PRINCE GEORGE’S COUNTY
HEALTH DEPARTMENT

HEALTH ENTERPRISE ZONE
Sustainability Summit
November 3, 2016
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Health Officer

Building a Healthier Prince George’s County
HEZ Overview

- Capitol Heights Zip Code 20743 with ~ 40,000 residents
- Much less that 1 physician per 3500 residents
- Diverse population presents particular challenges that are exacerbated by the lack of reliable, robust data on residents’ health care needs, utilization and outcomes.
- Given that over 90% of the population belong to a racial and/or ethnic minority a comparison of the Maryland median with the values for Capitol Heights on several health indicators demonstrates significant disparities (see Table 1).

<table>
<thead>
<tr>
<th>Table 1: Health Disparities in Capitol Heights</th>
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<tbody>
<tr>
<td>Maryland Median</td>
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<tr>
<td>Capitol Heights</td>
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</tbody>
</table>

- Need to address social determinants of health
Capital Heights: zip code 20743

- Kingdom Square: Capitol Heights
- Southern Capitol Heights
- Coral Hills
- Seat Pleasant
- Fairmount Heights
Health Enterprise Zone Overview

- Building a healthcare system to coordinate care in a community
  - Transition from hospital, ER, Nursing home or NSF to home
  - Public Health/Health Department Services
  - Community/County resources and services
  - Community Health Workers
  - Health Information Exchange & Technology
  - Insurance Connection
  - Preventing illness and treating chronic diseases
Health Enterprise Zone Overview

- Improving health in the community by engaging the community: elected officials, civic associations, faith based leaders, residents
- Improving Health Literacy with the assistance of the University of Maryland School of Public Health
- Reducing healthcare costs
Engage Patients for Value Based Care

- Leverage Data to Identify High Risk Patients – QIO, PGCPHD, Hospitals, Payers

- Help Patients Manage their meds - Medication Therapy Management

- Designate a Patient Engagement Advocate – Leverage Community Health Workers

- Build Partnerships – Hospitals, payers, public health, other providers

- Seek interoperability opportunities – connect to CRISP and PGC PHIN
Health Enterprise Zone Overview

- Establish 5 Patient Centered Medical Homes (PCMHs) with a minimum of 1 physician and two nurse practitioners per PCMH within 4 years
  - Greater Baden, Gerald Family Care, Global Vision, Dimensions Ambulatory Care Center and Family Medical Services

- Care Coordination Team (CCT/CHW)
  - Health Department CHWs integrated into the 2 Hospitals (Doctor’s Community Hospital and Dimensions Healthcare System) and Primary Care Practices (Patient Centered Medical Homes)

- Establishment of a Community Care Coordination Team (CCCT/Oversight)

- Health Literacy Campaign

- Behavioral Health and Social Services Integration

- Evaluation and Quality Improvement
Increase in Access to Health Care as of June, 2016:

- 42,897 total number of patient visits in HEZ medical practices
- 30,117 patients seen (unduplicated visits)
- Patients seen are from 20743 and surrounding zip codes
- 12,483 people seen from zip code 20743
  - Approximately 41.45% of patients from Zone

Increase in Workforce

- 5.3 new Zone providers; 2.95 existing = 8.25 practitioners (MDs, PAs, and NPs)
- 8.20 new and other licensed health care practitioners
- 5 Full-time Community Health Workers
- 18.0 New jobs created in the Zone to date
- Total Zone FTE: 24.75 (all categories – new and Pre Zone)
Care coordination is a key strategy that has the potential to improve the effectiveness, safety, and efficiency of the American health care system.

Well-designed, targeted care coordination that is delivered to the right people can improve outcomes for everyone: patients, providers, and payers.

Must obtain data to identify your targeted population.

Prince George’s County HEZ statistics:

- 10% of Prince George’s County HEZ residents represent 80% of all readmissions at County hospitals
- Approximately 270 patients
- In need of multiple services, i.e. social services, primary care, behavioral health services

Resource: Institute of Medicine of the National Academies*
Targeted Population

Inpatient Utilization Data for HEZ - zip code 20743 from CRISP

- % Total Patients: 6-10%
- % Discharges: 6-10%
- % Readmissions: 6-10%
- Total Patients: 80%
- Discharges: 80%
- Readmissions: 80%
1. Establishes accountability and agreed upon responsibility of each member of the care team.
2. Communicates/shares knowledge about the patients’ needs.
3. Helps with transitions of care: hospitalizations, emergency visits.
4. Assesses patient needs and goals.
5. Creates a proactive, comprehensive and coordinated care plan.
6. Monitors and schedules follow-up with the patient, including responding to changes in patients' needs.
7. Supports patients' self-management goals.
8. Links to community resources.
9. Works to align resources with patient and population needs.

Resource: Agency for Healthcare Research and Quality (AHRQ)
Department of Health and Mental Hygiene
Care Coordination Team: Evidence-Based Care Transitions and Care Coordination

- Hospitalist
- Care Transition
- Inpatient Clinical Coordinator
- Hospital
- Care Coordination
- Community Health Worker
- Patient
- Patient's Doctor
- Outpatient Clinical Coordinator
- Patient Centered Medical Home

Determinants of health:
- Health behaviors: 30%
- Social & economic factors: 40%
- Clinical care: 10%
- Physical environment: 10%
- Genes & biology: 10%
Community Care Coordination:

Opportunities & Solutions: Care Coordination

COMMUNITY HEALTH WORKER REFERRAL PROTOCOLS

Care Coordination

- High risk patients in poor control of their chronic illness
- High risk patients needing connections to family and social services
- High risk patients with behavioral health illnesses
- High risk patients in need of medication management
- Patients with no Primary Care Physician
- Patients who have not seen a PCP in > 12 months
- Patients with no health insurance
- Patient with care gaps

Care Transition (Home, NSF, Long Term Care, etc.)

- High risk patients with a hospital readmission within 30-days for the same condition
- High risk patients with overuse of ED visits:
  - ED visit for non-emergency care
  - 3 or more ED visits within 12 months
  - Repeat ED visits within 30-days
- Patients with multiple 9-1-1 calls for non-emergent reasons
Care coordination team that deliberately organizes patient care activities and shares information among all of the participants concerned with a patient's care to achieve safer and more effective care.

The patient's needs and preferences are known ahead of time and communicated:

- at the right time
- to the right people

Resource: Agency for Healthcare Research and Quality (AHRQ)
Department of Health and Mental Hygiene
High Level CCCT Workflow

**Provider**
- Identifies target Population
- Initiates care plan

**Care Coordination**
- Assigns CHWs
- Implements interventions

**CCCT**
- Identifies gaps
- Assigns team members to appropriate cases
- Creates protocols, workflows and pathways

**Care Coordination**
- Reviews and monitors pathways
- Guides and manages CHWs
- Provides feedback on effectiveness of pathway implementation

**CCCT**
- Modifies pathways as needed
- Evaluates overall performance
- Reports to Stakeholders
Phase 2: Prince George’s County Community Care Coordination Team Model

Community Stakeholders
- Local Businesses
- Faith-based Organizations
- Community Centers
- Community Based Organizations

Primary Care Providers (PCMH)
- FQHC
- Private Practices

Hospital Systems & Specialists
- Regional Hospital
- Local Hospitals
- Specialty groups practices

Public Health Department

Multi-disciplinary team from several health and social service organizations working together to meet the needs of at-risk patients

The Team identifies gaps in processes across organizations; creates workflows and protocols to address gaps

CCCT workflows focus on linkages to care and services

CCCT pathways ensure quality, evidence based practices

Family
Nurse Coordinator
Community Health Workers
Social Workers
Care Coordinators
Dieticians
Pharmacists
Behavioral Health
Sister Circles
Health Literacy
Fire/EMS
Home Health
QIO
Payers
Case Example

Real Case
- 56 y.o. AA female
- 4 hospitalizations
- Referred to CHW
- Issues
  - Diabetes poor control
  - No PCP
  - No Transportation
  - Not taking medications
  - Depressed
  - Introverted
  - No Family Support
  - Unable to take care of home

CHW Intervention
- At intake: Multiple needs, Illiterate, family abandonment
- Pathways Completed:
  - Medical home
  - Transportation
  - Medication Assessment
  - Medication Reconciliation/Pictorial Aids
  - Specialty referrals for home health, behavioral health, cardiology, pulmonology, nephrology, ophthalmology
  - Diabetes self-management
  - Referral for Adult Evaluation Review Service
  - Linked to:
    - Adult daycare
    - Personal care assistant
    - Diabetes group classes
    - Prime Time Sister Circle

Outcomes: PCP visits, specialty visits, support services, socializing, thriving... No ED visits, No Hospitalizations
## 2015 HEZ Hospital Use Analysis

<table>
<thead>
<tr>
<th></th>
<th>All 2015 Clients</th>
<th>2015 Clients Included in Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>154</td>
<td>96</td>
</tr>
<tr>
<td>Graduated</td>
<td>43</td>
<td>22</td>
</tr>
<tr>
<td>Non-Compliant/LTFU</td>
<td>41</td>
<td>33</td>
</tr>
<tr>
<td>Ongoing</td>
<td>52</td>
<td>41</td>
</tr>
<tr>
<td>Expired</td>
<td>7</td>
<td>---</td>
</tr>
<tr>
<td>Moved Away</td>
<td>11</td>
<td>---</td>
</tr>
</tbody>
</table>
# 2015 HEZ Hospital Use Analysis: Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Graduated</th>
<th>Ongoing</th>
<th>Non-Compliant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>22</td>
<td>41</td>
<td>33</td>
</tr>
<tr>
<td>Average Age (years)</td>
<td>48.8</td>
<td>50.0</td>
<td>48.2</td>
</tr>
<tr>
<td>% Female</td>
<td>82%</td>
<td>56%</td>
<td>52%</td>
</tr>
<tr>
<td>% Black</td>
<td>95%</td>
<td>88%</td>
<td>94%</td>
</tr>
<tr>
<td>% Reside in 20743</td>
<td>41%</td>
<td>44%</td>
<td>55%</td>
</tr>
<tr>
<td>% Medicare</td>
<td>29%</td>
<td>24%</td>
<td>36%</td>
</tr>
<tr>
<td>Average Pathways</td>
<td>2.73</td>
<td>3.34</td>
<td>2.67</td>
</tr>
</tbody>
</table>
2015 HEZ Hospital Use Analysis (N=96)

**Average Hospital Visits**

- **6 Months Before**
  - Graduated: 6.59
  - Ongoing: 6.39
  - Non-compliant: 6.39
- **6 Months After**
  - Graduated: 5.51
  - Ongoing: 5.09

**Average Hospital Charges**

- **6 Months Before**
  - Graduated: 18,929
  - Ongoing: 29,353
  - Non-compliant: 31,662
- **6 Months After**
  - Graduated: 20,493
  - Ongoing: 8,699
  - Non-compliant: 18,142

**Reduction in Visits**

- Graduated: 42.2%
- Ongoing: 16.4%
- Non-compliant: 20.3%

**Reduction in Cost**

- Graduated: 54%
- Ongoing: 30.2%
- Non-compliant: 42.7%
Readmissions per 1,000 Medicare Beneficiaries in Zip Code 20743

31% reduction

Readmissions per 1,000 Beneficiaries in Zip 20743 Compared to Prince George's

HEZ Initiated

Prince George's County - Confidential & Proprietary Information
## Health Literacy Campaign

- Health literacy dialogic aid developed to encourage communication with providers. Titled, “Medical Action Plan” (MAP) booklet
  - Communicate with health care team
  - Ask important questions
  - Get good health information, understand it and use it
- 10,000 MAP booklets printed.
- 80% of MAP booklets distributed: to every household in City of Capitol Heights through:
  - Community events
  - Civic Association Meetings
  - Fire/EMS responses
  - Shoppers pharmacy
  - Churches
  - FQHCs and Provider Practices
  - CHWs

- 5 Health Literacy Advocate trainings: Steering Committee, CHWs, Fire/EMS, Police Departments
- 5 Health Literacy Community Forums held: 250 residents reached
- 4,000 cards and fliers with patient rights, questions to ask and additional resources distributed
- Mobile application in development: local health literacy resource guide through app on mobile phone
- Conference presentation at American Public Health Association annual conference.
PTSC designed to assist African American women to take control of their health by use of a cognitive behavioral modality to reduce unmanaged stress, improve diet, increase exercise, and monitor key biometric health indicators, i.e., weight, body mass index, and blood pressure.

**Highlights:**

- Partnerships developed with Community Services Foundation, Pleasant Homes Apartment Complex, Seat Pleasant Police Department
- Transportation provided by the City of Seat Pleasant and the Police Department
- Self-report and clinical data documented that:
  - 87% of women gained additional knowledge and skills; significantly decreased their stress and unhealthy nutrition habits while increasing their exercise behaviors.
  - Improvement in blood pressure ratings
  - Approximately 41% lost two or more pounds
  - Overall weight loss ranged from 2 to 9 pounds.
- Over 75% of women attended at least 9 of the 13 meetings

![Figure 3. Participants’ satisfaction with Circle, knowledge and usefulness](image)

<table>
<thead>
<tr>
<th></th>
<th>Satisfaction with the Sister Circle Group</th>
<th>Gained additional knowledge and skills</th>
<th>Information is useful in my daily life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>80%</td>
<td>87%</td>
<td>87%</td>
</tr>
</tbody>
</table>

![Figure 4. Participants’ satisfaction with facility and experts](image)

<table>
<thead>
<tr>
<th></th>
<th>Sister Circle facilitator was effective</th>
<th>Nutrition expert was effective</th>
<th>Fitness expert was effective</th>
<th>Stress management expert was effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>87%</td>
<td>87%</td>
<td>80%</td>
<td>87%</td>
</tr>
</tbody>
</table>
Successes

The PGCHEZ created an effective value-based system of care in an significantly underserved zip code (20743) of ~40,000 residents that:

- Established a Model for Care Coordination
- Engaged the community and established effective partnerships (CCCT)
- Increased access to PCMHs
- Increased Community Health Literacy
- Increased Community Workforce
- Introduced Behavioral Health Integration
- Demonstrated a significant reduction in:
  - hospital visits between 16% - 42%
  - hospital cost between 30%-54%
Lessons Learned

- Addressing access gaps in the community are essential for effective care coordination and improving population health outcomes.
- Addressing social determinants of health contribute to reducing hospital readmissions and frequent ED visits and costs.
- Building collaborative partnerships with hospital systems, county agencies, Fire/EMS, providers and payers promotes information sharing and improves care coordination.
- Community Health Worker (CHW) home visits are key to assessing the patient environment, identifying patient and family needs, and address social determinants affecting their health, facilitate resource connections and implement the right interventions.
- Standardized evidence-based pathways guide CHW interventions and improve health outcomes.
Lessons Learned

- Creating an atmosphere of compassion in all aspects of the project creates better performance
- Establishing PCMHs in depressed areas require public/private funding
- Care coordination requires an overlap of clinical, behavioral, social determinants and medication therapy management interventions
- A Bridge Organization (CCCT) is needed to assure optimal communication and quality assurance in care coordination
- The Bridge organization should be a neutral trusted source
- Community engagement is critical
- Health Literacy is the foundation for community health transformation
- Public Health involvement is important

Sustainability Challenges and Strategies

- Establishing a public/private entity
- Consider social impact bonds in depressed areas
- Short Term Gap funds from investors, foundations, local, state and federal government
- Long Term: Establish Business Case: adjunct to value based purchasing for hospitals, nursing homes, NSF’s, ACOs, PCMHs, employers, payers.
Questions