD, FACP, FAHA*
Professor USC, School of Medicine

Kenneth Connell, MBBS, DM, PhD, FACP, FRCP, FACC*
Deputy Dean, University of the West Indies (Barbados)

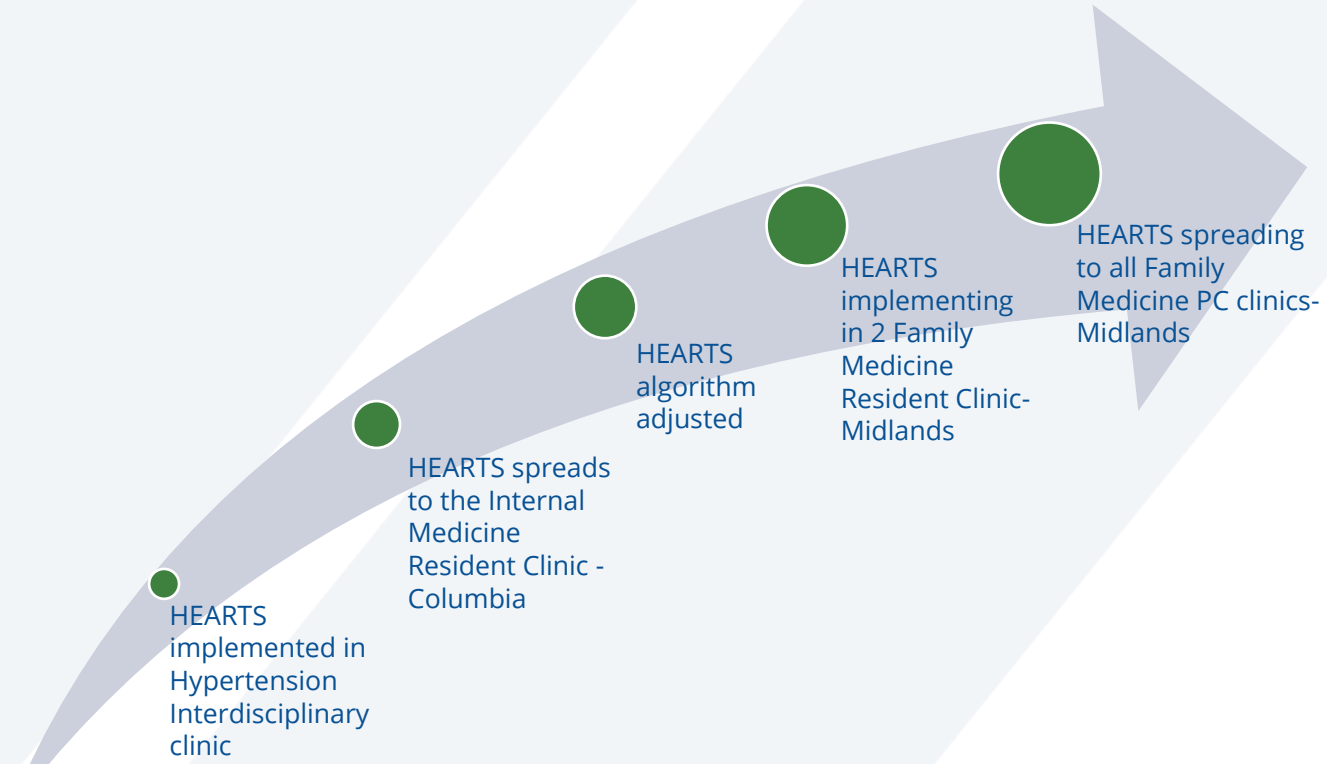
Daniel Lackland, DrPH, FACE, FAHA
Professor of Epidemiology, Medical University of SC

Immediate past-president World Hypertension League

David Flood, MD, MSC*
Professor, Division of Hospital Medicine, University of Michigan

*HEARTS Advisor

PRISMA HEALTH South Carolina-Columbia and Midlands



Internal Medicine Resident Clinic

2,549 attributed patients

Age

- <29y – 7%
- 30-49y – 29%
- 50-69y – 54%
- 70-89y – 9%
- ≥90y – <1%

Gender

- **66% Female**

Race

- **79% Black**
- 16% White
- 3% Hispanic
- 2% Native American, Asian, other

Community Pharmacist Elevates HEARTS with Success

Donna Avant, PharmD

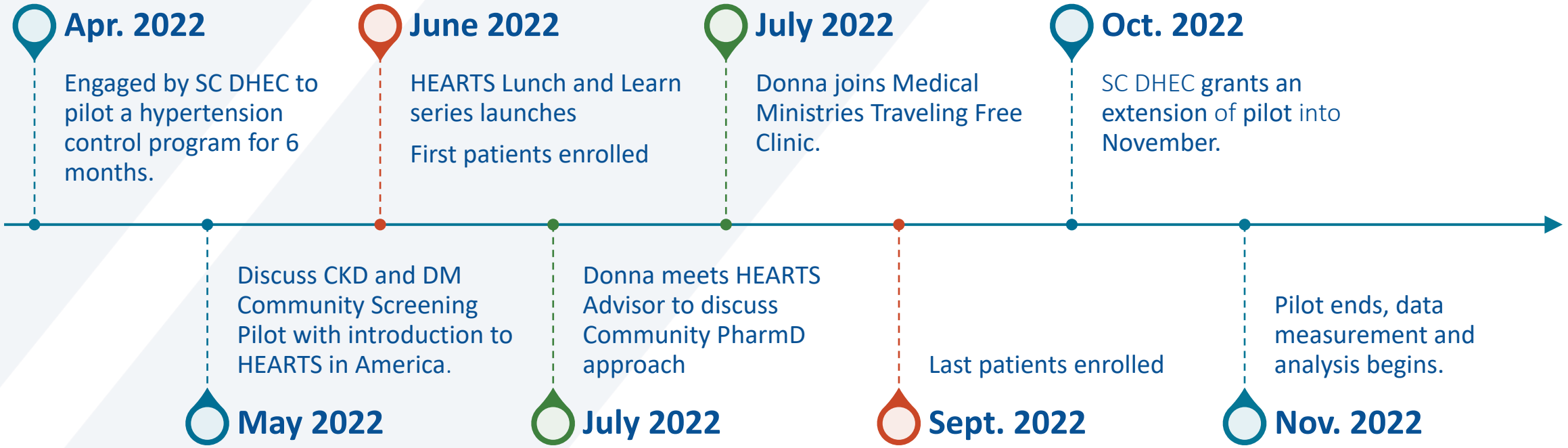
- Ehrhardt Pharmacy owner
- Medical Ministries Inc Volunteer

Sherri Cassidy, FNP

- Medical Ministries Inc.
- Traveling Free Clinic
  - 8 locations in Low Country, SC

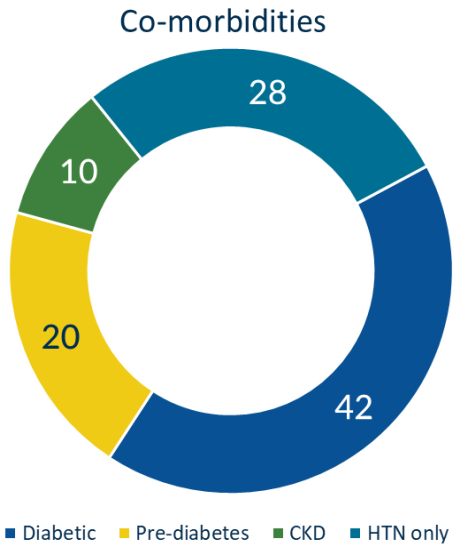
Donna Avant, PharmD

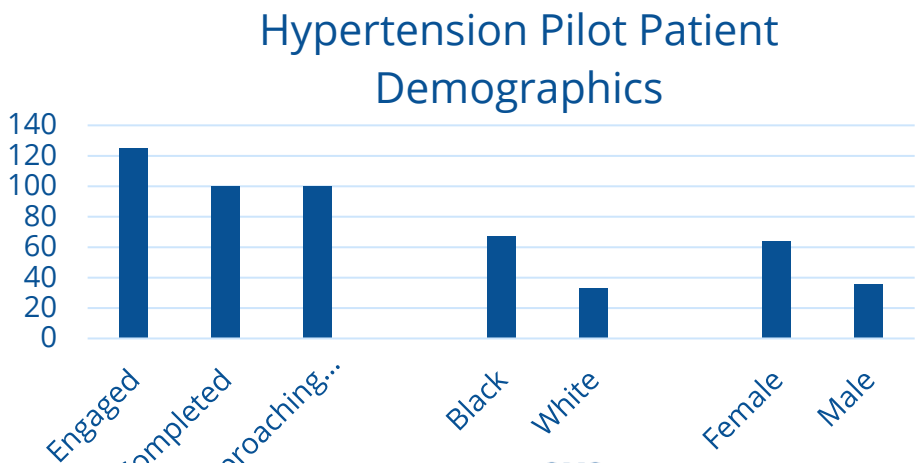
Rural Community Pharmacist Hypertension Pilot Timeline



Hypertension Pilot Project Plan

- HEARTS standardized protocol
- All participants initial engagement visit
- Diabetes education
  - Proper nutrition
  - Physician activity and motivation
  - MTM class
  - Emotional wellbeing
- All must have minimum of two visits or vitals measurement for inclusion





"One Monday at the free clinic, I had 15 patient with BP greater than 150/90" - Donna Avant, PharmD

CMS Quality 2023 Conference
Building Resilient Communities:
Having an Equitable Foundation for Quality Healthcare

Rural Hypertension Pilot Outcomes

- All patients achieved a blood pressure of 140/82 or below by end of pilot
- Diabetic patients averaged a 2% reduction in their A1C
  - Highest A1C 13.2 lowered to 8.5
- Pre-diabetic patients averaged a .3 reduction in A1C

Patient Sampling of Outcomes	Initial Blood Pressure	Pressure After 3 Months on Medication
Patient 1	160/96	117/76
Patient 2	156/106	127/87
Patient 3	200/120	124/72

Next Steps

Participated in PAHO's HEARTS in the Americas Strategic Planning Summit, Dec 2022

Conducting a post LAN survey assessing

- Current states of readiness
- Valued topics to inform next events
- Barriers and gaps

Spring 2023, three Technical Workshops led by HEARTS Advisors

HEARTS IN AMERICA

Kansas • Missouri • South Carolina • Virginia

Contact Information

Donald J. Dipette, MD, FACP, FAHA
Professor of Medicine, University of South Carolina School of Medicine
Donald.dipette@uscmed.sc.edu

Karen Southard, RN, MHA CPHQ
South Carolina QIO Director
ksouthard@thecarolinascenter.org

Vicky Kolar, EMT-P, CPHQ
Quality Improvement Specialist
vkolar@thecarolinascenter.org

HEARTS IN AMERICA
Kansas • Missouri • South Carolina • Virginia

HQIN
Health Quality Innovation Network

CMS Quality 2023 Conference
Building Resilient Communities:
Having an Equitable Foundation for Quality Healthcare

This material was prepared by Health Quality Innovators (HQI), a Quality Innovation Network-Quality Improvement Organization (QIN-QIO) under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Views expressed in this material do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS. 12SOW/HQI/QIN-QIO-0433-02/10/23