Component Breakout Session 3: Health Systems Interventions and Community Clinical Linkages for Hypertension Control

July 19, 2017
CDC Site Visit

Session Overview

- High Level Overview
  - Colin Simms, Center for Chronic Disease Prevention and Control
  - Community Health Worker Integration for Hypertension Control
  - Bill Lafferty and Rachel Flanagan, Allegany County Health Department
  - Community Health Worker Curriculum and Baltimore Workforce Collaborative
  - Shantia Jones, BSW, CMA, Baltimore Area Health Education Center
  - Facilitating Engagement Between Pharmacists and Physician Teams to Improve Outcomes for Patients with Hypertension
  - Catherine Cooke, PharmD, BCPS, PAHM, University of Maryland School of Pharmacy
  - Oral Health and Pharmacy Integration for Hypertension Control
  - Jasmine Benford, MPH, Baltimore City Health Department

Overview

- Health systems team and approach
- Successes achieved and challenges faced
- Partnerships developed
- Key strategies
- Sustainability efforts

High Level Overview

Colin Simms
Center for Chronic Disease Prevention and Control

Team and Approach

- 1422 Health Systems Team
  - Eileen Sparling- 1422 Program Manager
  - Kathleen Graham- Health Systems Team Manager
  - Colin Simms- 1422 Component 2 Lead
- Approach
  - Component 2 lead holds monthly calls with 1422 LHDs
  - Component 2 lead meets weekly with program and team managers
  - Health Systems team attends bi-weekly team meetings
  - 1422 grant team meets quarterly

Strategies

- 2.3- Increase engagement of non-physician team members in hypertension management
- 2.4- Increase use of self-measured blood pressure monitoring tied with clinical support
- 2.5- Implement systems to facilitate identification of patients with undiagnosed hypertension and people with prediabetes
- 2.6- Increase engagement of CHWs to promote linkages between health systems and community resources
- 2.7- Increase engagement of community pharmacists in the provision of medication/self-management for adults with high blood pressure
Foundation for Health Systems Interventions

- LHDs in the 5 communities partnered with FQHCs to implement systems changes related to:
  - Screening for undiagnosed hypertension
  - Hypertension management
- Targeted health system changes
  - Role of LHDs
  - Role of the Maryland Department of Health

Federally Qualified Health Centers (FQHC)

LHDs in 5 communities have partnered with 6 FQHCs to develop and implement policies.

<table>
<thead>
<tr>
<th>FQHC</th>
<th>Policies Developed</th>
<th>Policies Drafted</th>
<th>Policies Assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chesapeake Health Care</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Choptank Community Health</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Family Healthcare of Hagerstown</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthcare for the Homeless</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Mountain Laurel Medical Center</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Tri-State Community Health Center</td>
<td></td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

Locations of Federally Qualified Health Centers partnering with 1422 communities.

Building on the Foundation

- Increased partnerships
  - Pharmacies
  - Oral Health Practices
  - Community Health Workers
- Local health department integration

Oral Health Practices

- Scope of Work
  - Implement policies to provide blood pressure screening to patients
  - Provide education on hypertension and hypertension management
  - Refer identified patients to primary care
- Successes
  - Partnerships with 19 practices
  - Process Mapping
  - Increased collaboration with the Office of Oral Health
  - Conferences
- Challenges
  - Funding and time
  - Equipment
  - Staffing to take blood pressure screenings

Pharmacies

- Scope of Work
  - Implement policies to provide blood pressure screening to patients
  - Provide education on hypertension and hypertension management
  - Identify any hypertension medication related issues
  - Refer identified patients to primary care
- Successes
  - Partnerships with 15 pharmacies
  - Integration of students
  - Workforce development
- Challenges
  - Pharmacist availability and limited screening times
  - Retail pharmacy accessibility
Community Health Workers (CHW)

- **Scope of Work**
  - Develop and implement training on 1422 strategies within their work at health systems
  - Promote local health department 1422 initiatives
  - Connect patients with primary care physicians
- **Successes**
  - 74 CHWs, representing 24 unique health systems, received training on hypertension [PM 18A]
- **Challenges**
  - CHW Model is not supported within FQHCs
  - Financial impact of hiring CHWs

Successes and Challenges

**Successes**
- Partnership development
- Policy implementation
- Toolkit development
- Leveraging other funds to expand on other projects regarding hypertension
- Creating linkages back to primary care

**Challenges**
- Time and funding
- Access to Care
- Change in lifestyles is not seen immediately
- Electronic Health Systems differ
- No legislation to support non-physician team member efforts

Sustainability

- Policy development, adoption, and maintenance on undiagnosed hypertension screenings, as well as hypertension management
  - FQHCs
    - Pharmacies
    - Oral Heal Providers
  - Electronic Health Record support to better identify patients within the system
- Partnerships with state partners that will support workforce transformation in relation to hypertension management
  - Schools of Pharmacy
  - Maryland Dental Action Coalition

Next Steps

- Maintain and strengthen collaborations pharmacists and oral health providers to increase screenings
- Develop and disseminate toolkits to support local health department efforts
- Local health department integration into health improvement and wellness coalitions, promoting strategies to an increased number of health systems

**ALLEGANY COUNTY MARYLAND**

**Overview of Allegany County’s Accomplishments and Challenges in Implementing the Chronic Disease 1422 Grant**
Allegany County is located in the western part of the state of Maryland. Cumberland is the county seat and a gateway to the east and west.

Allegany County is bordered on the west by Garrett County, MD and to the east by Washington County, MD. The state of Pennsylvania provides the northern border, while West Virginia is to the south. Each state is within 15 minute drive of the city of Cumberland.

### Allegany County Chronic Disease Statistics

**Allegany County Health Planning Coalition 2013**

- Age-adjusted death rate for heart disease is 243 per 100,000 (Maryland is 172)
- Hypertension ED visits is 279 per 100,000 (Maryland is 252)

### Allegany County 1422 Staff:

- Lynn Kane - Director of Nursing and Physical Health
- William Lafferty – Chronic Disease Coordinator
- Rachel Flanagan – Chronic Disease Coordinator
- Tina Baird – Community Health Nurse II

### Demographics of Allegany County, Maryland

(United States Census Bureau 2015)

<table>
<thead>
<tr>
<th></th>
<th>Allegany County</th>
<th>Maryland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (estimated, 2016)</td>
<td>72,130</td>
<td>5,016,447</td>
</tr>
<tr>
<td>Population change (from 2010)</td>
<td>(3.9%)</td>
<td>4.2%</td>
</tr>
<tr>
<td>Population male</td>
<td>42.1%</td>
<td>52.1%</td>
</tr>
<tr>
<td>Population female</td>
<td>57.9%</td>
<td>47.9%</td>
</tr>
<tr>
<td>Population white</td>
<td>88.6%</td>
<td>59.3%</td>
</tr>
<tr>
<td>Population African American</td>
<td>8.1%</td>
<td>30.7%</td>
</tr>
<tr>
<td>Education Bachelor degree +</td>
<td>17.4%</td>
<td>24.9%</td>
</tr>
<tr>
<td>18-64 years old</td>
<td>62.9%</td>
<td>63.0%</td>
</tr>
<tr>
<td>65 and over</td>
<td>19.5%</td>
<td>14.6%</td>
</tr>
<tr>
<td>In work force (16 years old +)</td>
<td>53.3%</td>
<td>67.1%</td>
</tr>
<tr>
<td>Per capita income</td>
<td>$21,674</td>
<td>$38,897</td>
</tr>
<tr>
<td>Median household income (2015)</td>
<td>$40,551</td>
<td>$37,551</td>
</tr>
<tr>
<td>Persons in poverty - percent</td>
<td>20.0%</td>
<td>9.7%</td>
</tr>
</tbody>
</table>

### Strategies

Increase engagement of CHWs to promote linkages between health systems and community resources for adults with high blood pressure

### Activities

- Work with Community Health Workers (CHWs) to provide education on screening undiagnosed hypertension, as well as referral to community resources and lifestyle change programs.
- Work with Community Health Worker partners to engage FQHCs in incorporating CHWs in their health system.

### Organizations/Partners

- Allegany County Health Department
- Western Maryland Health System
- Maryland Area Health Education Centers (AHEC)
- AHEC West
- Allegany Health Right
- Allegany College of Maryland
- Allegany County Health Planning Coalition

### Community Health Worker (CHW) Partner Activities

**Allegany Health Right**

- Allegany Health Right (AHR) has served as a “safety net” for low-income individuals. AHR accomplishes this by coordinating donated and deeply discounted oral health care, making it easier for oral health providers to reduce the cost of services.

**AHEC West**

- AHEC West works within the 1422 grant to educate CHWs and non-physician team members within the community regarding chronic disease screenings and management.

**Western Maryland Health System**

- CHWs in the health system help patients and their families to navigate and access community services, other resources, and adopt healthy behaviors. The CHWs works one-on-one with patient in home and assists each in making healthier lifestyle choices.

### Allegany County Health Department Successes on CHW Integration

- Increased community collaboration of CHWs in the jurisdiction
- Collaborated with AHEC West to provide trainings
- Assisted in the facilitation of linkages to community resources
- Supported efforts to detect undiagnosed hypertension
Challenges on CHW Integration

- Integration within Federally Qualified Health Centers
- Access to care across the jurisdiction

References


Baltimore Area Health Education Center

Shantia Jones, BSW CMA Community Health Training Coordinator

Maryland Area Health Education Center (MAHEC) Program

Maryland AHEC Program Office
University of Maryland School of Medicine

Baltimore Area Health Education Center (BAHEC)

- 2003 Established as Non-Profit 501 c (3)
- 2016 Re-launched -new Leadership & Board
- Operational support from University of Maryland Medical Center (UMMC)
- Focus on:
  - Clinical Education for Medical Students in Community
  - Interdisciplinary Training for Students on UMB Campus
  - Community Health Worker Training Program

Mission

The BAHEC’s mission is to improve access to quality healthcare and to address the issue of health disparities in medically underserved urban areas in Baltimore City and County.
Maryland Area Health Education Center Community Health Worker Training Institute

- MAHEC has a Community Health Worker Training Curriculum
- 160 Hours as recommended by CHW State Workgroup and aligned with the 11 state mandated competency areas
- Field Practicum Guide to Training CHWs with employers
- AHECs have trained CHWs working across the state in hospitals, health departments, and within other AHEC centers

Importance of CHW Role

- Serve as a link between patients with hypertension and the health care team
- Provide culturally specific basic health information
- Support those with hypertension in their efforts to make changes in daily routine
- Connect individuals to primary care providers
- Assess individuals support system
- Provide referrals to social services for those who may face barriers to programs

Baltimore Population Health Workforce Collaborative (BPHC)

- 9 Baltimore City Hospitals
- Recruit new employees in economically distressed neighborhoods
- Focus on 3 Positions:
  - Peer Recovery Specialist
  - CHW
  - CNA
- Baltimore Alliance Career Healthcare (BACH) Umbrella/Training
- CBOs (Turnaround Tuesday, CFUF, Penn North)
- Training Partners (BAHEC, CCBC, MPRT)

MAHEC & DHMH Collaboration

- Partner on Center for Disease Control (CDC) State and Local Public Health Action to Prevent Obesity, Heart Disease, and Stroke (1422 Grant) with Center for Chronic Disease Prevention and Control (CCDPC)
- Increase engagement of CHWs to promote linkages between health system and community resources for adults living with hypertension

Objectives of Training Module

- Provide education on hypertension
  - Risk factors for hypertension
  - Preventing & managing hypertension
- Identify CHW roles and Maryland referral programs
  - Locating community health providers
  - Education support groups
Accomplishments of BAHEC

• In partnership with other AHEC centers developed training module
• Jan – June 2017 Trained 58 CHWs face to face as part of Population Health Workforce Collaborative
• Partnered with Baltimore City Local Health Department on Chronic Disease
  • 2017 Community Health Workers Conference June 21st
  • 114 attendees

Outcome of Training

<table>
<thead>
<tr>
<th>Training Classes</th>
<th>Number of Students Trained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1 (January 9th thru February 17, 2017)</td>
<td>16</td>
</tr>
<tr>
<td>Cohort 2 (March 8th thru April 28th, 2017)</td>
<td>11</td>
</tr>
<tr>
<td>Cohort 3 (May 8th thru June 2nd, 2017)</td>
<td>13</td>
</tr>
<tr>
<td>Cohort 4 (June 5th thru June 30th, 2017)</td>
<td>12</td>
</tr>
<tr>
<td>Total Students Trained</td>
<td>52</td>
</tr>
</tbody>
</table>

Challenges

• Empowering CHWs to understand the role of health educator
• Limited knowledge on future employment type
• Limited open classes on DPP/DSME in Baltimore City
• Different knowledge levels and past experiences of trainees on hypertension

Sustainability/Future Opportunities

• Baltimore Population Health Workforce Collaborative
• Exploring other grant funding
• Make case for long term part of All Payer Model in Maryland
• Specialized CHWs in Chronic Disease
• More Specific training on specific populations
• Partnering with Community Colleges
• Starting to train for other partners (LHDs, FQHCs)
• Continue to Partner on Annual Baltimore City Community Health Workers Conference

This program supported by state and local public health actions to prevent obesity, diabetes, and heart disease and stroke, via grant #DP14-1422PPHF14
Facilitating Engagement Between Pharmacists and Physician Teams to Improve Outcomes for Patients with Hypertension

Catherine E. Cooke, PharmD, BCPS, PAHM
Shan Xing, PharmD

Burden of Hypertension (HTN) in Maryland

1 in 3 Maryland adults has HTN

Only 1 in 2 able to achieve blood pressure (BP) control

Antihypertensive medications are an integral component of HTN control

Only 2 of 3 Maryland adults with HTN take any antihypertensives

Many patients never pick up their first fill

Medication Adherence is a multi-step process

Facilitating Engagement between Pharmacists & Physician Teams to improve outcomes for patients with Hypertension

CDC Site Visit, July 19, 2017

Catherine E. Cooke, PharmD, BCPS, PAHM
Shan Xing, PharmD

Can we do something about it?

• Through this grant, we will explore ways to improve engagement between pharmacies/pharmacists and physician teams with the goal of improving clinical outcomes for patients with hypertension.

• Focus is on bidirectional communication related to initial medication non-adherence (IMN)

• Can pharmacists and physician teams leverage electronic prescribing (e-Rx) fill status notification to communicate about initial medication non-adherence to antihypertensives, ultimately reducing this problem?
Our work will:

1) Define best practices for bidirectional communication between pharmacists and physician teams for initial medication non-adherence
2) Identify tools used to track initial medication adherence
3) Examine the current landscape of bidirectional communication between pharmacists and physician teams in Maryland
4) Make recommendations for systems level interventions to improve patient outcomes

Grant activities

- Systematic literature searches
- Stakeholder Advisory Board
- Key informant interviews
- Visits to healthcare collaborators in Maryland
  - E.g., physician offices, pharmacies, health systems, payers

Status Update

- Uncovered what is currently known about IMN to antihypertensive therapy
  - Prevalence/incidence
  - Reasons
  - Patient(s)/clinical predictors
  - Which interventions have worked and which haven’t
- Working on more fully understanding the process of e-Rx and how fill status notification (e.g., RoFill) can be leveraged to enhance bi-directional communication between pharmacists and physician teams
  - Have others used it?
  - Document the process of prescription communication
  - What do stakeholders think? (e.g., pharmacists, physicians, IT...)

Opportunities and Challenges

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhance pharmacist-provider collaboration</td>
<td>Given that this is a newer topic, may not have reliable information on facilitators and barriers</td>
</tr>
<tr>
<td>Engage a possibly “neglected” patient population</td>
<td>Successful intervention may be “focal and flaky”</td>
</tr>
<tr>
<td>Bring awareness to the problem of IMN</td>
<td>Best “setting” for an intervention unknown (community, outpatient clinic?)</td>
</tr>
<tr>
<td>Identify future areas for practice innovation and research</td>
<td></td>
</tr>
</tbody>
</table>

Status: Our Common work to date: 2)

- Working
- Uncovered interventions
- Communication
- Adherence

Status: Provider

- Update
- Interventions
- Teams
- Pharmacy

Status: Patient

- Identify
- Make
- Examine
- Define

Status: Rx

- Enhance
- Pharmacy
- Process
- To
- Patient
- Takes
- Evaluation

Status: Provider

- Update
- Interventions
- Teams
- Pharmacy

Status: Patient

- Identify
- Make
- Examine
- Define

Status: Rx

- Enhance
- Pharmacy
- Process
- To
- Patient
- Takes
- Evaluation

Status: Provider

- Update
- Interventions
- Teams
- Pharmacy

Status: Patient

- Identify
- Make
- Examine
- Define

Status: Rx

- Enhance
- Pharmacy
- Process
- To
- Patient
- Takes
- Evaluation

Status: Provider

- Update
- Interventions
- Teams
- Pharmacy
Oral Health and Pharmacy Integration for Hypertension Control

Jasmine Benford, MPH, Baltimore City Health Department

Health Systems Intervention

Jasmine Benford
Health Systems Program Coordinator

Mortality

<table>
<thead>
<tr>
<th>Cause</th>
<th>2000</th>
<th>2008</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Disease</td>
<td>5.9</td>
<td>6.9</td>
<td>7.4</td>
</tr>
<tr>
<td>Stroke</td>
<td>2.4</td>
<td>2.5</td>
<td>2.4</td>
</tr>
<tr>
<td>Cancer</td>
<td>3.4</td>
<td>3.6</td>
<td>3.7</td>
</tr>
<tr>
<td>Diabetes</td>
<td>4.3</td>
<td>4.6</td>
<td>4.8</td>
</tr>
<tr>
<td>Other</td>
<td>1.5</td>
<td>1.6</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Top Causes of Death in Baltimore City

- Heart Disease
  - 24.4 per 10,000 people
  - 24.4% of total deaths

Pharmacy Collaboration

- Partnering with the P3 Program
  - Represented by the Maryland Pharmacists Association and University of Maryland School of Pharmacy
  - Engagement of two pharmacies
  - Role of pharmacy students in screening
  - Host 4-6 screening events throughout the project period, ending September 30th, 2017.
  - Referrals to PCP providers

Prehypertension Process Map
Oral Health Collaboration

- Secured partnerships
  - Baltimore City Health Department Oral Health Services serving East and West Baltimore
  - Private dental clinic, The Smile Center
- Process maps created a referral pipeline
  - Oral Health Services can now refer non-emergency patients to a PCP
  - The Smile Center will now refer patients to PCP
- BCHD is trying to partner with a local FQHC for referrals from the BCHD clinics