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CASE WESTERN RESERVE UNIVERSITY

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MedTAPP

OHIO COLLEGES OF MEDICINE GOVERNMENT RESOURCE CENTER

Ohio Department of Medicaid

Success Stories from the Field: Involving Community Health Workers in Team-based Cardiometabolic Care

June 9, 2021

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Welcome

Michael W. Konstan, MD

PI, Cardi-OH

Shari Bolen, MD, MPH

Co-PI, Cardi-OH

Case Western Reserve University School of Medicine

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About Cardi-OH

Founded in 2017, the mission of Cardi-OH is to improve cardiovascular and diabetes health outcomes and eliminate disparities in Ohio's Medicaid population.

WHO WE ARE: An initiative of health care professionals across Ohio's seven medical schools.

WHAT WE DO: Identify, produce and disseminate evidence-based cardiovascular and diabetes best practices to primary care teams.

HOW WE DO IT: Utilize monthly newsletters and an online repository of resources at Cardi-OH.org, podcasts available on Cardi-OH Radio, and the Project ECHO® virtual training model.

Learn more at cardi-oh.org

Special Thanks

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Ohio
Department of Medicaid

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Zoom Webinar Logistics

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- **If joining as a group, please use the Chat feature to record names and emails of all attendees**

- **Submit Questions for Discussion**
  - Use the Q&A feature to submit questions at any point
  - Questions will be answered during the 'Question and Answer' portion of the program
  - Please specify which speaker should answer

- **Post Webinar Evaluation Survey**
  - The survey link will be shared at the end of today's webinar and also sent by email
  - Please complete by COB Wednesday, June 16

Continuing Medical Education (CME)

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- 1.00 AMA PRA Category 1 Credit is available for this webinar
- You must complete the CME Evaluation and claim credits by Wednesday, June 23
- If you do not receive an email to complete your CME evaluation or need other assistance, contact Cathy Sullivan, csullivan1@metrohealth.org

Disclosure Statement:

- Adam Perzynski, PhD has reported a financial relationship with commercial interests.

The MetroHealth System is accredited by the Ohio State Medical Association to provide continuing medical education for physicians. The MetroHealth System designates this educational activity for a maximum of 1.00 AMA PRA Category 1 Credit(s)™. Physicians should only claim credit commensurate with the extent of their participation in the activity. Other Healthcare Professionals: check with your professional association as these credits might be applicable for licensure renewal.

Agenda

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Topics	Presenter(s)	Timing
Welcome and Overview	Michael Konstan, MD Shari Bolen, MD, MPH	5 mins.
Ohio Department of Medicaid: Introductory Remarks & Health Equity Framing	Donald Wharton, MD Chezré Willoughby	5 mins.
Introduction to Community Health Workers	Elizabeth Beverly, PhD Melissa Thomas, PhD	15 mins.
Clinic Site #1: OhioHealth Physician Group, Athens	Amber Healy, DO Margot Baker, CHW	5 mins.
Clinic Site #2: Heart of Ohio Family Health Centers, Columbus	David Brewer, MBA, MS, RD, LD Arcelia Herrera, CHW	15 mins.
Facilitated Question and Answer	Chris Bernheisel, MD All	13 mins.
Next Steps and Wrap-Up	Shari Bolen, MD, MPH	2 mins.

Speakers

Donald Wharton

Chezré Willoughby

Ohio Department of Medicaid

Elizabeth Beverly

Melissa Thomas

Amber Healy

Margot Baker

Ohio University

David Brewer

Arcelia Herrera

Heart of Ohio Family Health Centers

Chris Bernheisel

University of Cincinnati

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Ohio Department of Medicaid: Introductory Remarks & Health Equity Framing

Donald Wharton, MD

Assistant Medical Director

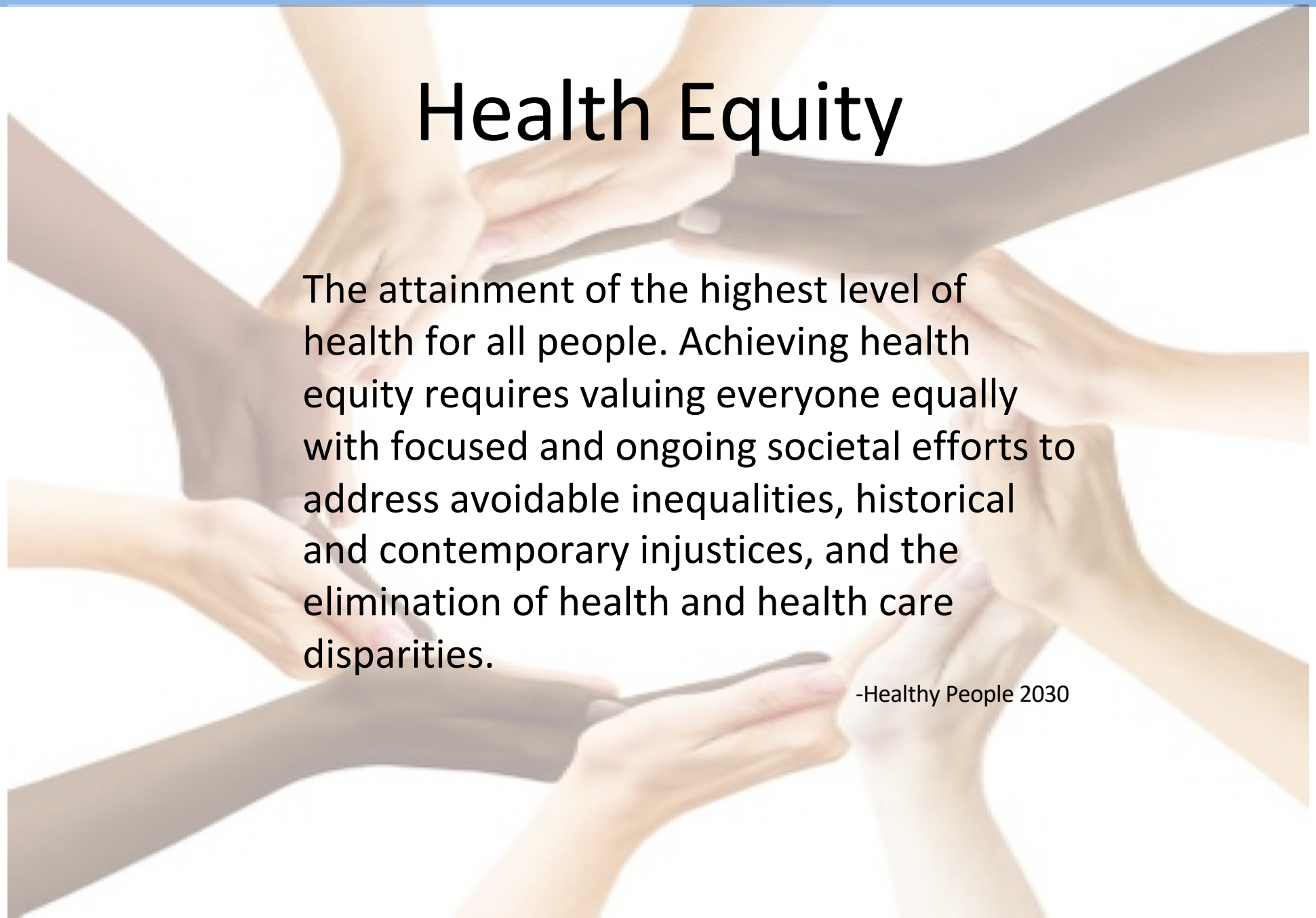
Office of Health Innovation and Quality

Chezré Willoughby

Health Equity Manager

Bureau of Health Research and Quality

Health Equity



The attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health and health care disparities.

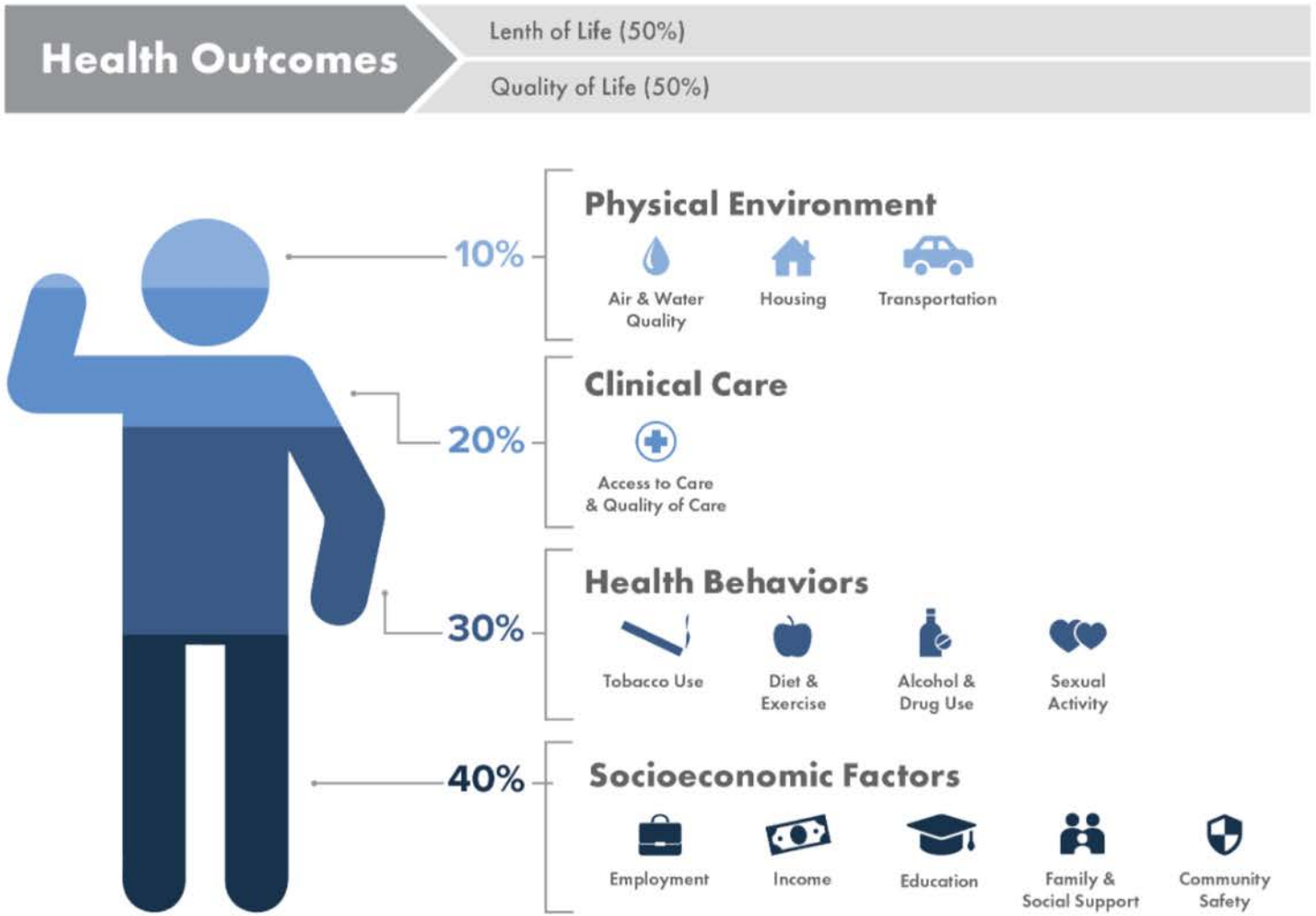
-Healthy People 2030

Equality vs Equity

EQUALITY

EQUITY

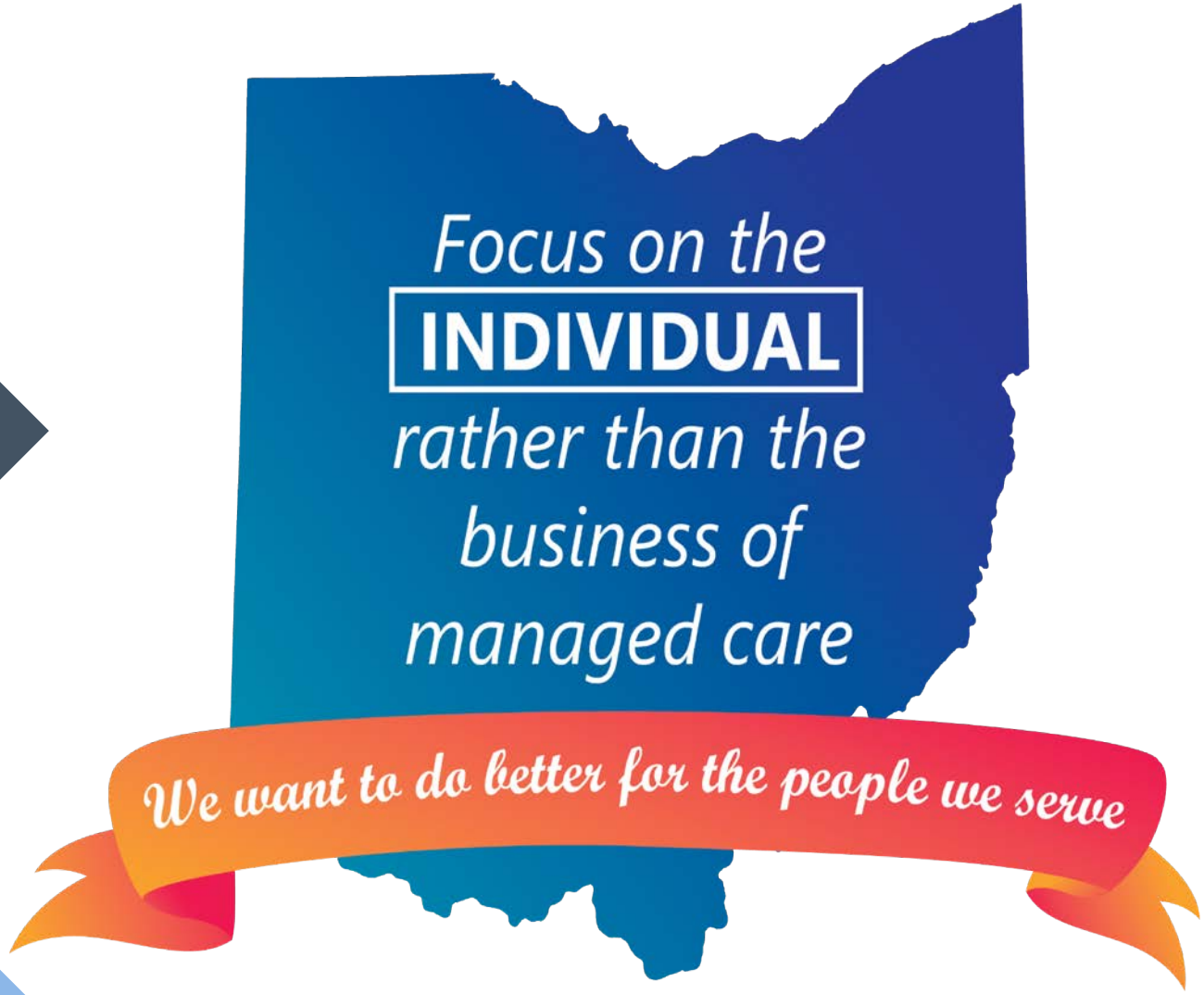
RW
J


Health Outcomes
Lenth of Life (50%)
Quality of Life (50%)
10%
Physical Environment
Air & Water Quality
Housing
Transportation
20%
Clinical Care
Access to Care & Quality of Care
30%
Health Behaviors
Tobacco Use
Diet & Exercise
Alcohol & Drug Use
Sexual Activity
40%
Socioeconomic Factors
Employment
Income
Education
Family & Social Support
Community Safety

Population Health- With an Equity Focus

- Person-focused
- Promotes better patient engagement
  - Patients feel empowered to manage their own health
  - Provide better patient satisfaction while improvement in entire groups as costs go down due to efficiencies
- Uses health data strategically
  - Identify and monitor improvement opportunities
  - Incorporate the member perspective into the design of strategic initiatives to address identified needs
  - Evaluate effectiveness of care to inform continued improvements

- Improve Wellness & Health Outcomes
- Support Providers in Better Patient Care
- Emphasize a Personalized Care Experience
- Improve Care for Children and Adults with Complex Needs
- Increase Program Transparency and Accountability



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Introduction to Community Health Workers

Elizabeth Beverly, PhD
Site PI, Cardi-OH

Melissa K. Thomas, PhD, MSPH, MSA, MCHES®, C-CHW

Ohio University Heritage College of Osteopathic Medicine

Objectives

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1. Define the role of community health workers (CHWs).
2. Describe effective CHW strategies to improve cardiometabolic care and outcomes and reduce disparities.
3. List real world approaches to integrating or linking CHWs into team-based primary care.

US Bureau of Labor Statistics

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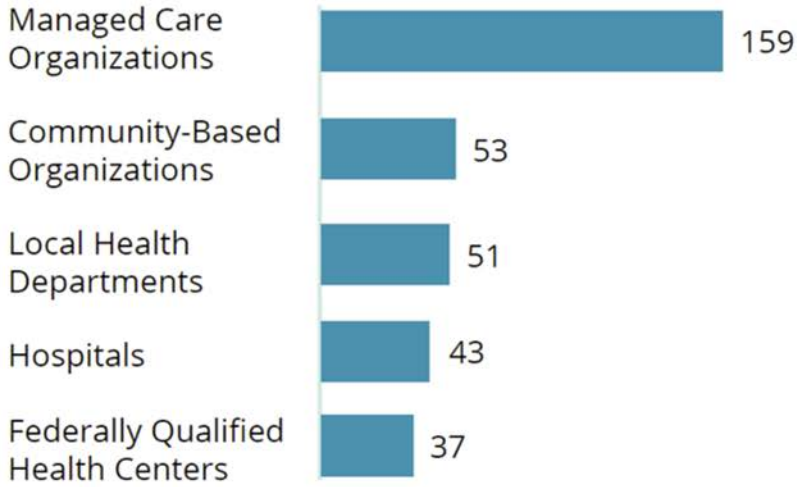
- **21-1094 Community Health Workers**

“Promote health within a community by assisting individuals to adopt healthy behaviors. Serve as an advocate for the health needs of individuals by assisting community residents in effectively communicating with healthcare providers or social service agencies. Act as liaison or advocate and implement programs that promote, maintain, and improve individual and overall community health. May deliver health-related preventive services such as blood pressure, glaucoma, and hearing screenings. May collect data to help identify community health needs. Excludes "Health Education Specialists" (21-1091)”

https://www.bls.gov/oes/current/oes211094.htm

WHERE DO MOST CHWs IN OHIO WORK?



WHO DO CHWs IN OHIO SERVE?

- Adult Males
- Pregnant Women
- Adult Females
- Infants and Children

OHIO CHWs BY THE NUMBERS

850*
Certified and non-certified

94%
Female

46%
African American

44%
Caucasian

100%
All Ohio Counties served

**The total number of CHWs reported is likely underestimated*

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Ohio Department of Health

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Find more information on the 2018 Community Health Worker Statewide Assessment at http://grc.osu.edu/OhioCHWs

The Ohio Department of Health (ODH) sponsored this assessment and contracted with the Ohio Colleges of Medicine Government Resource Center (GRC) to complete the assessment. This publication was made possible by grant number 5 NU58DP004826-05-00 from the Centers for Disease Control and Prevention (CDC). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the CDC.

Diabetes Statistics in Ohio

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- 13.5% of adults have diabetes (1.3 million)
- ~70,000 people are diagnosed with diabetes every year
- Medical expenses are 2.3 times higher for people with diabetes
  - $9.1 billion direct medical expenses
  - $2.9 billion indirect costs

American Diabetes Association.
Connected for Life

Social Determinants of Health in Ohio

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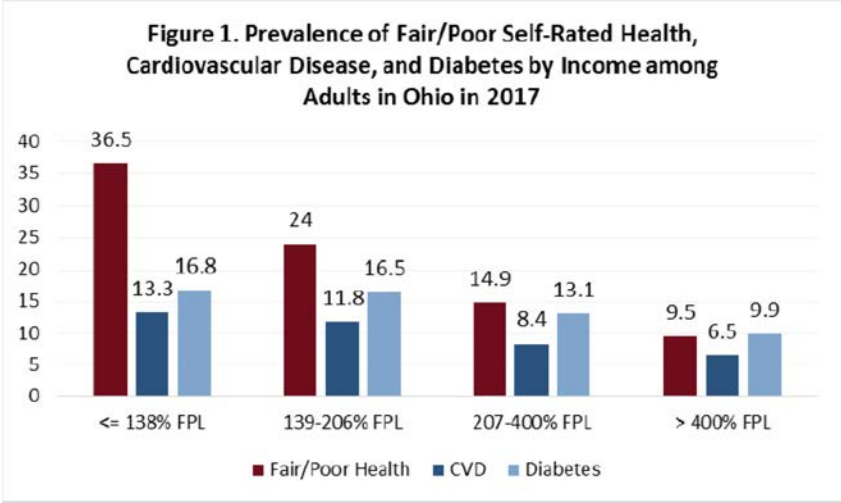
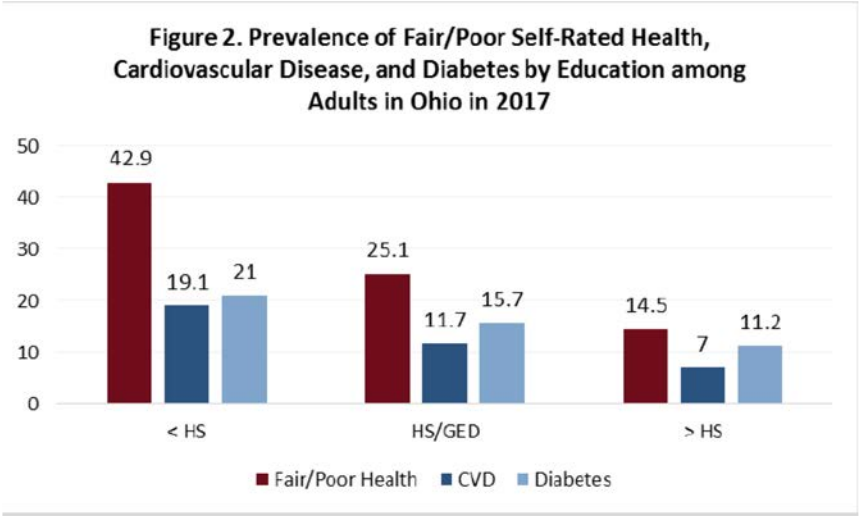
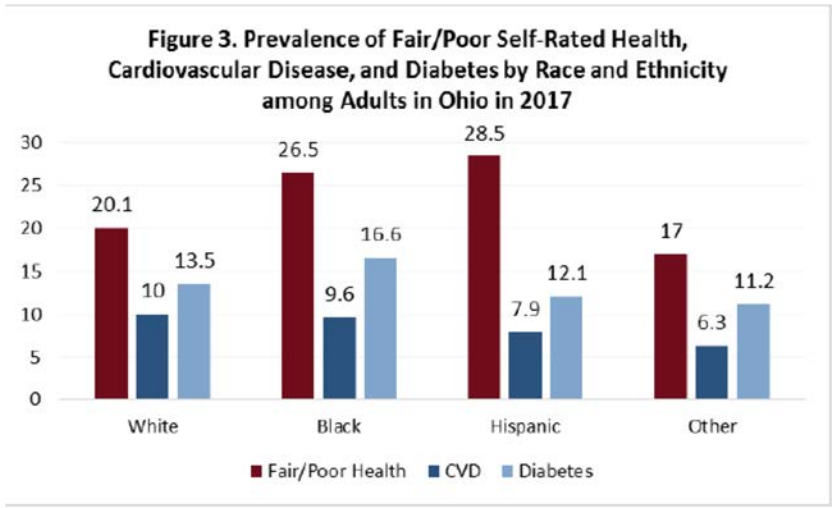
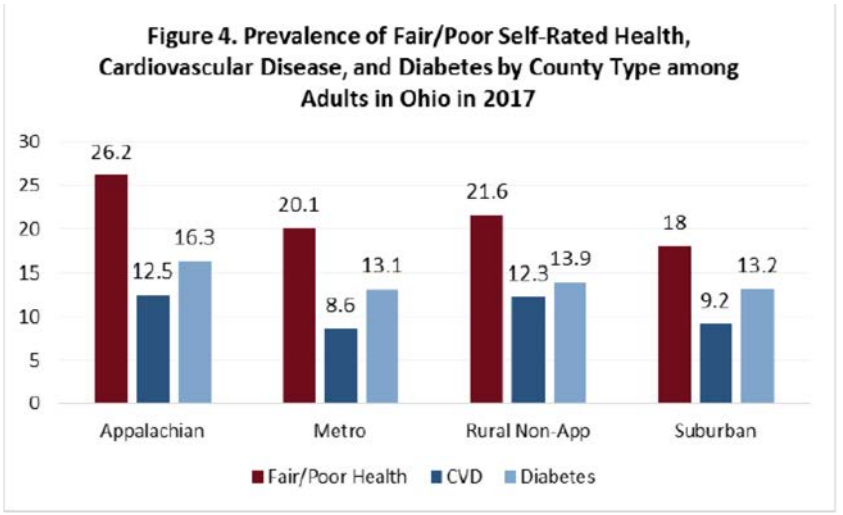
Figure 1. Income
Figure 2. Education
Figure 3. Race
Figure 4. County









Ferketich A, Balistreri K, Conrey E, Elbaor A, Sahr T, Stearmer M. 2019. Ohio Medicaid Assessment Survey.

CHWs and Health Disparities

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- CHW Model is designed to address health disparities and improve outcomes by:
  - Connecting patients to and navigating them through the healthcare system,
  - Supporting adherence to screening and diagnostic services,
  - Providing emotional support and building trust, and
  - Providing financial and community resources.

https://www.cdc.gov/dhdsp/pubs/toolkits/chw-toolkit.htm; Roland KB, Milliken EL, Rohan EA, et al. 2017, Health Equity.

Role(s) of CHWs and Type 2 Diabetes

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- Education: lay diabetes educators for Type 2 Diabetes (n=44)
- Support: provide emotional, appraisal, informational, and instrumental/tangible support (n=42)
- Advocacy: help participants communicate with providers and health care system(n=10)
- Coordination: (n=44)
  1. CHWs are coordinated by interventionists or researchers
  2. CHWs are coordinated by providers at healthcare practice
  3. Experienced CHW coordinates CHWs and communicates with practices

Egbuijie BA, Delobelle PA, Levitt N et al., 2018, PloS ONE..

CHWs and A1C Reductions

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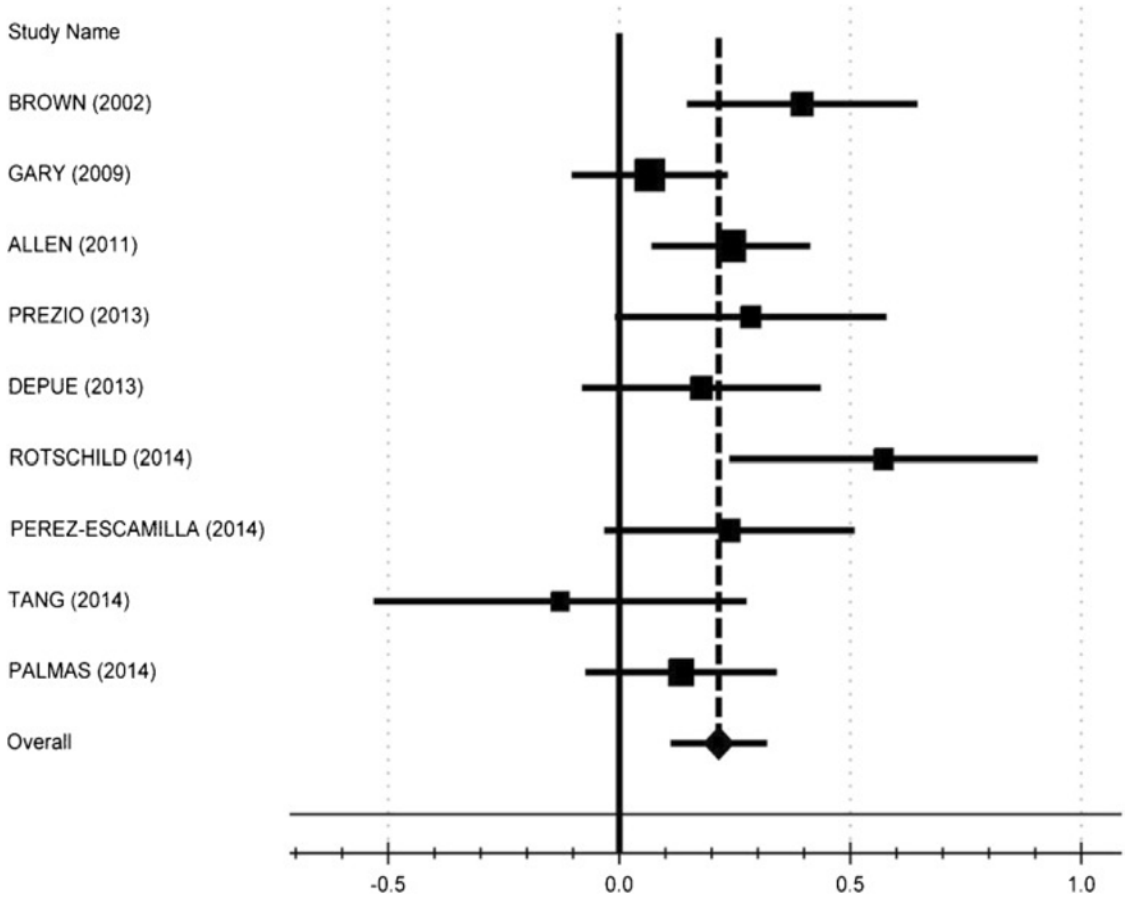
- Meta-analysis of 9 randomized controlled trials showed a modest reduction in A1C=0.21% (0.11, 0.32%) lasting 12 months.
- Greater reduction in A1C achieved in populations with higher A1C at baseline.
- More visit-intensive CHW protocols may lead to great A1C improvements



Palmas W, March D, Darakjy S et al., 2015, JGIM

CHWs and Self-Care Behaviors

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- CHW interventions improved diabetes knowledge (Babamoto et al., 2009; Wagner et al., 2015).
- CHW interventions improved self-care:
  - Medication-taking (Babamoto et al., 2009; Batts et al., 2001; Heisler et al., 2014)
  - Diet (Babamoto et al., 2009; Batts et al., 2001; Kollannoor-Samuel et al., 2016; Rothschild et al., 2014)
  - Physical activity (Batts et al., 2001; Gary et al., 2003; Rothschild et al., 2014; Spencer et al., 2011).

CHWs and Mental Health

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- CHW interventions demonstrated improvements in:
  - ↑ Self-efficacy (Heisler et al., 2014; Rothschild et al., 2014).
  - ↓ Diabetes distress (Heisler et al., 2014; Spencer et al., 2013; Tang et al. 2014).
  - ↓ Depressive symptoms (Wagner et al., 2016).
  - ↓ Anxiety symptoms (Wagner et al., 2016).

CHWs and Economic Benefits

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- To manage Type 2 Diabetes, the median change in healthcare cost was a reduction of $72 per patient per year.
- The median cost per quality-adjusted life year (QALY) gained for CHW interventions to manage Type 2 Diabetes was $35,837.
  - The U.S. values one QALY at $50,000 - $150,000

Jacob V, Chattopadhyay SK, Hopkins, DP et al., 2019, Am J Prev Med.

Southeast Ohio CHW Program

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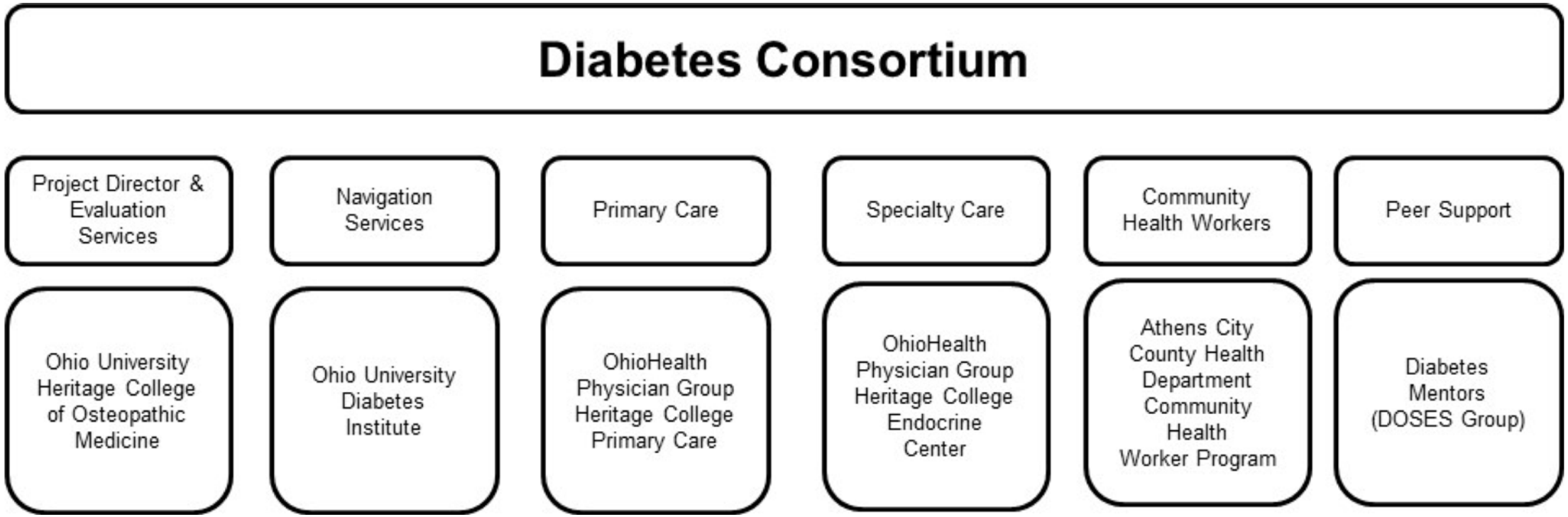

Funding by the Health Resources and Services Administration Grant No. D04RH31792

Southeast Ohio Navigation Program

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- Patient Navigators and CHWs provide lay education, support, and advocacy for Type 2 Diabetes management.
- Patient Navigator coordinates with researcher.
- Experienced CHW coordinates CHWs and communicates with practices.
- The mean A1C of participants before receiving CHW services was 10.1%, and the mean after working with the CHW was 8.2% (mean improvement=1.9%, t-value=4.590, p=.004).

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Southeast Ohio Provider and CHW Experiences

Amber Healy, DO

Clinical Assistant Professor

Director, Diabetes Fellowship

Ohio University Heritage College of Osteopathic Medicine

Margot Baker, CHW

OhioHealth Physician Group, Athens

Provider Experiences

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Real World Considerations

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- Patient buy-in
  - Convincing the patient of the benefits
- Integrating CHWs as a part of a healthcare team
  - Health system buy-in
  - HIPAA
  - Establishing communication process
- Outcomes
  - Mostly positive
  - Occasional unreachable patient

Integrating CHWs as Part of a Team

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- Cannot get direct access to the EMR due to HIPAA
  - Referral to Athens County Health Department for CHW
  - CHW faxes back intake notes and updates after meetings with patient
  - Calls with more emergent needs as needed

- Ask at appointments about support from CHW
  - If perceived as beneficial, then encourage continued utilization of support

CHW Experiences: Discussion

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- What is the referral process?
- What has worked well?
- What would you change?

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Utilizing Community Health Workers to Improve Diabetes and Hypertension in a Federally Qualified Health Center

David Brewer, MBA, MS, RD, LD, CPHQ

Arcelia Herrera, CHW

Heart of Ohio Family Health Centers, Columbus

HEART OF OHIO FAMILY HEALTH

About HOFH - Our Mission

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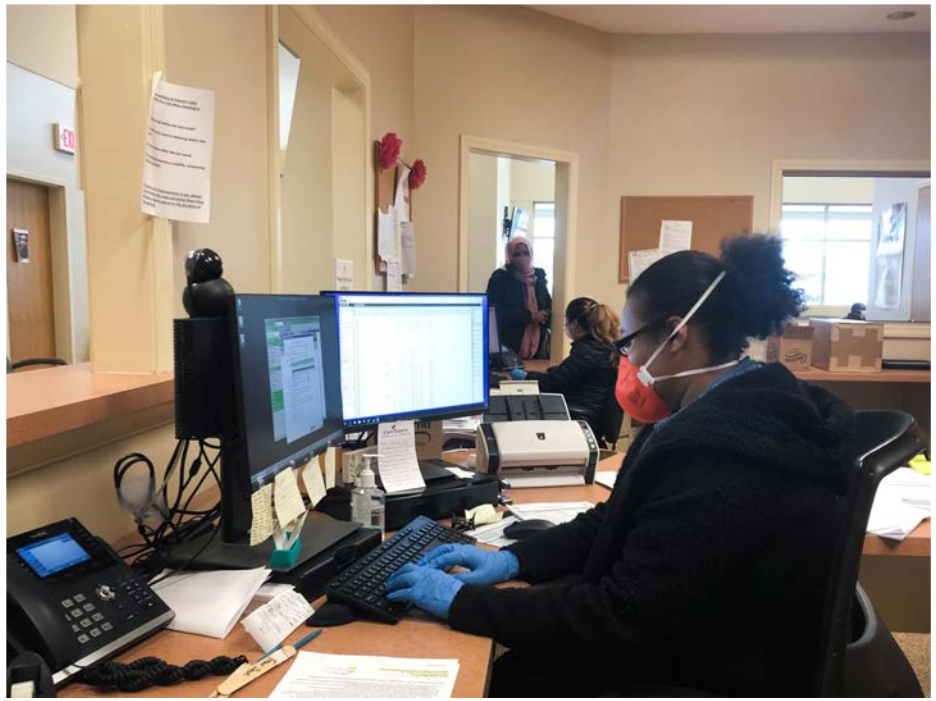

Our mission is to provide high-quality, holistic, and compassionate care to meet the healthcare needs of everyone in our diverse community, one heart at a time.

About HOFH - Our Clinics

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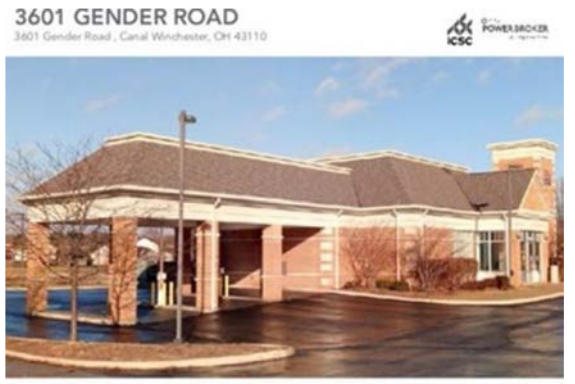
5969 E. Broad Street Suite 300, Columbus, Ohio 43213

675 S Yearling Rd, Whitehall, OH 43213



3601 Gender Road, Columbus, OH 43110 - Coming 2021

882 S. Hamilton Road, Columbus, OH 43213

2365 Innis Rd, Columbus, OH 43224

James B. Feibel Health Center - Coming 2021

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FAMILY HEALTH

Hypertension and Diabetes Care Team

- Physicians and CNPs
- Dietitians
- Clinical Pharmacists
- RN Care Coordinators
- Counselors
- Psychiatric CNPs
- Community Health Workers

CHWs at Heart of Ohio Family Health Centers

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Hire CHWs and begin to develop a CHW visit

2018-2019

Develop screening and referral process to identify patients in need of CHW. Enrolled in Pathways HUB.

Fall 2019

Partner with Mid-Ohio Foodbank as a part of the Mid-Ohio Farmacy produce prescription program

March 2020

Experiment with CHW dedicating 10-20% time to uncontrolled DM and HTN Outreach

Oct 2020 to March 2021

Hire CHW dedicated fully to uncontrolled DM and HTN Outreach

April 2021

Blood Pressure Monitor & Remote Patient Monitoring outreach and enrollment

April/May 2021

CHW Screening and Referral Process

- Medical Assistants screen ALL patients for SDOH every 3 month
  - Housing, transportation, employment, education, health insurance, clothing, legal help, bills, baby items, food, and social circle
- Medical Assistants are empowered to schedule the patient with the CHW after needs are identified.
- Medical Assistants can connect patients with the Mid-Ohio Farmacy produce prescription program (>1,500 enrollees)
- 78% of patients in 2020 received at least one screening

CHW Visit Process

- CHW reviews SDOH screening and special notes in the referral.
- CHW assesses complexity of patient needs over the phone.
  - Complex patients: Enroll in Pathways HUB model for intensive case management
  - Patients with limited need: Connect patient to resources
- Always schedule a follow up before the end of the visit for home visit, clinic visit, or phone visit.

CHW Outreach to Uncontrolled DM and HTN

- Monthly spreadsheet generated from UnityPHM which includes:
  - Historical BP and A1c readings
  - Care team members who have seen the patient in the past 6 months
  - Upcoming appointments for PCP, dietitian, pharmacist, etc.
  - Recent missed appointments

- CHW would review the chart and call the patient to get them back in to services that they need and provide education

Results:
CHW Outreach to Uncontrolled DM and HTN

- 256 patients with HgbA1C>8% called
  - 50 patients rescheduled
  - 127 voicemails left, texts sent, or patient will call back
- 140 patients with BP >140/90
  - 23 patients rescheduled
  - 50 voicemails left, text sent, or “patient will call back”
- Various other outcomes
  - Patient connected to application specialist to apply for insurance
  - Patients no longer getting care at HOFHC
  - Concerns about high readings at home triaged with a nurse

Results:
CHW Outreach to Uncontrolled DM and HTN

- Learning experiences
  - Identification of providers not following more frequent follow up guidelines for uncontrolled DM and HTN and education of providers.
  - Identification of process problems leading patients lost to care (patient not being scheduled for follow up before leaving the office or before ending telehealth visit)
  - Identification of providers not referring patients to beneficial ancillary services during telehealth visits.
  - Automated text messages to patients who no-show.
  - Why wait until monthly report to call patients when we could call the patient 1-2 days after no-show?
  - Patients are generally thankful for this outreach

Next Steps:
CHW Outreach to Uncontrolled DM and HTN

- List of patients with DM/HTN who miss visits automatically emailed to our CHW the day after the missed visit to call to reschedule.
- Can we get more done in that phone call like connect patients to other needed services?

Results:
Connecting Patients with Home BP Monitors

- 700 patients sent a text message asking if they wanted a home BP monitor
  - Did not include patient name, identifying info or infer high blood pressure status
- 101 responded YES and were contacted by CHW
  - 26 scheduled for remote patient monitoring visit with dietitian or pharmacist
  - 7 scheduled with application specialist to get insurance
  - Others are pending information about insurance coverage, scheduled with Charitable Pharmacy to get BP cuff, or choosing to buy a BP cuff on their own (some seeing our pharmacist to learn how to use it)

Results:
Connecting Patients with Home BP Monitors

- Learning experiences
  - Unanticipated situations to account for in the future:
    - Patients who were only seeing GYN providers at our practice
    - Patients who were managed by cardiology who wanted RPM
    - Patients who had arm circumference too large for our RPM devices
  - Private insurance rarely covers home BP monitors
  - Lack of consistency in how insurance handles home BP monitors (pharmacy, DME supplier, Prior Auth, etc.)
  - There are sources of BP cuffs for low income patients (Charitable Pharmacy and maybe 340B)

Results:
Connecting Patients with Home BP Monitors

- Major Takeaway
  - Connecting patients with Home BP monitors can be complicated, especially for the disadvantaged patients served at an FQHC
  - Having a local expert to help providers and patients navigate the process

Next Steps:
Connecting Patients with Home BP Monitors

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- Referral process for home blood pressure monitors tha involves CHW

From the CHW Perspective

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Question and Answer

Chris Bernheisel, MD

University of Cincinnati College of Medicine

Speakers

REMINDER: Submit questions using the 'Q&A' feature and specify which speaker should answer

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Donald Wharton

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Chris Bernheisel

University of Cincinnati

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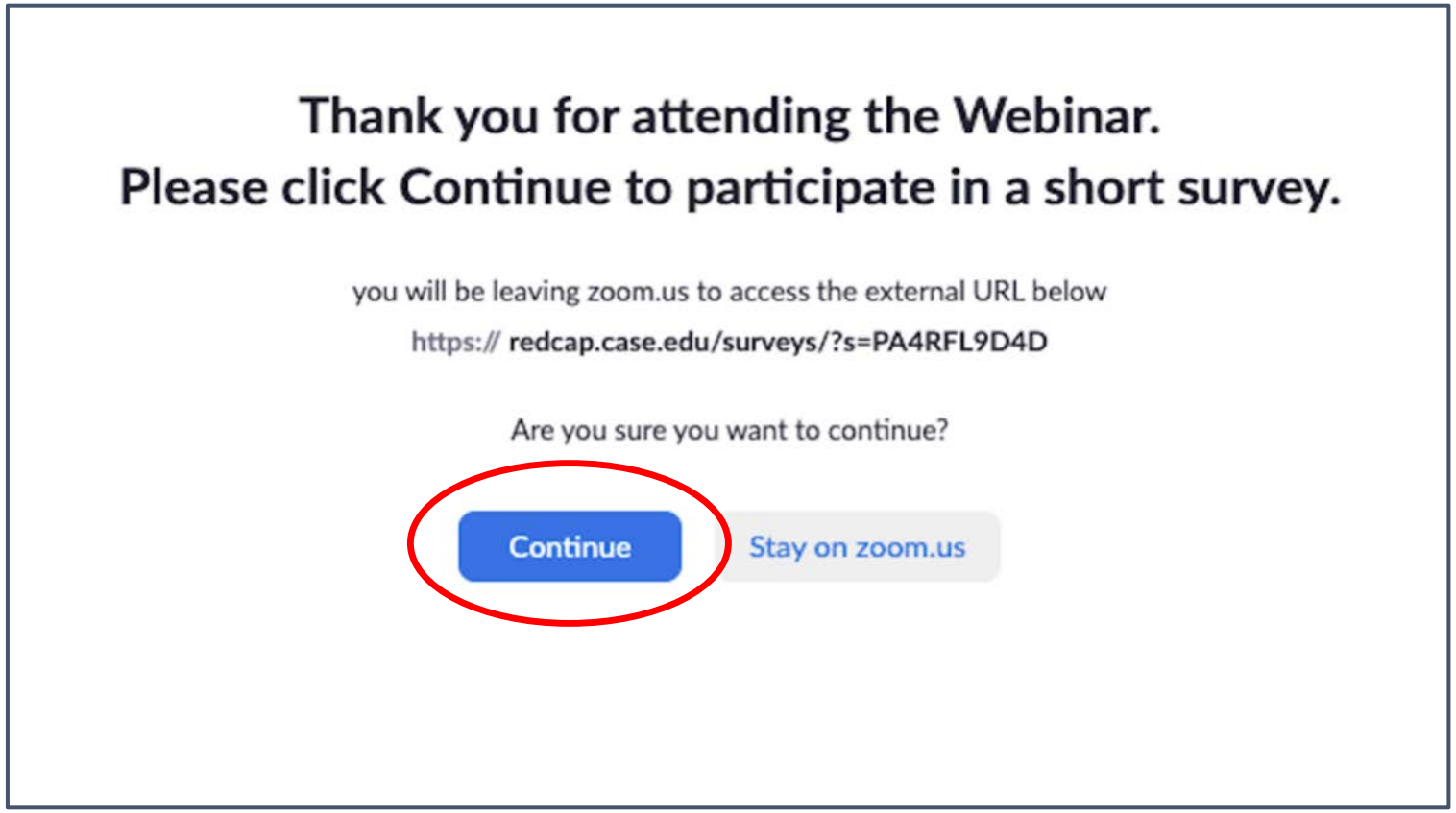
Next Steps and Wrap Up

Shari Bolen, MD, MPH

Case Western Reserve University School of Medicine

We Want to Hear from You!

Please complete a brief evaluation of the webinar.



Hit the **Continue** button in your new browser tab to access the evaluation survey.
The survey link will also be emailed to you.

Fall 2021 TeleECHO Clinic
September 16 to December 9, 2021
Thursdays, 8 - 9 a.m.

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Project ECHO®
CARDI-OH
Ohio Cardiovascular & Diabetes Health Collaborative

Your Patient with Diabetes at Risk for Heart Disease:
A Series of Case Discussions

How Does it Work?

- Utilizes simple videoconferencing technology to conduct virtual clinics with community health care providers in Ohio
- Includes a brief didactic session followed by an interactive discussion of de-identified case studies
- Offers a whole-person approach to diabetes and cardiovascular risk management

Why Join?

- Improves cardiovascular and diabetes health outcomes
- Enhances professional development and retention
- Provides continued learning through the sharing of best practices
- Increases efficiency and joy of practice

Register now — Cardi-OH.org
CME credit provided at no cost.

Ohio Cardiovascular & Diabetes Health Collaborative

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Learn More!

To learn more about the collaborative and read up on the latest best practices, visit cardi-oh.org and follow us on Twitter @cardi_OH and Facebook @cardiohio.

The Ohio Cardiovascular and Diabetes Health Collaborative is funded by the Ohio Department of Medicaid and administered by the Ohio Colleges of Medicine Government Resource Center. The views expressed in this presentation are solely those of the authors and do not represent the views of the state of Ohio or federal Medicaid programs.