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In partnership with:

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Navigating Toward Health: Innovative Care Models in Clinics and Communities

Stacey Gardner-Buckshaw, PhD, MPA

Elizabeth Beverly, PhD

Rochelle Rennie, DO

Jennifer L. Rodis, PharmD, BCPS, FAPhA

Alexa Sevin Valentino, PharmD, BCACP

Disclosures

The following planners, speakers, moderators, and/or panelists of the CME activity have financial relationships with commercial interests to disclose:

Alexa Sevin Valentino, PharmD, BCACP
Theravance/Prime Meridian Consulting (honorarium)

The Ohio Cardiovascular 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.

Learning Objectives

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1. Understand how clinical providers engage with community-based cardiovascular health resources

2. Study examples of successful cardiovascular health programs, and determine which elements could be incorporated at participants' work sites

3. Understand how to use available tools to access community-based health services

Social Determinants of Health

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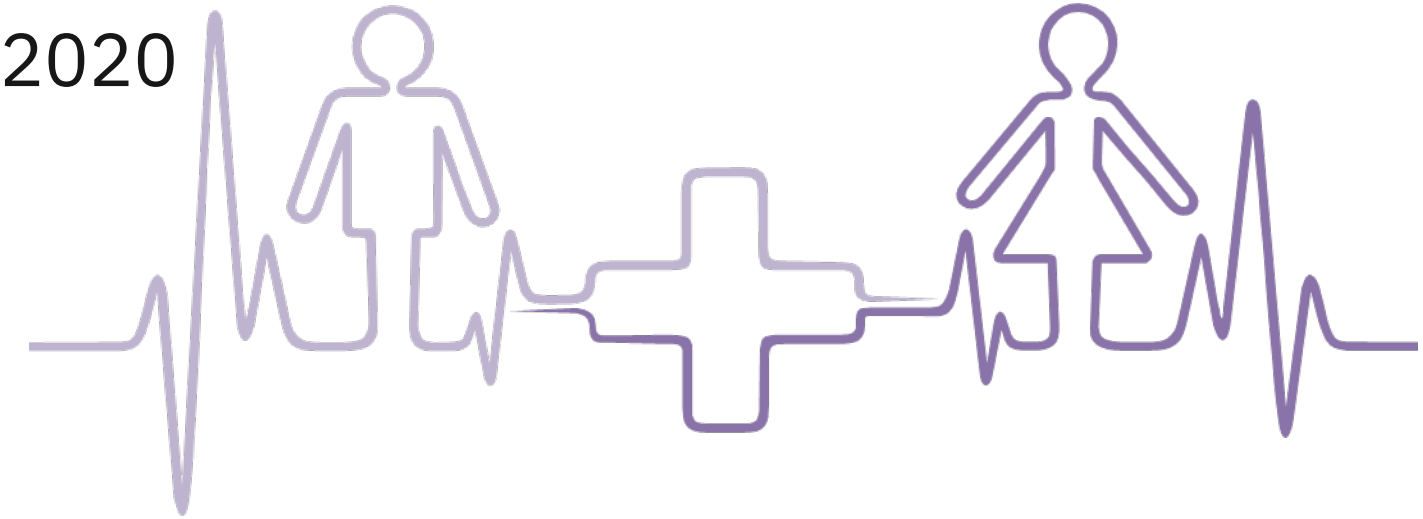
- "...defined as conditions in the social, physical, and economic environment in which people are born, live, work, and age. They consist of policies, programs, and institutions and other aspects of the social structure, including the government and private sectors, as well as community factors."

  - Healthy People 2020



Center for Disease Control's strategies to address chronic health challenges

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1. Epidemiology and surveillance to monitor trends and inform programs
2. Environmental approaches that promote health and support healthy behaviors
3. Health system interventions to improve the effective use of clinical and other preventive services
4. Community resources linked to clinical services that sustain improved management of chronic conditions

Summary Handout: https://stacks.cdc.gov/view/cdc/27508/cdc_27508_DS1.pdf

Multiple Methods to Achieve Heart Health

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1. OSU – Pharmacists engaged in medication therapy management at Community Health Centers

2. OU – Patient Navigators work in rural areas to help patients manage diabetes

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EXPANDING MEDICATION THERAPY MANAGEMENT IN COMMUNITY HEALTH CENTERS

Jennifer L. Rodis, PharmD, BCPS, FAPhA
Alexa Sevin Valentino, PharmD, BCACP

This session was supported by the Cooperative Agreement number, NU58DP004820, funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services.

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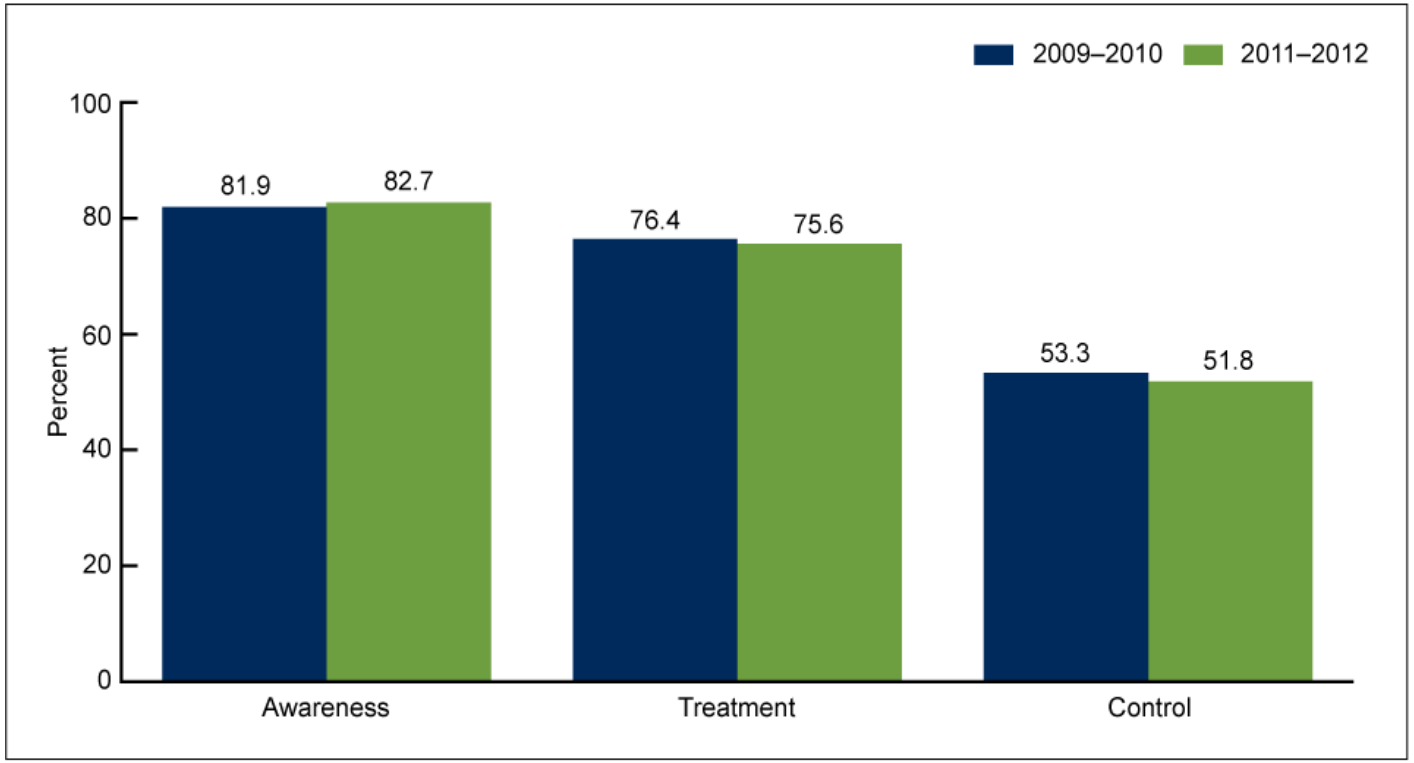
National statistics

- 29.1 million people or 9.3% of the U.S. population have diabetes[1]
- 30% US population diagnosed with HTN

Figure 2. Age-adjusted awareness, treatment, and control of hypertension among adults with hypertension: United States, 2009–2012



NOTE: Age-adjusted prevalence of awareness, treatment, and control of hypertension were calculated using the subpopulation of persons with hypertension in 2011–2012.
SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey, 2011–2012.

[1] CDC National Diabetes Statistics Report, 2014

State statistics

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34% of Ohioans have **hypertension**.

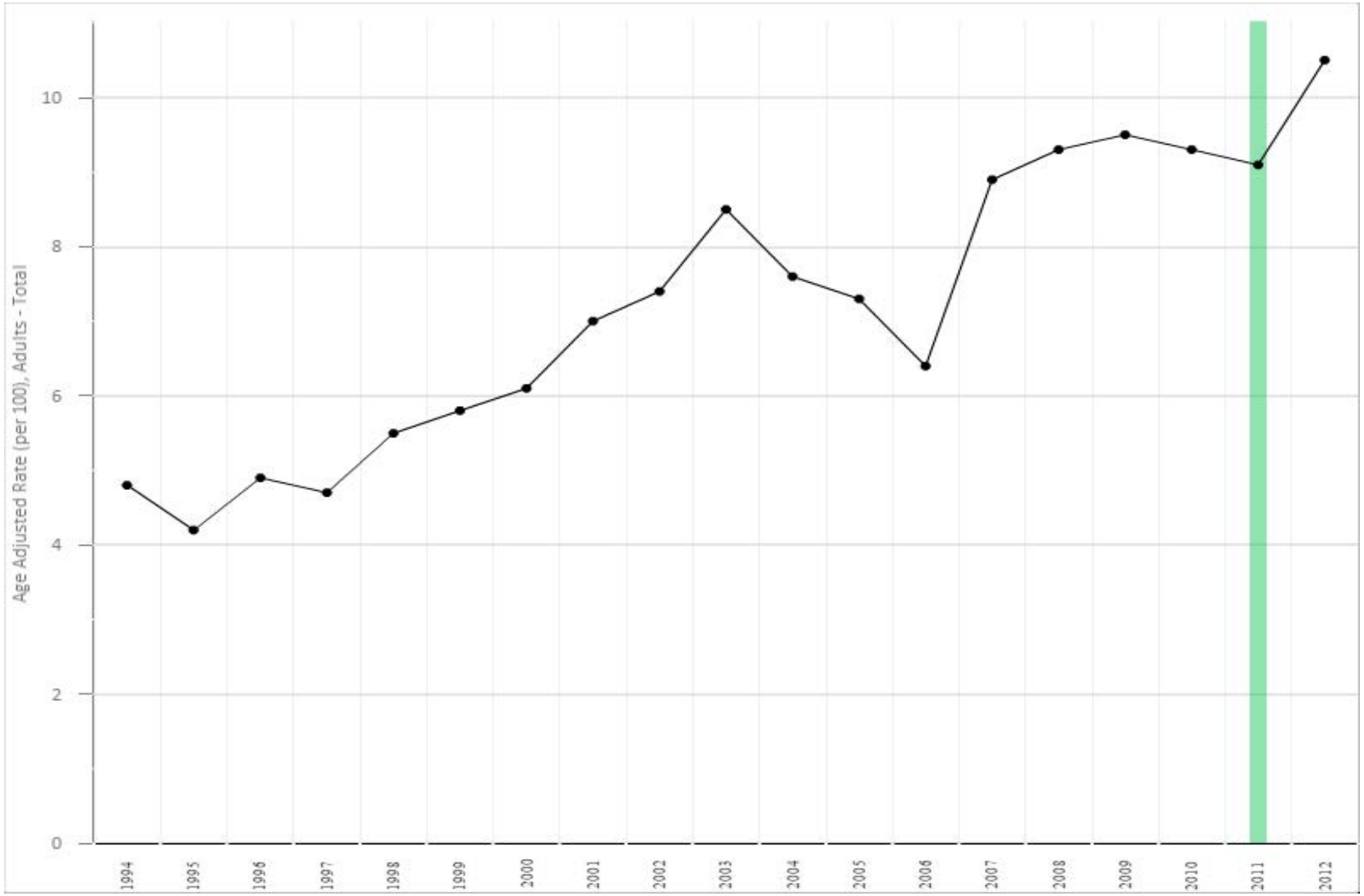
Only 50% *of diagnosed patients are* ***<140/90.***

10% of Ohioans have **diabetes**

14% of this population are African-Americans

Behavioral Risk Surveillance System, Ohio Department of Health; 2011-2013.

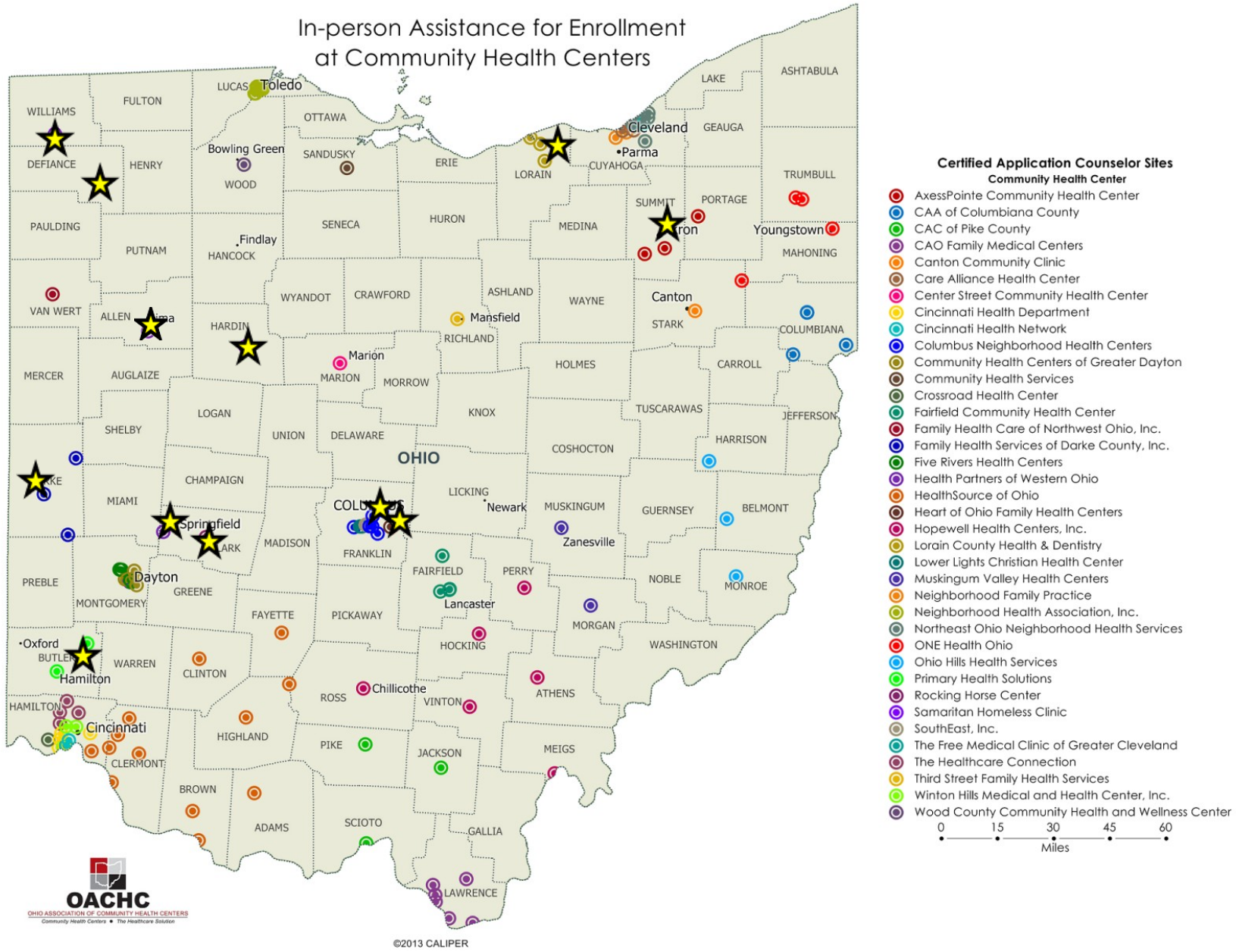
Ohio - Diagnosed Diabetes, Age Adjusted Rate (per 100), Adults - Total



Green vertical bar indicates major changes to the survey methods. http://www.cdc.gov/surveillancepractice/reports/brfss/brfss.html

Disclaimer: This is a user-generated report. The findings and conclusions are those of the user and do not necessarily represent the views of the CDC.

MTM in Ohio FQHCs



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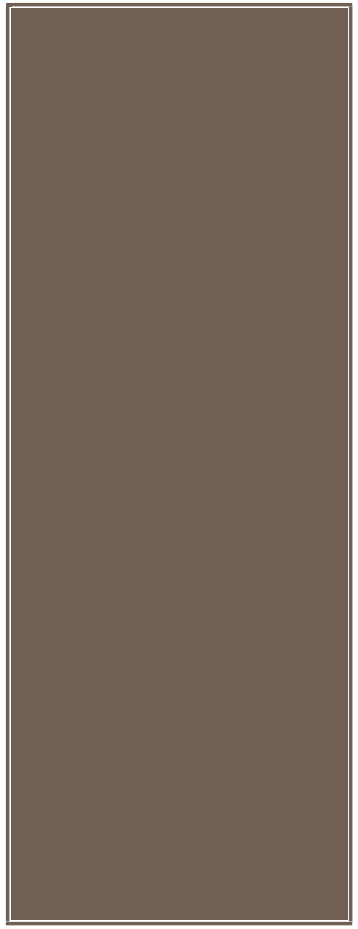
4. Community resources linked to clinical services that sustain improved management of chronic conditions

Project goal



- To expand medication therapy management (MTM) provided by pharmacists to patients cared for in Community Health Centers (CHCs) in Ohio to reduce the burden of chronic disease.

Medication Therapy Management

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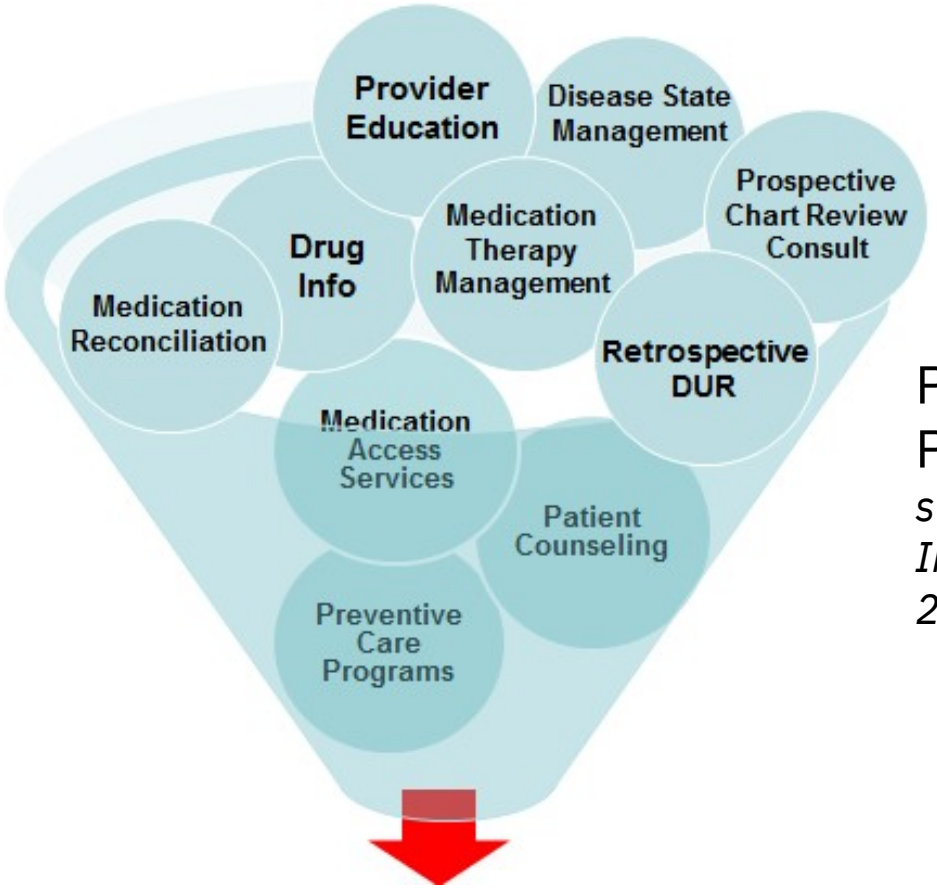
- A service or group of services that optimizes therapeutic outcomes for individual patients. The service is provided by pharmacists, the medication experts on the health care team.

A PROGRAM GUIDE FOR PUBLIC HEALTH Partnering with Pharmacists in the Prevention and Control of Chronic Diseases. Centers for Disease Control and Prevention, July 2012.

Integrated Medication Management



Patient Safety and Clinical Pharmacy Services Collaborative

supported by HRSA and The Alliance for Integrated Medication Management 2009-2014

10 Elements for Integrated Medication Management

Models for Pharmacist Integration

Shared Faculty

Contracted Consultant

Contracted 340B Pharmacy

Health Center Owned Pharmacy

Staff Clinical Pharmacists

Project Sites

Name of site	Address/location	Contact
AxessPointe	Akron	Magdi Awad mawad@neomed.edu
PrimaryOne Health (Columbus Neighborhood Health Center)	Columbus	Alexa Valentino Valentino.49@osu.edu
Health Partners of Western Ohio	Lima	Lindsey Rutter lruttter@hpwohio.org
Muskingum Valley Health Centers / Northside Pharmacy	Zanesville	Amanda Wheeler awheeler@genesishcs.org
Family Health Services , Inc. / Family Health Pharmacy	Greenville	Rachel Barhorst rbarhorst@familyhealthservices.org
Community Health & Wellness Partners of Logan County	West Liberty	Jason Martinez martinez.554@osu.edu
Five Rivers Health Centers	Dayton	Anne Metzger metzgean@ucmail.uc.edu
Crossroads OTR	Cincinnati	Sue Paul suepaulrph@cinci.rr.com
NE Ohio Neighborhood Health Centers (NEON)	Cleveland	Michael Sreshta sreshtam@neonhealth.org
Rocking Horse Community Health Center	Springfield	Andrew Straw astraw@cedarville.edu

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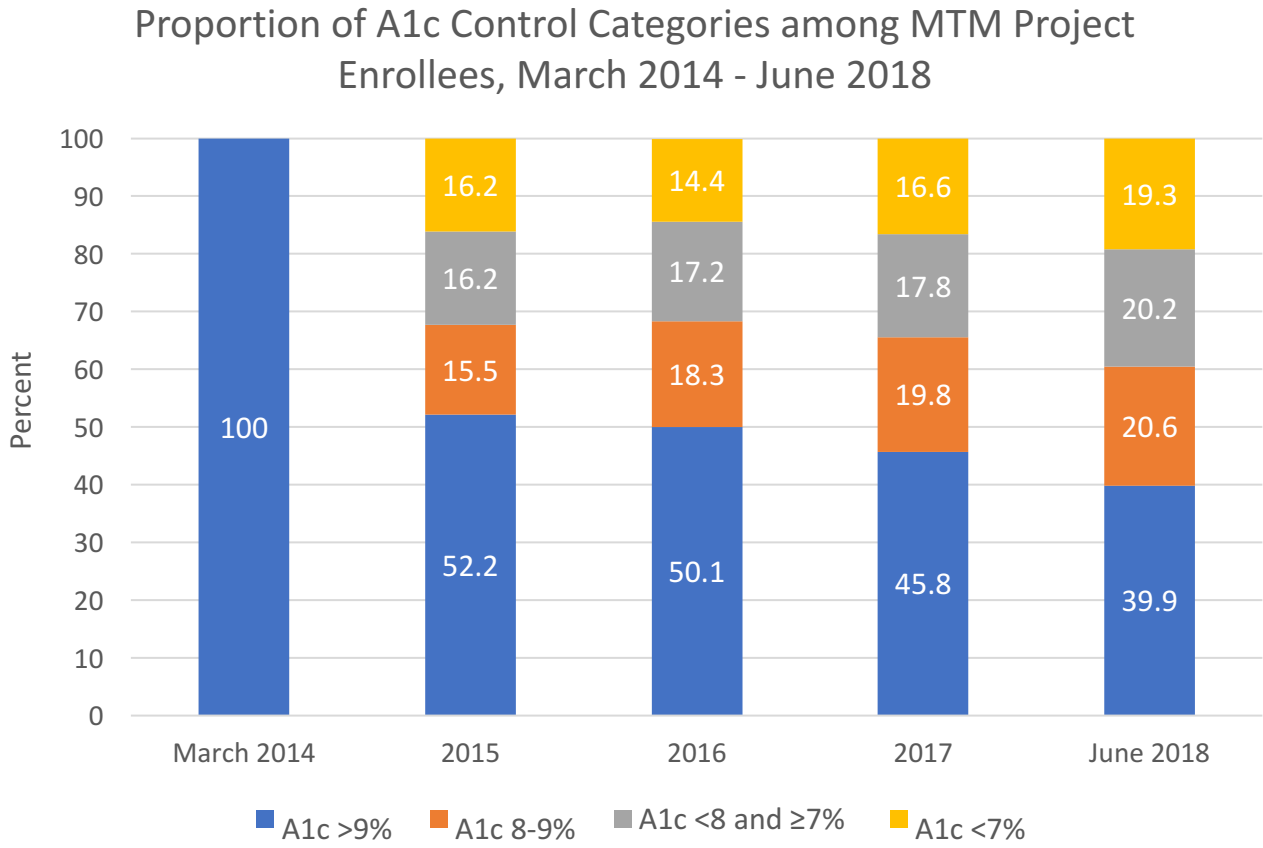
Data – Diabetes patients

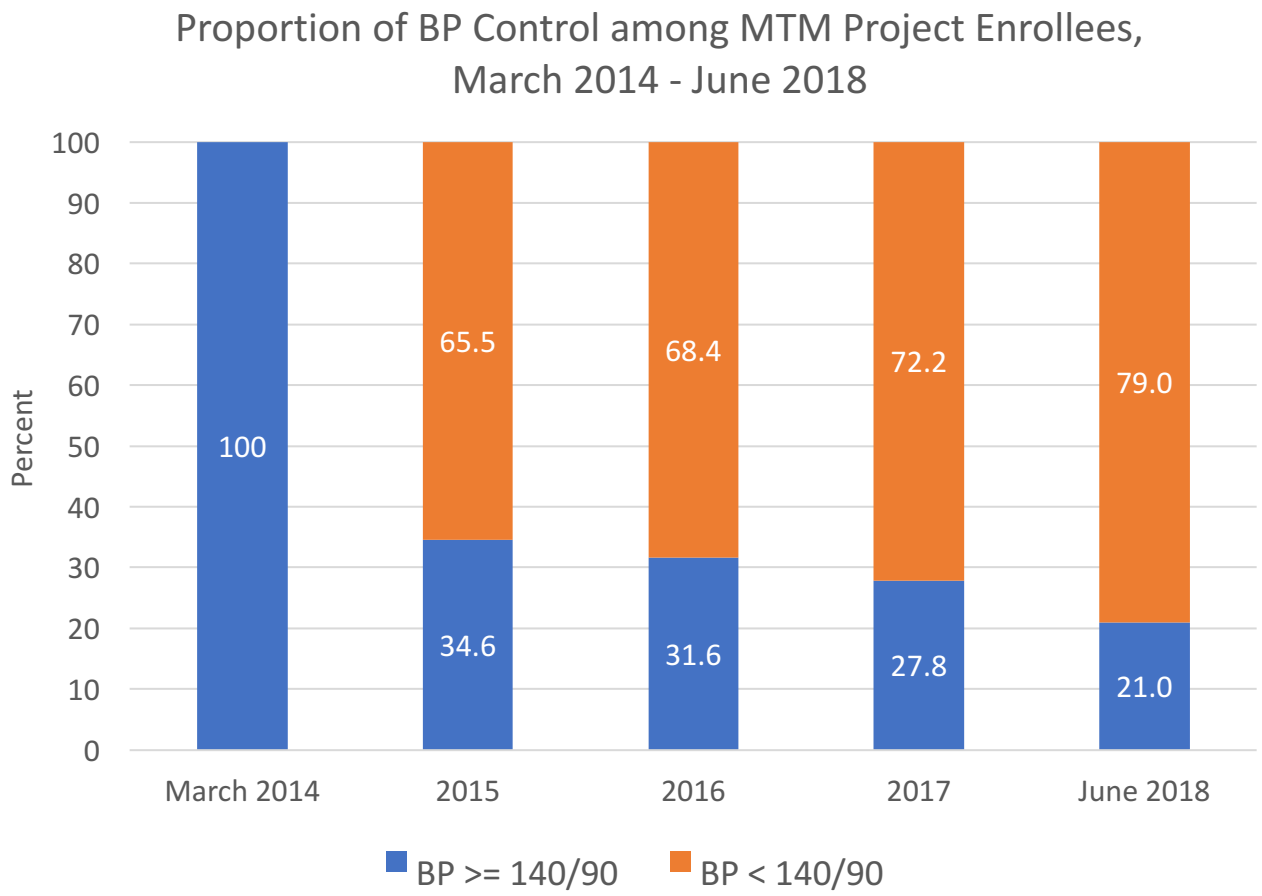
- No diabetes patients were in control* initially
- As of June 2018, 60% of diabetic MTM patients were in control*



* Diabetes in control was defined as an A1C measurement of less than or equal to 9%

Data - Hypertensive patients

- No hypertensive patients were in control* initially
- As of June 2018, 79% of hypertensive patients were in control*



* Hypertension in control was defined as an a blood pressure measurement of less than 140/90

Data – Medication Related Problems

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645
Indications
MRPs detected

1082
Efficacy MRPs
detected

385
Safety MRPs
detected

684
Compliance
MRPs detected

Financial Models

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Sources of funding / reimbursement for MTM

Site	Outcomes MTM / Mirixa	340B savings / revenue	Incident-to billing: higher level codes	Lower level billing codes	University supported pharmacist salary	Clinic budget or grants	Pharmacy budget or grants
1	●	●		●		●	
2	●	●	●				
3	●	●			●		
4	●	●				●	
5	●	●					
6	●		●			●	
7	●		●		●		●
8	●			●	●		

- Sites utilize multiple funding sources to directly or indirectly support MTM services
- The extent to which MTM costs are covered varies
- Key factors determine the available options and choice of models:
  - FQHC-owned or contract pharmacy
  - 340b status
  - Whether MTM services are part of the clinic budget or the pharmacy budget
  - Priorities of clinic and/or pharmacy management

It always helps if the pharmacists can bring in money, but that has not been a priority for clinic management. The main priority is quality measures.

The value-added service results in staff satisfaction, patient satisfaction and overall outcome achievement; this is what helps sustain MTM, at least at a minimum level.

Revenue was never the purpose for implementing MTM; the purpose was to enhance patient care and improve outcomes.

Regardless of the amount of financial support for MTM, all sites value the non-financial benefits.

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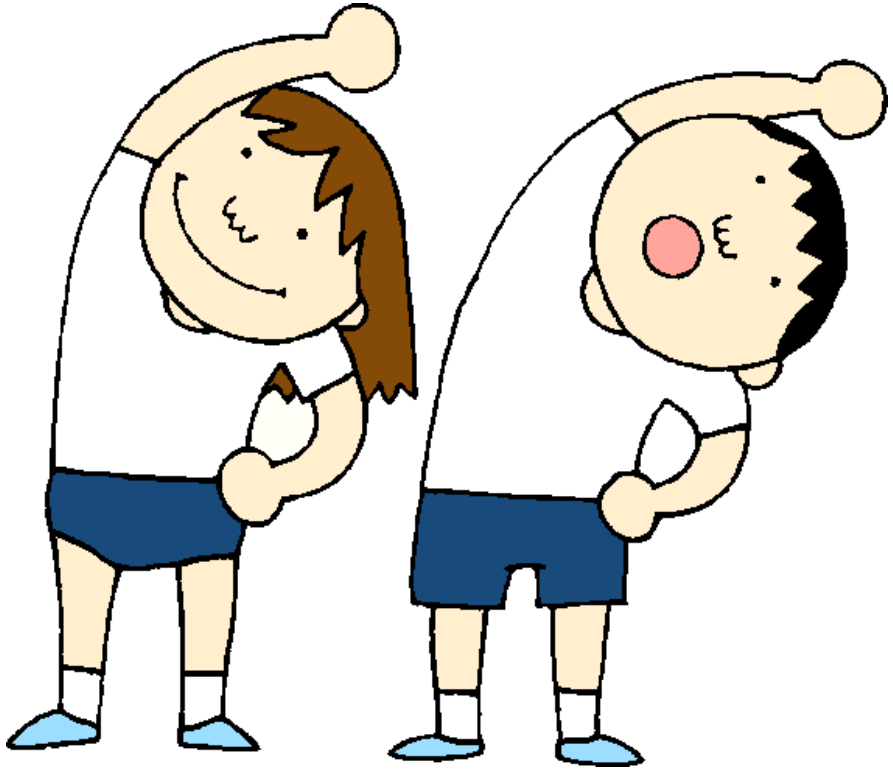
Pharmacist-Community Program Referrals

- Linkage with Medicare Quality Improvement Program, Health Services Advisory Group
  - Referrals to Diabetes Self-Management Education classes (DSME)
  - Resources to reduce adverse drug events

- Referrals to community resources encouraged, with a focus on DSME

Examples from PrimaryOne Health



Acknowledgements

- Ann Weidenbenner – ODH
- Meredith Baker – ODH
- Carrie Hornbeck – ODH
- Ashley Ballard – OACHC
- Ernie Boyd and staff – OPA
- Pharmacists, Faculty, Residents, Students, and Staff at CHCs

Read More

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- http://www.ohiochc.org/?page=MTM&hhSearchTerms=%22mtm%22
- http://journals.sagepub.com/doi/abs/10.1177/2150131917701797?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%3dpubmed
- https://innovations.ahrq.gov/profiles/statewide-consortium-increases-use-pharmacist-led-medication-therapy-management-federally
- http://www.pharmacist.com/moving-needle-ohio-cdc-funded-mtm-pilot-expanding-fqhcs-0
- http://www.pharmacist.com/cdc-names-pharmacists-grants-states-smith-serves-patients-chronic-diseases

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A New Approach to Diabetes Navigation in Rural Appalachia

Elizabeth A. Beverly, PhD

Rochelle G. Rennie, DO

The data presented in this session were funded by the Health Resources and Services Administration Grant No. D04RH28409 and Grant No. D04RH31792. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Health Resources and Services Administration.

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Diabetes & Rural Appalachia

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- In southeastern Ohio, diabetes rates far exceed the national (19.9% vs. 9.4%) and state prevalence (11.0%).
- Here, people are more likely to be diagnosed late, have lower empowerment and health literacy, and higher rates of complications.
- Nearly one-fifth to one-third of residents live below the poverty line, suffer from high unemployment, food insecurity, lower access to health care, and depression.

Ruhil A, Johnson L, Cook K, Trainer M, Beverly EA, Olson M, Wilson N, Berryman DE. What Does Diabetes Look Like in our Region: A Summary of the Regional Diabetes Needs Assessment Study. Athens, OH: Ohio University's Diabetes Institute; 2017.

Diabetes & Rural Appalachia

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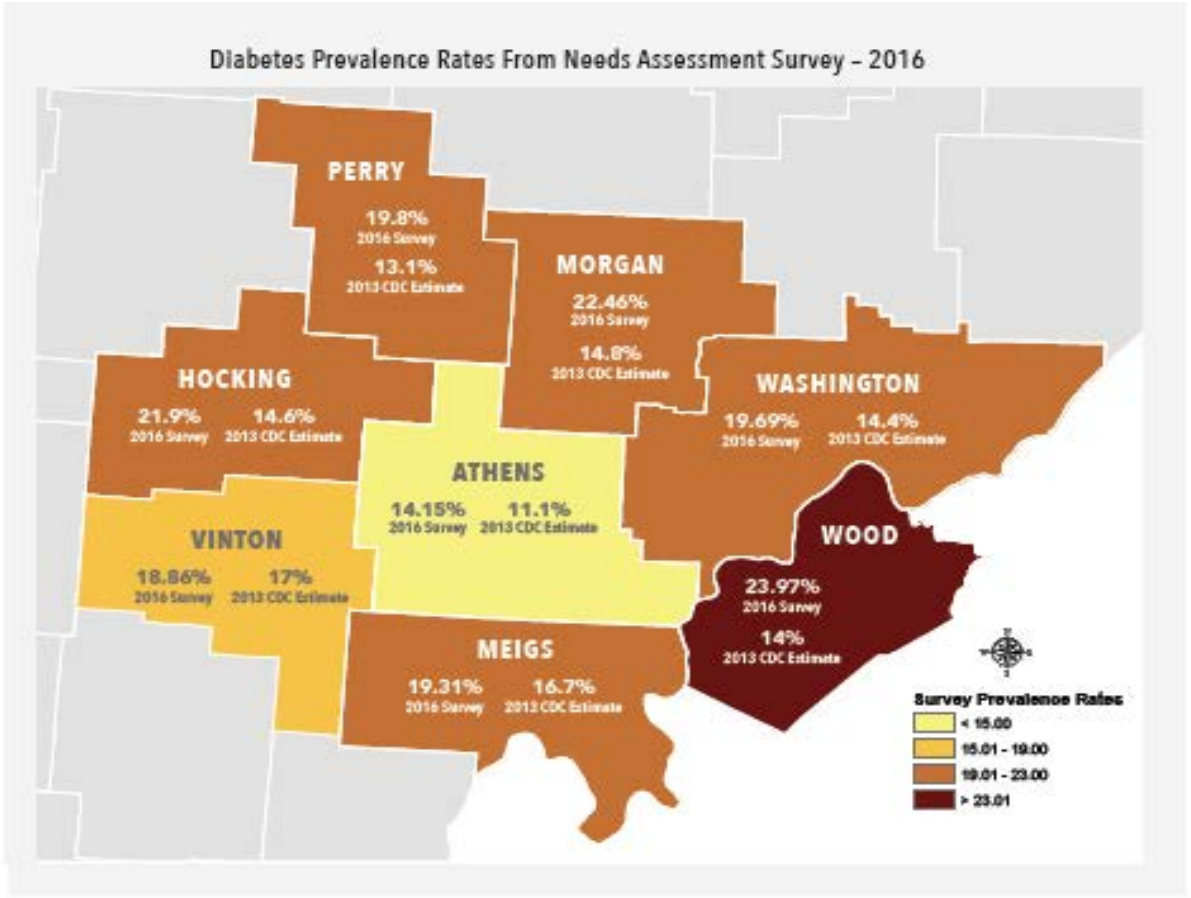

Ruhil A, Johnson L, Cook K, Trainer M, Beverly EA, Olson M, Wilson N, Berryman DE. What Does Diabetes Look Like in our Region: A Summary of the Regional Diabetes Needs Assessment Study. Athens, OH: Ohio University's Diabetes Institute; 2017.

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Diabetes & Rural Appalachia

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- Strategies that complement standard diabetes care are critically important to:
  - Alleviate the burden of complications
  - Reduce health expenditures
  - Improve the quality of life
- Patient navigation is an evidence-based approach that promotes timely movement of patients through the healthcare system and eliminates barriers.

Freeman HP. A model patient navigation program. *Oncol Issues*. September/October 2004:44-46.

Diabetes & Navigation

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- Navigators are trained personnel who address barriers to care and provide information and services relevant to overcoming these barriers, improving access to care, and facilitating self-management.

- Diabetes navigation programs have shown:
  - Improved A1C levels
  - Reduced hypoglycemia
  - Increased medical visits to primary care providers
  - Reduced hospitalization/emergency department utilization
  - Increased diabetes knowledge
  - Increased diabetes self-efficacy

Corkery E et al., 1997; Svoren BM et al., 2003; Spencer MS et al., 2011; Thom et al., 2013; Prezio EA et al., 2013; Carrasquillo O et al., 2017; Loskutova NY et al., 2016; Laffel LM et al., 1998; Gary TL et al., 1998; Schoenbery NE et al., 2017

Diabetes & Navigation

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We developed Comprehensive Diabetes Navigation in Rural Appalachia that consists of:

1. Nurse-Led Diabetes Navigation Program
2. Child Diabetes Navigation Program
3. Community Health Worker Program
4. Community Coalition (Diabetes Community Partners)
5. Peer Support Program (DOSES)

Figure 1. Frequency of Diabetes Patients' Most Common Barriers to Diabetes Care in Year 1 (n=32)

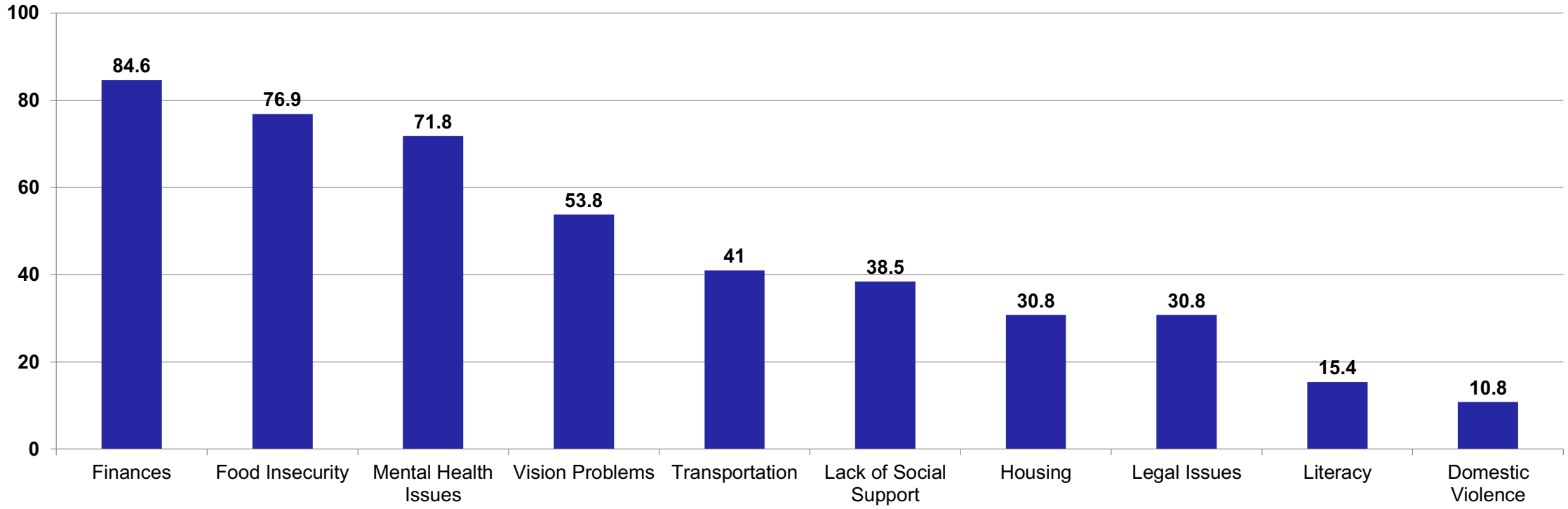

Figure 2. Frequency of Navigation Services Provided to Diabetes Patients in Year 1 (n=32)

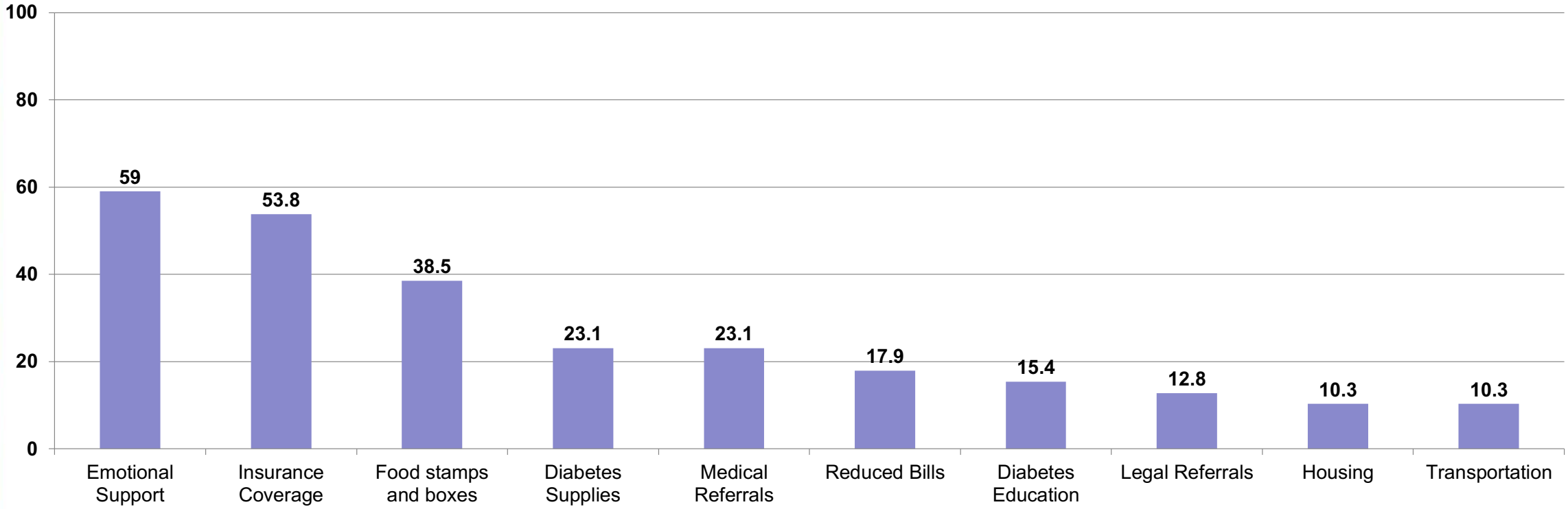

Table 1. Mean Differences in A1C, Depressive Symptoms, and Diabetes Distress at 6-Month Follow-Up from Year 1 (n=32)

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Variable	Baseline	6-Month Follow-Up	p-value
Hemoglobin A_{1c} (%)	8.9 ± 2.3	7.7 ± 4.6	0.023
Depressive symptoms (PHQ-9)	9.8 ± 7.5	3.1 ± 2.2	0.139
Diabetes distress (PAID-5)	8.8 ± 6.7	3.9 ± 3.8	0.115

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Process Evaluation

- Conducted process evaluation at Endocrine Clinic.
- Identified difficulties with cross-system integration of services:
  - —Issues with referral system
  - —Lack of access to EHR
  - —Problems with patient documentation
  - —Challenges with physical location

Beverly EA et al., 2018

New Referral and Documentation

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DIABETES NAVIGATOR REFERRAL
OUHCOM-Community Health Program
PHONE: (XXX) XXX-XXXX
FAX: (XXX) XXX-XXXX

Date_____ DOB: _____

Gender (Circle One) M F

Client Name: _____

Address: _____ City: _____ Zip: _____

Home Phone: _____ Cell: _____ Work: _____

Referring Provider Information

Referring Agency/Person: _____

Primary Care Provider: _____

Required Referral Information

Medical Info: **A1C** _____ **BP** _____

Please check known patient barriers you would like the navigator to address:

[ ] Transportation

[ ] Depression/Mental health referrals

[ ] Financial or other assistance related to insurance, food, housing, access to medication

[ ] Missed medical appointments

[ ] Assistance in understanding or following nutrition education already provided

[ ] Assistance in understanding insulin or other medication adherence as prescribed

[ ] Other: _____

[ ] Client is aware of reason for referral

Caregiver's Name (If applicable): _____

Comments: _____

Diabetes Navigator Form

Patient Name: _____ DOB: _____ Gender: M F

Date Referral Received: _____ From: _____

Patient contact: Attempt 1 date:_____ Outcome: _____
Attempt 2 date:_____ Outcome: _____
Attempt 3 date:_____ Outcome: _____

Intake appointment date: _____ Attended DNKA Rescheduled: _____

Medical needs: A1C: _____ Blood pressure: _____

Social determinant needs identified:

Transportation	Housing
Depression/Mental Health	Medical bills
Insurance coverage	Utility repairs
Getting fresh, affordable food	Missed medical appointments
Paying for medications	Legal issues
Other: _____	Other: _____

Services provided:

Social Security Extra Help Program	MLP referral
HCAP	Cincy Smiles
PIPP	Food stamps
HEAP	Emergency food box
Other: _____	Other: _____

Education reinforced: _____

_____

Progress: _____

_____

Follow-up date: _____ Phone Meeting

Case open Case closed Referrals pending: _____

Signature Line: _____ Date_____

Beverly EA et al., 2018

Linking Services to the Clinic

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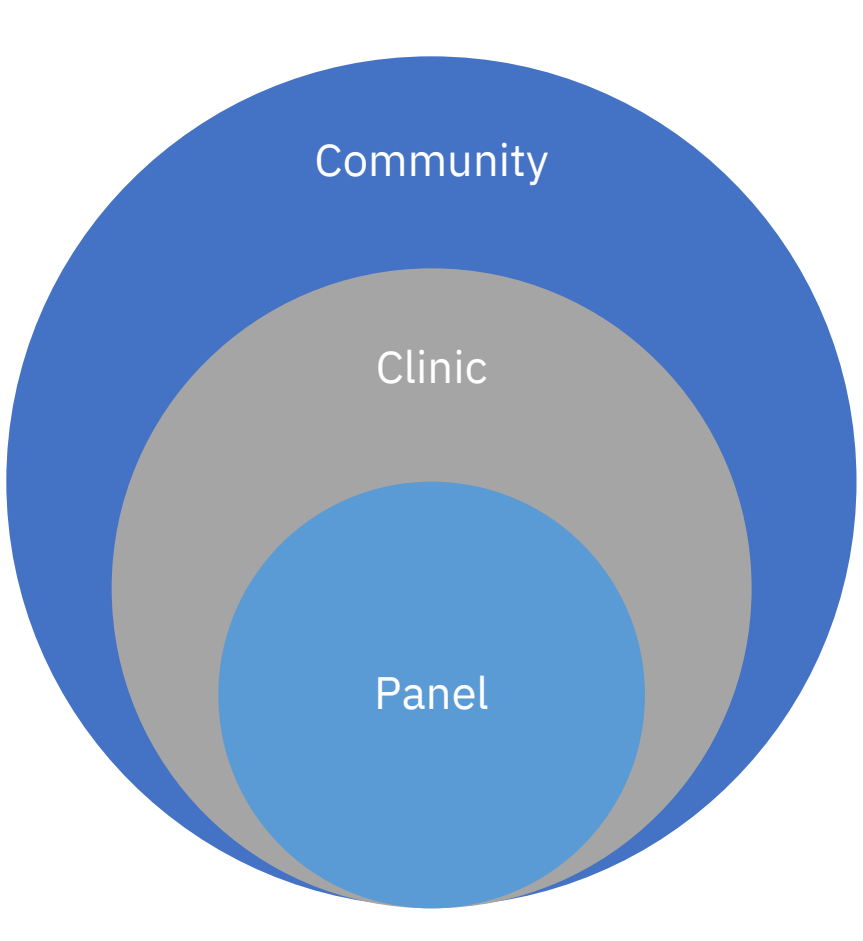
- Navigator meets with patients during medical visits
- Navigator meets with school nurses and families
- Created referral process for free mental health services at local Psychology and Social Work Clinic
- In process to sign contract with transportation organization to offer free transportation services

Types of Populations



Subgroups within these populations (e.g., diabetics)

Determinants of Population Health

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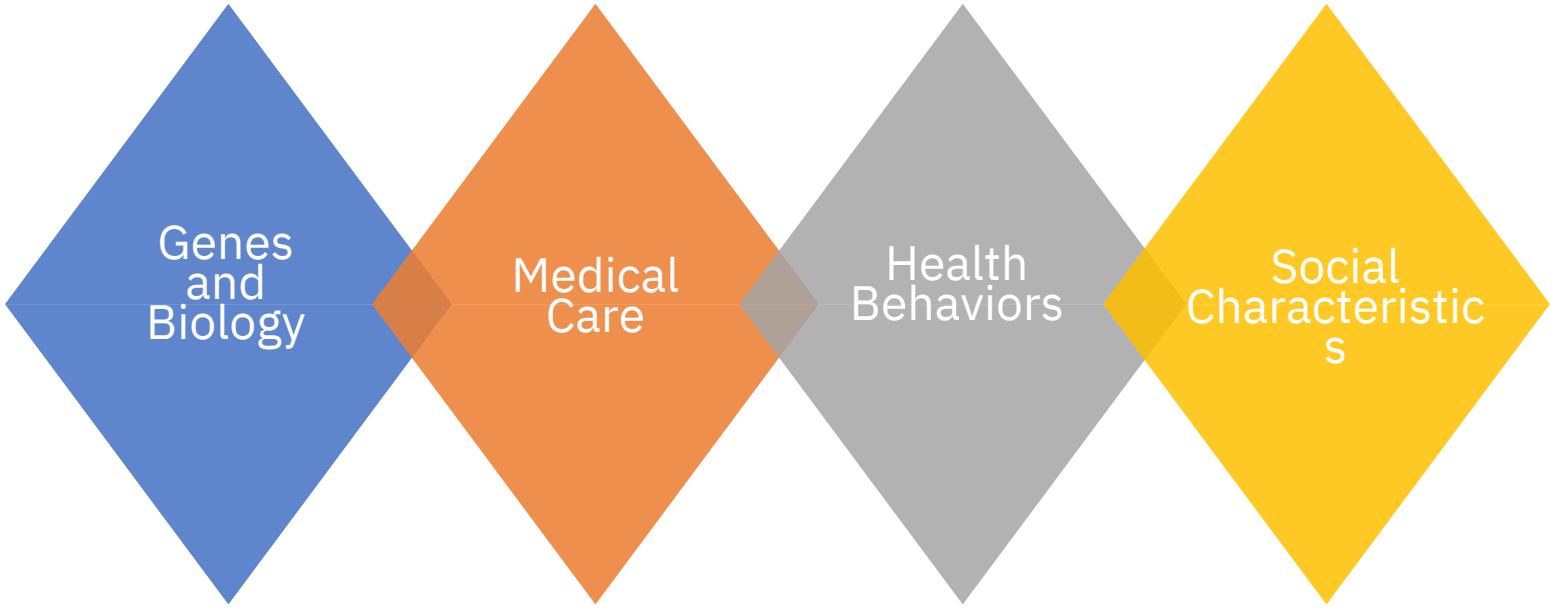

Annals of the New York Academy of Sciences
Volume 896, Issue 1, pages 281-293, 6 FEB 2006 DOI: 10.1111/j.1749-6632.1999.tb08123.x
http://onlinelibrary.wiley.com/doi/10.1111/j.1749-6632.1999.tb08123.x/full#f1

Technology Resources

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- AAFP's EveryONE Project: https://www.aafp.org/patient-care/social-determinants-of-health/everyone-project.html

- UDS Mapper: https://www.udsmapper.org/
- NowPow: https://www.nowpow.com/
- PHATE: https://www.graham-center.org/rgc/maps-data-tools/tools/phate.html
- Aunt Bertha: www.auntbertha.com

Aunt Bertha

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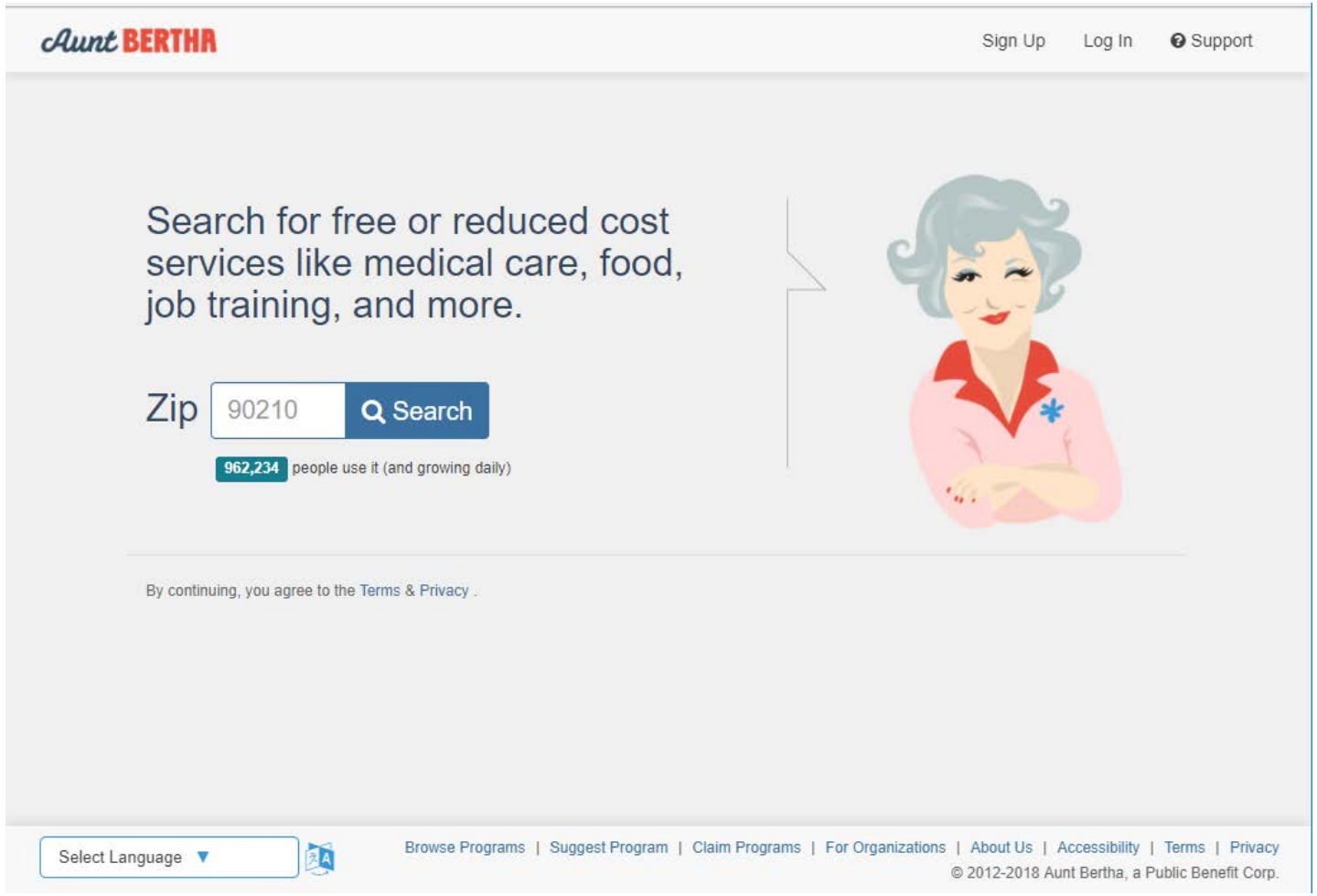

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Q&A

Thank you!

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sgardnerbuckshaw@neomed.edu
beverle1@ohio.edu
rennier@ohio.edu
valentino.49@osu.edu
rodis.2@osu.edu