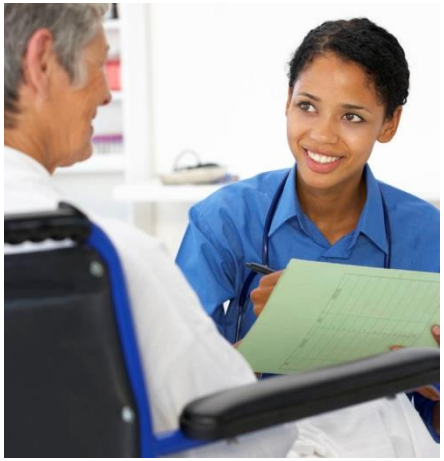
PRINCE GEORGE'S COUNTY HEALTH DEPARTMENT

The Health Enterprise Zone: A Population Health Model for Patients with Complex Needs

Maryland HEZ Site Visit

February 23, 2018

Ernest L. Carter MD PhD
Deputy Health Officer

Rushern L. Baker, III
County Executive

HEALTH DEPARTMENT
Prince George's County

Health Enterprise Zones

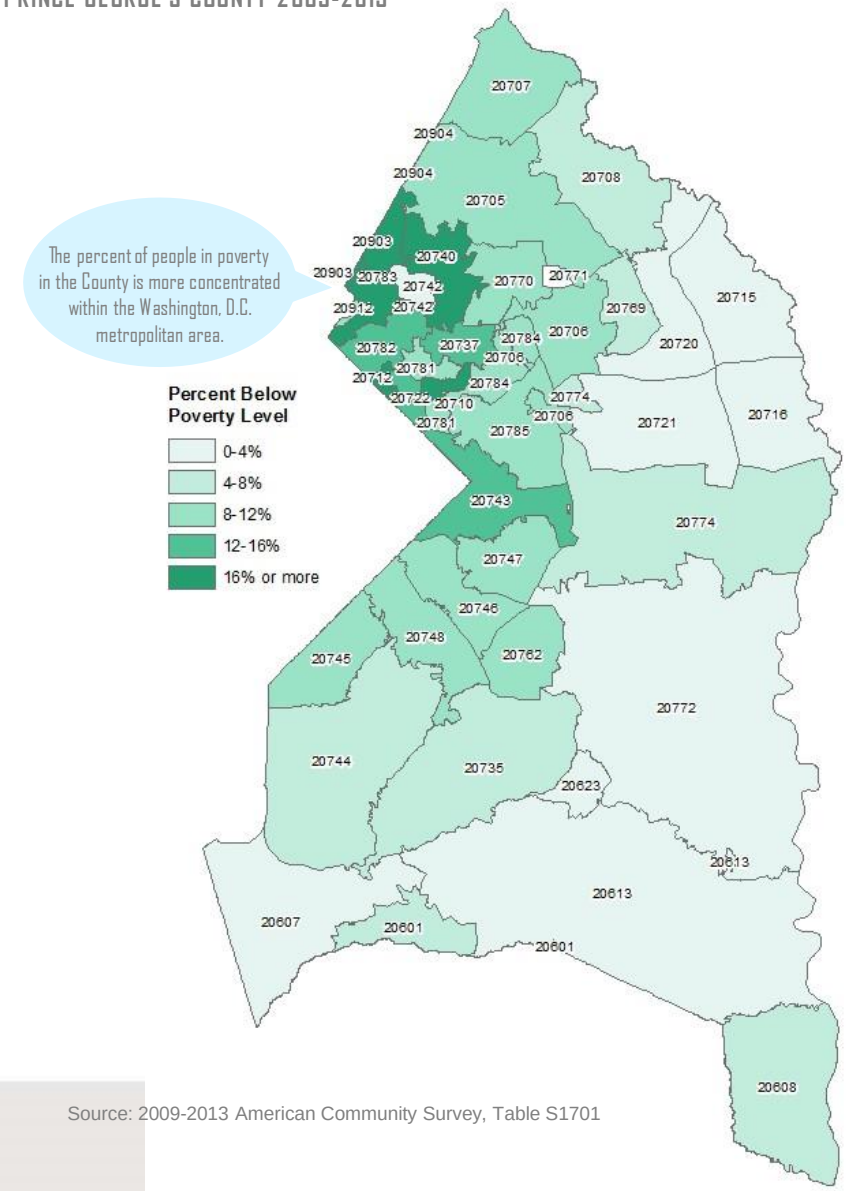
HEZ Overview: The Need

- 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 1	Life Expectancy (2006 – 2010)	Average LBW Rate	Medicaid Enrollment	Wic Participation
Maryland Median	79.2	6.3	109	17.9
Capitol Heights	72.16	11.8	201.33	29.72

- Need to address social determinants of health

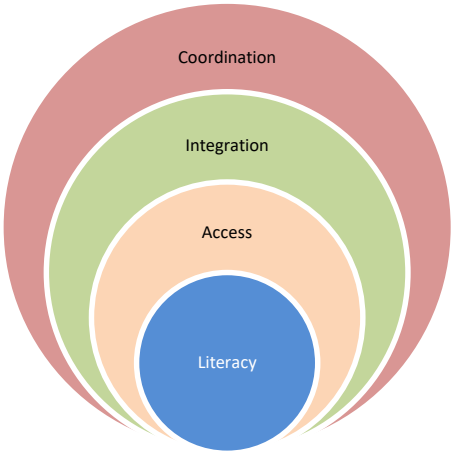
RESIDENTS LIVING IN POVERTY IN THE PAST 12 MONTHS BY ZIP CODE, PRINCE GEORGE'S COUNTY 2009-2013



Source: 2009-2013 American Community Survey, Table S1701

Health Enterprise Zone: Strategy

- Increase Access to Healthcare
  - Establish Patient Centered Medical Homes (PCMHs) through incentives
- Create Population Health Management Model to coordinate care in a community
  - ***improves the health outcomes of a group by monitoring and identifying individual patients within that group***.
  - requires a robust care management and risk stratification infrastructure, a cohesive delivery system, and a well-managed partnership network
  - gives real-time insights to identify and address care gaps within the patient population.



Health Enterprise Zone: Strategy

- Establish Health Information Exchange

- Engage the Capital Heights community – Community Activation: elected officials, civic associations, faith based leaders, residents

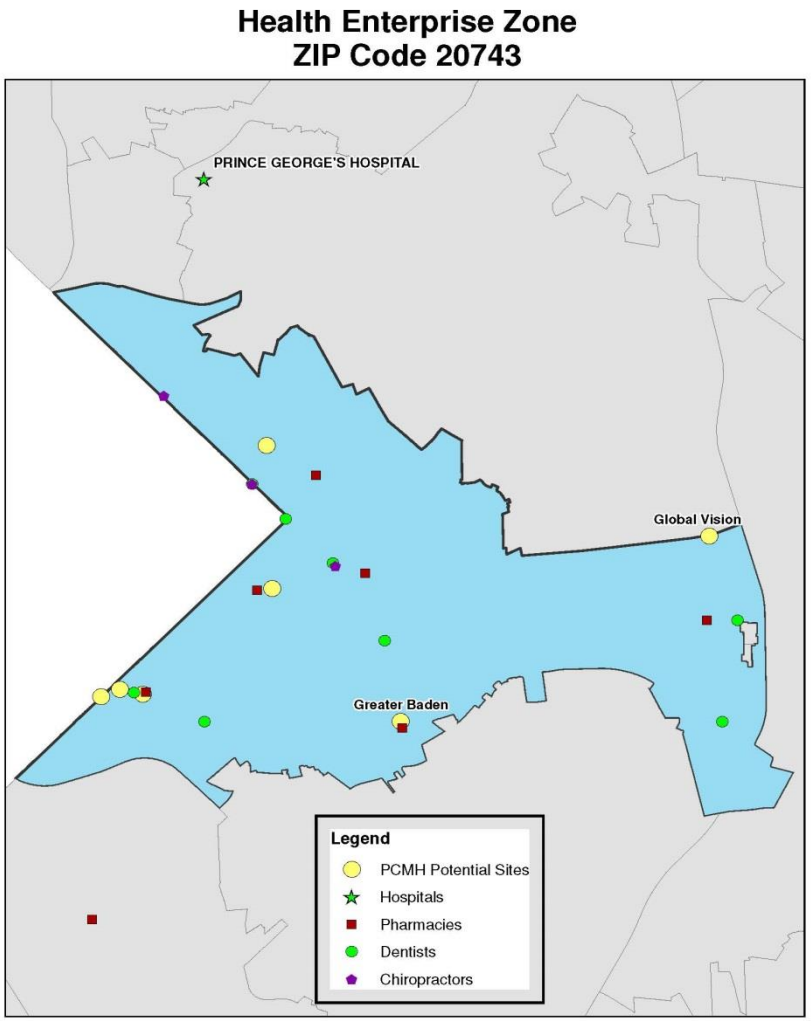
- Improve Health Literacy – Patient Activation with the assistance of the University of Maryland School of Public Health

- Reduce healthcare costs

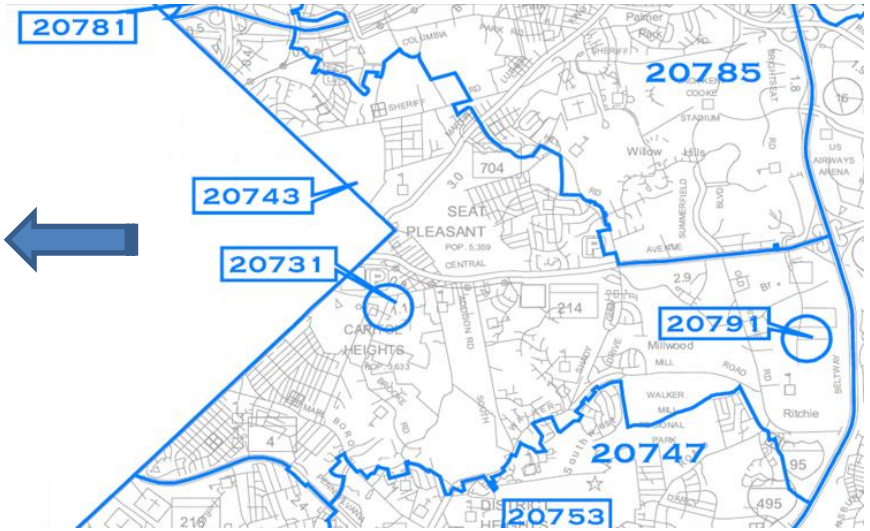
Health Enterprise Zone Overview

- 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) "Bridge Entity"
- Health Literacy Campaign
- Behavioral Health and Social Services Integration
- Evaluation and Quality Improvement

Increase Access:
Capital Heights: zip code 20743

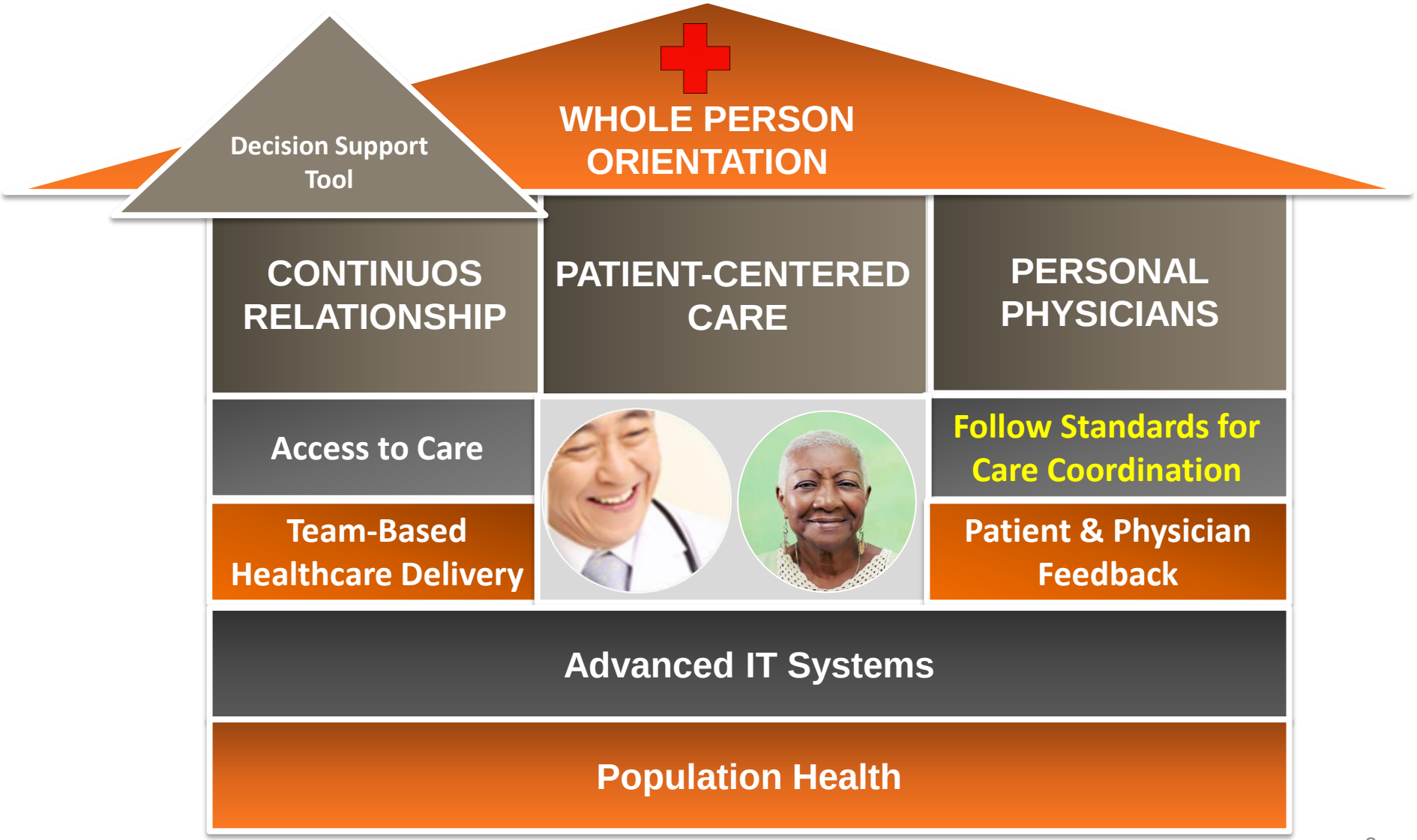


Density Map of HEZ



- Kingdom Square: Capitol Heights
- Southern Capitol Heights
- Coral Hills
- Seat Pleasant
- Fairmount Heights

Who is responsible?
Patient-Centered Medical Home



Increase Access:
Summary of PCMH Services and Increase in Capacity at Y4, Q3

Increase in Access to Healthcare as of Dec. 31, 2016:

- 58,451 Total number of patient visits in HEZ medical practices
- 41,614 Patients seen (unduplicated visits)
- Patients seen are from 20743 and surrounding zip codes
- 17,249 Patients seen in practices from zip code 20743
  Approximately 41.45% of patients are from Zone

Increase in Healthcare Workforce

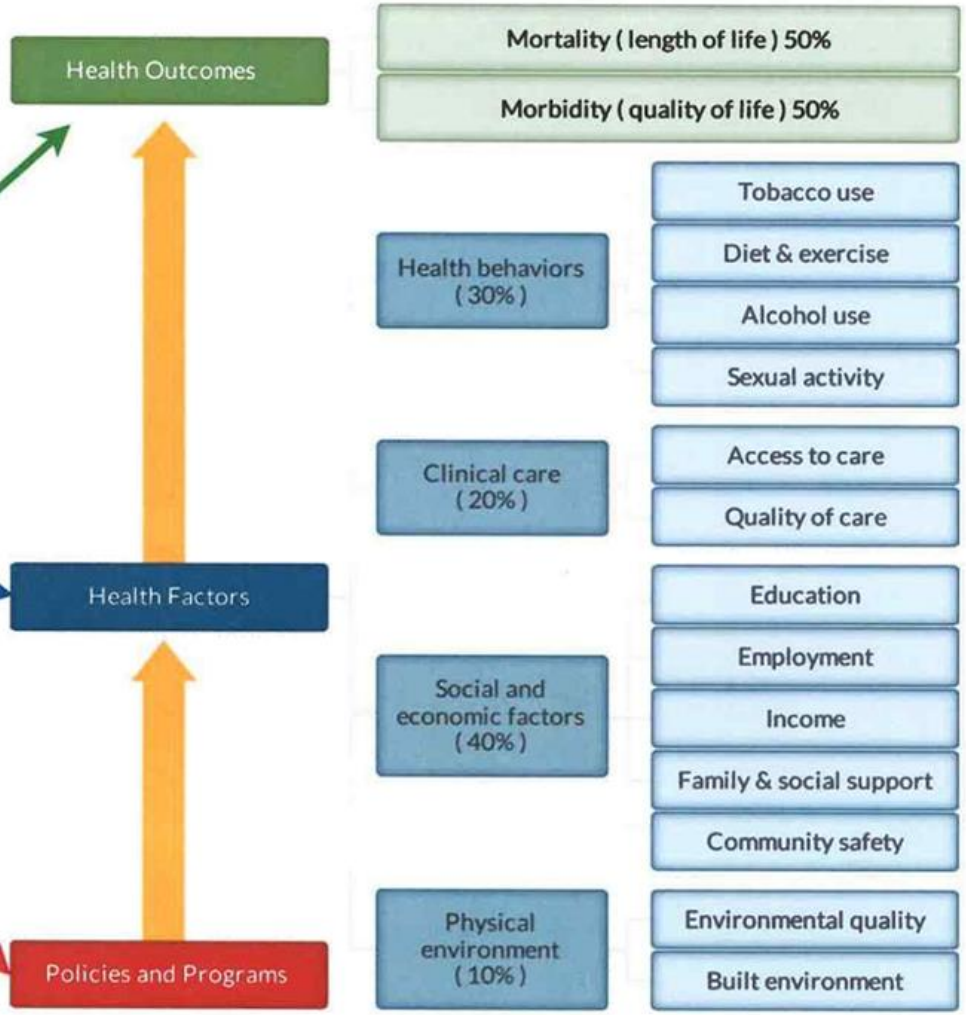
- 4.4 New Zone providers; 4.2 existing = 8.6 practitioners (MDs, PAs, NPs and nurse midwife)
- 4.9 New licensed health care providers (RNs, LPNs, social workers, CMAs, and certified counselors)
- 13.50 New and other licensed health care practitioners (All Practitioners)[9]
- 5 Full-time Community Health Workers
- 18.9 New jobs created in the Zone to date
- Total Zone FTE: 27.05 (all categories –New and Pre Zone)

RWJF County Health Rankings' model of population health improvement

Health outcomes
County's level of health

Health factors
Influences on County's health

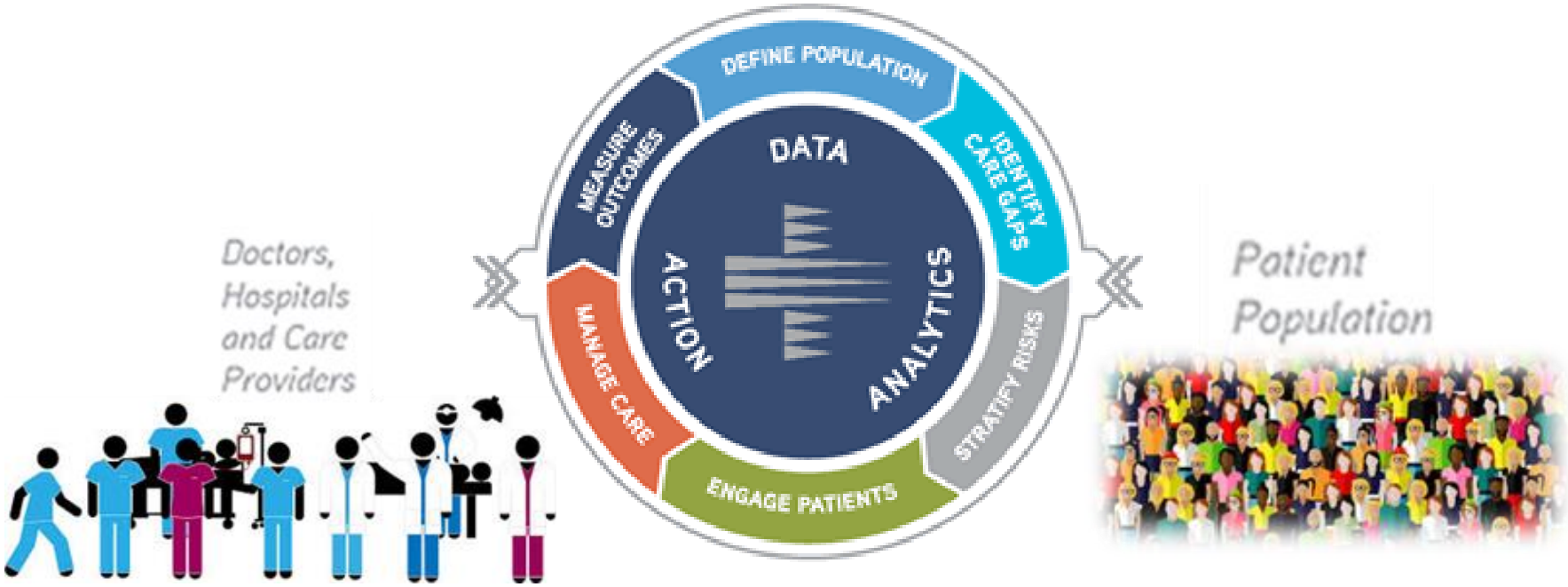
Level of intervention (pressure point):
- County
- Region
- State
- Nation



County Health Rankings model ©2012 UWPHI

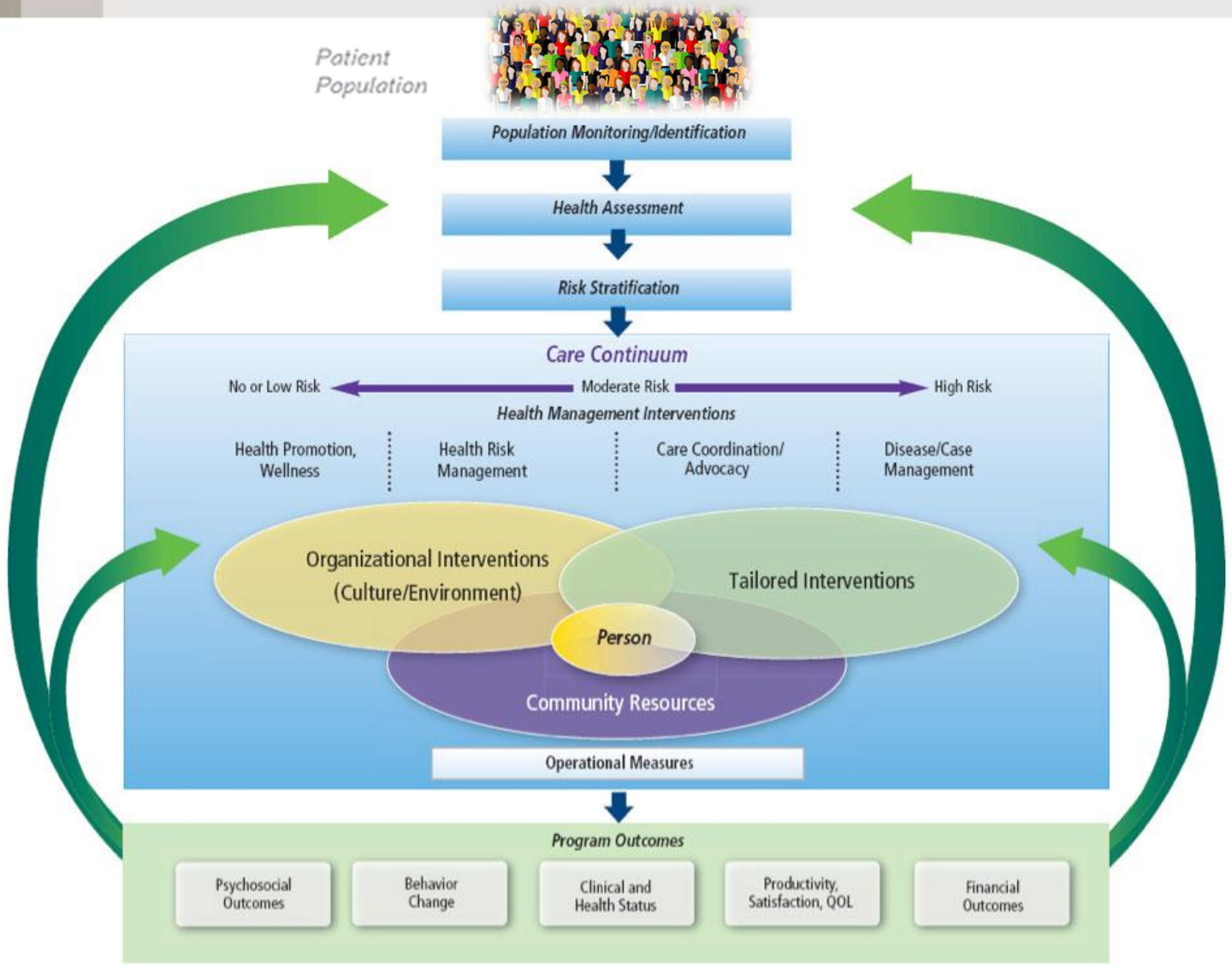
The Population Health Model

A well-developed care management program is the key to better outcomes and cost savings, especially in populations with chronic disease



http://www.urgentcareadvisors.com/population-health-management-vs-accountable-care-organizations/

Population Health Management

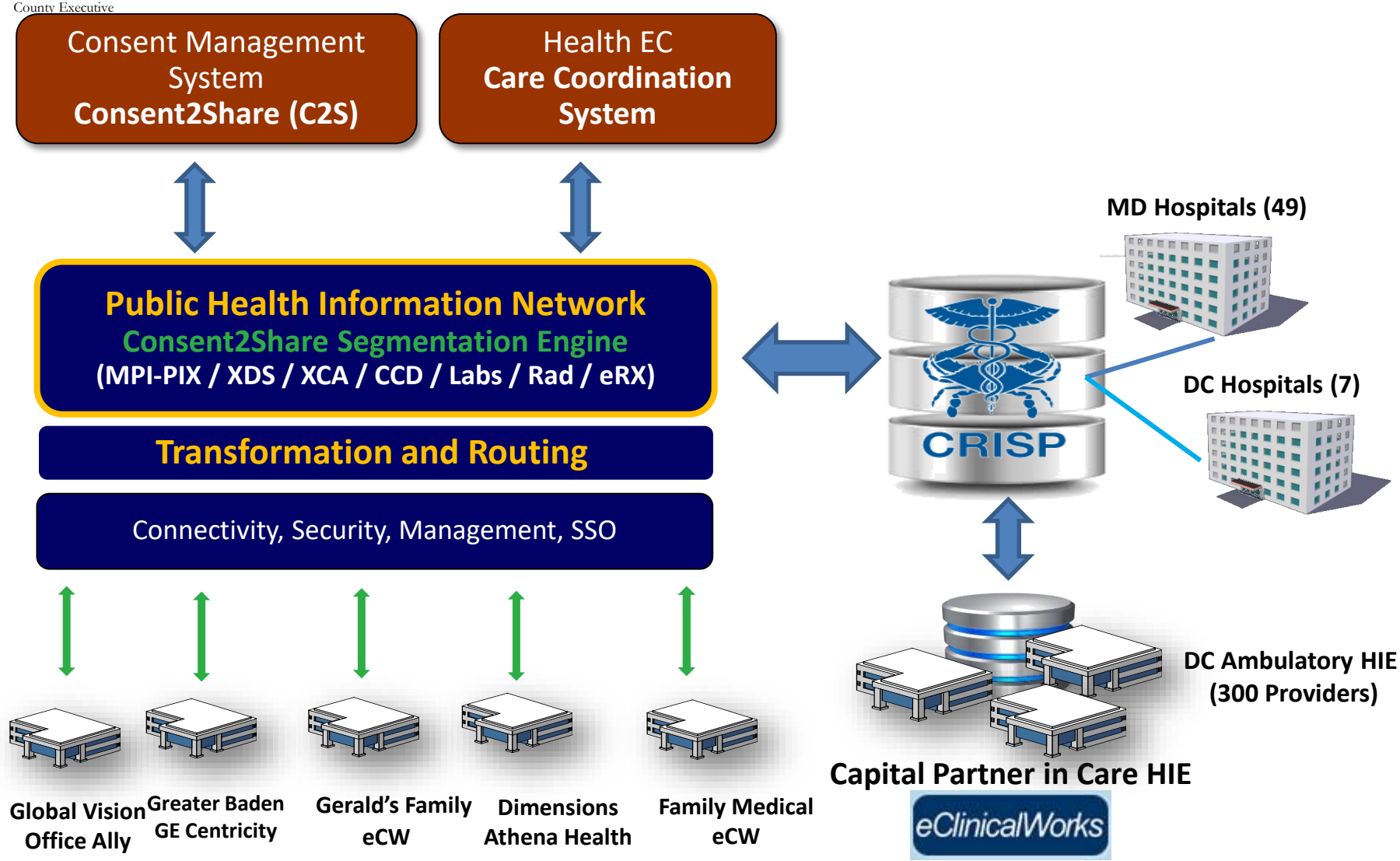


https://www.wellcentive.com/what-is-population-health-management/

Rushern L. Baker, III
County Executive

PGCHD: Public Health Information Network

Health Information Exchange



Care Coordination

OPPORTUNITIES AND SOLUTIONS: CARE COORDINATION

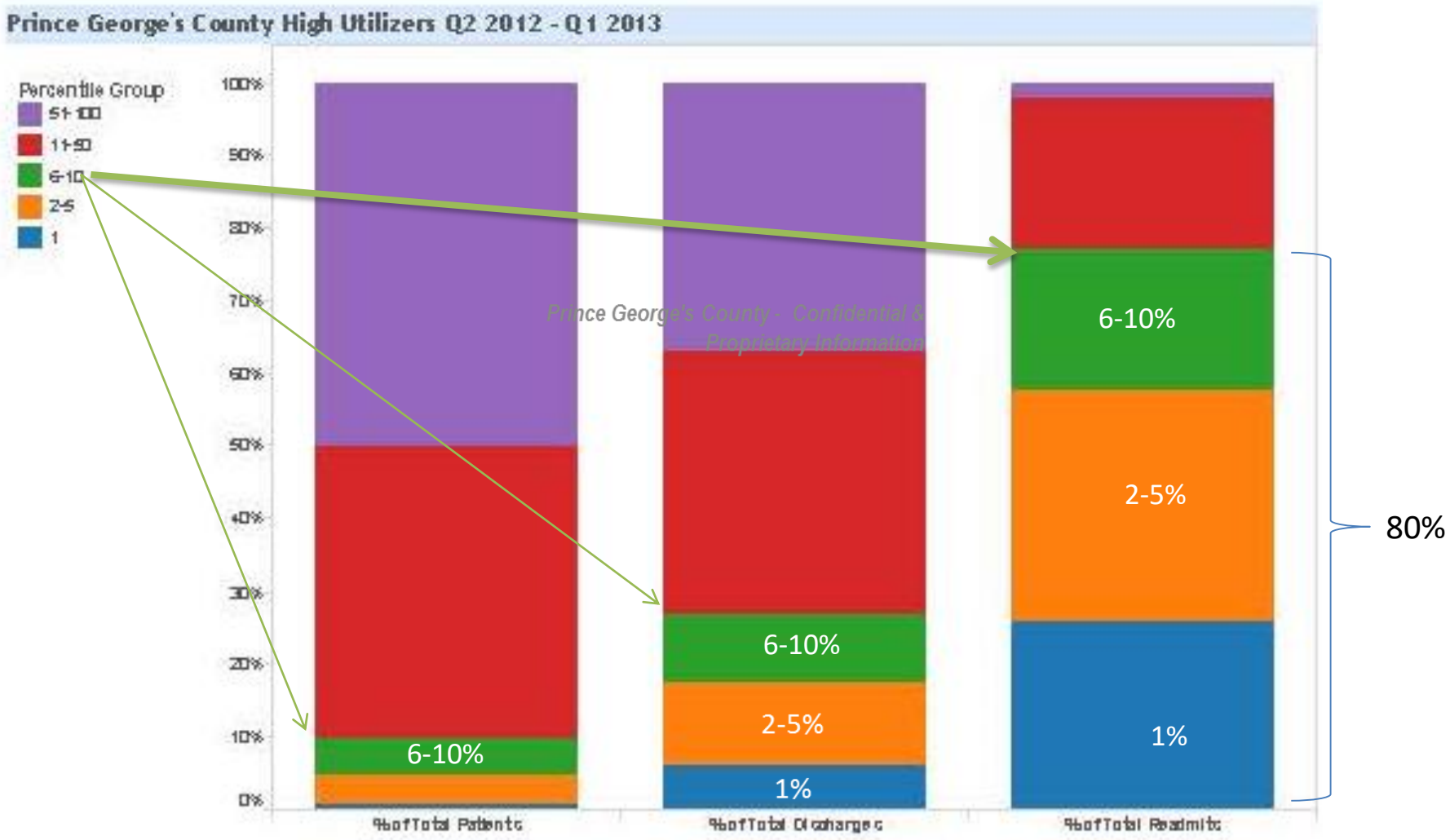
- Care coordination is a key strategy that has the potential to improve the effectiveness, safety, and efficiency of the American health care system*.
- Well-designed, targeted care coordination that is delivered to the right people can improve outcomes for everyone: patients, providers, and payers*.
- Must obtain data to identify your targeted population*.
- Prince George's County HEZ statistics (from CRISP data):
  - ✓ 10% of Prince George's County HEZ residents represent 80% of all readmissions at County hospitals
  - ✓ Approximately 270 patients are very high utilizers
  - ✓ In need of multiple services, i.e. social services, primary care, behavioral health services

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

Targeted Population

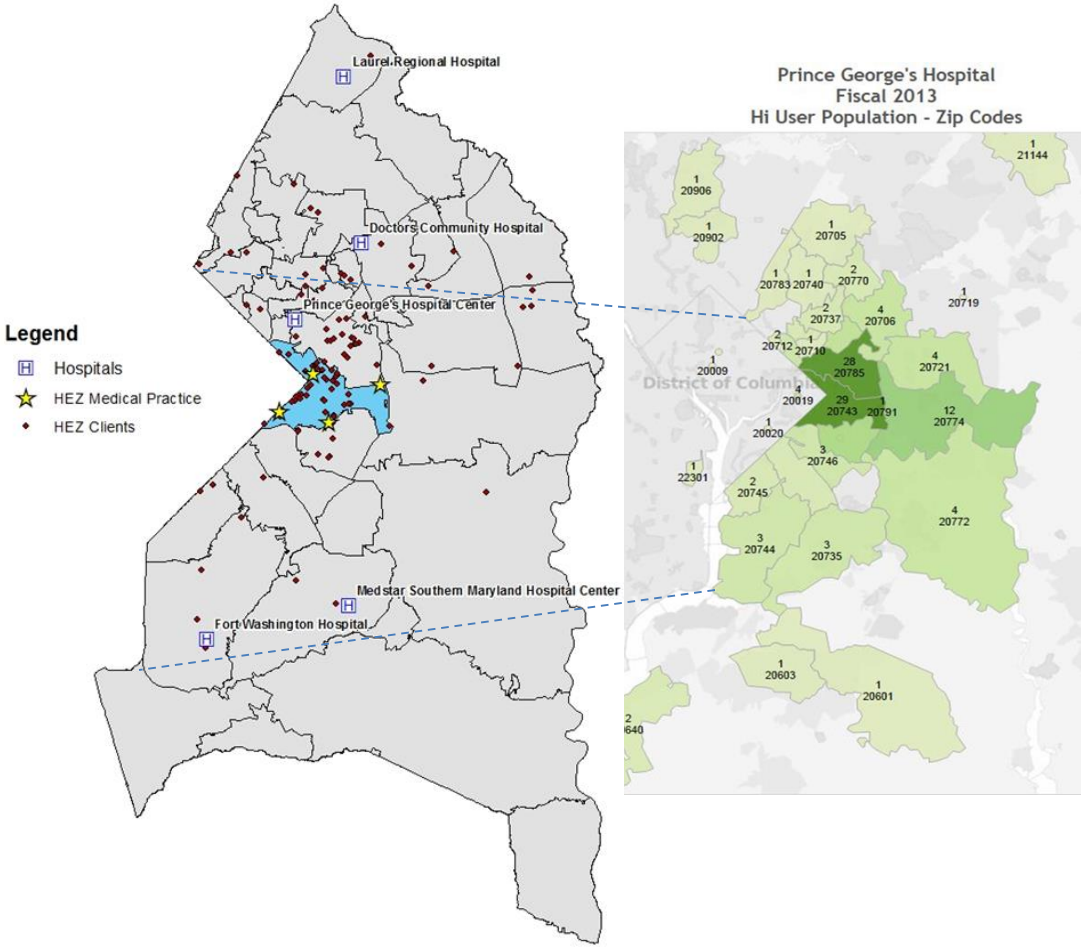
Care management and risk stratification infrastructure

Inpatient Utilization Data for HEZ - zip code 20743 from CRISP



Who we have served

- High risk patients in poor control of their chronic illness
- High risk patients needing connections to family and social services
- High risk patients with unmet behavioral health needs
- 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
- High risk patients with a hospital readmission within 30-days for the same condition
- Very high need patients who have 3 or more inpatient visits in one year
- Patients with multiple ED visits
- Patients with multiple 9-1-1 calls for non-emergent reasons



Community Care Coordination : Function

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 Management Team: Evidence-Based Care
Transitions and Care Coordination Across the Continuum of Care

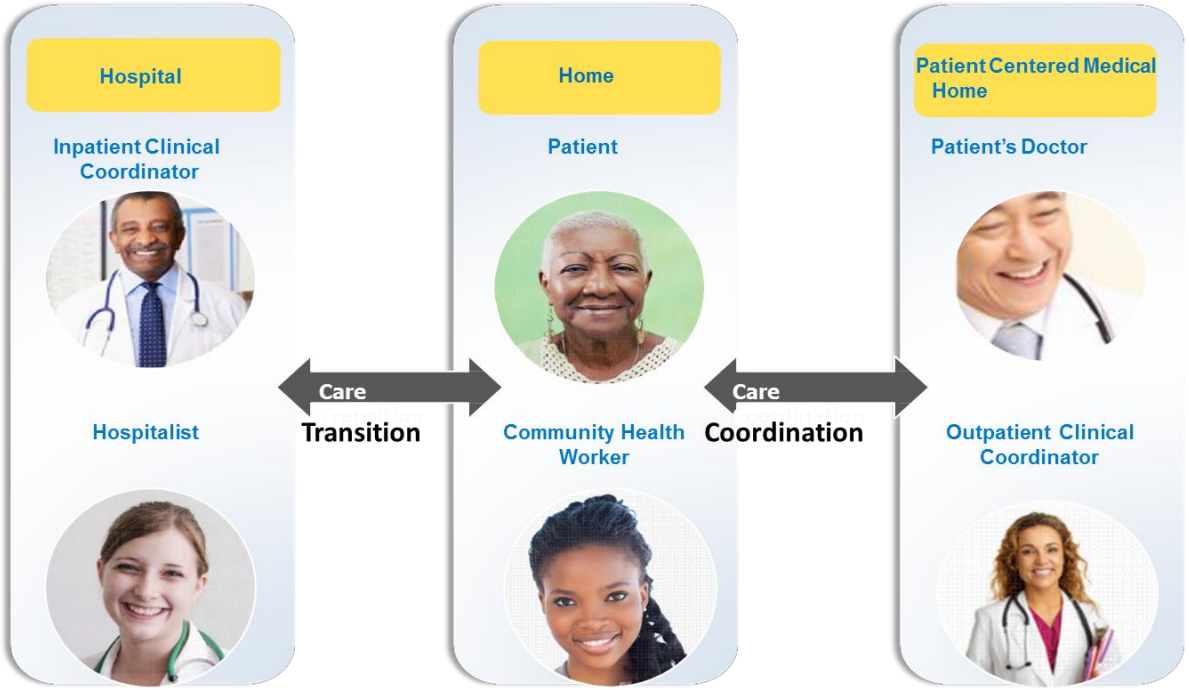
Quality Assurance

Care Coordination Management

Care management and risk stratification infrastructure

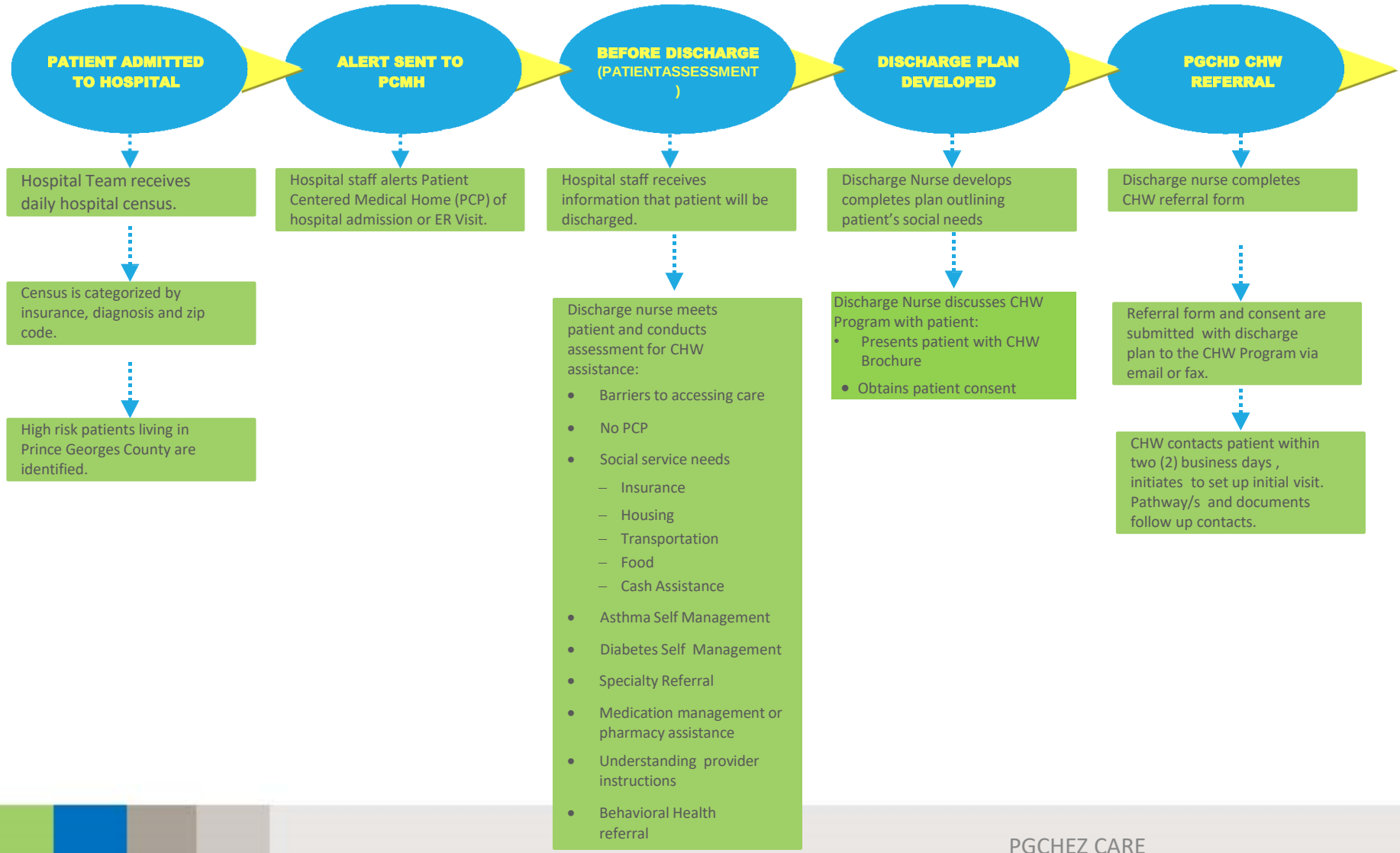
Managed partnership network

Cohesive delivery system



PRINCE GEORGE'S COUNTY HEALTH DEPARTMENT

HOSPITAL TRANSITION WORKFLOW



PRINCE GEORGE'S COUNTY HEALTH DEPARTMENT

PGH EMERGENCY DEPARTMENT (ED) TRANSITION WORKFLOW

ED Case Manager identifies high risk patients with the following criteria:

- Multiple emergency department visits
- No Primary Care Provider
- Need for community resources to manage illness/condition
- Complete CHW referral form (Intake Referral Checklist)
- Inform patient about the CHW Program
- Obtain CHW Consent
- Email or fax referral and consent to CHW Program

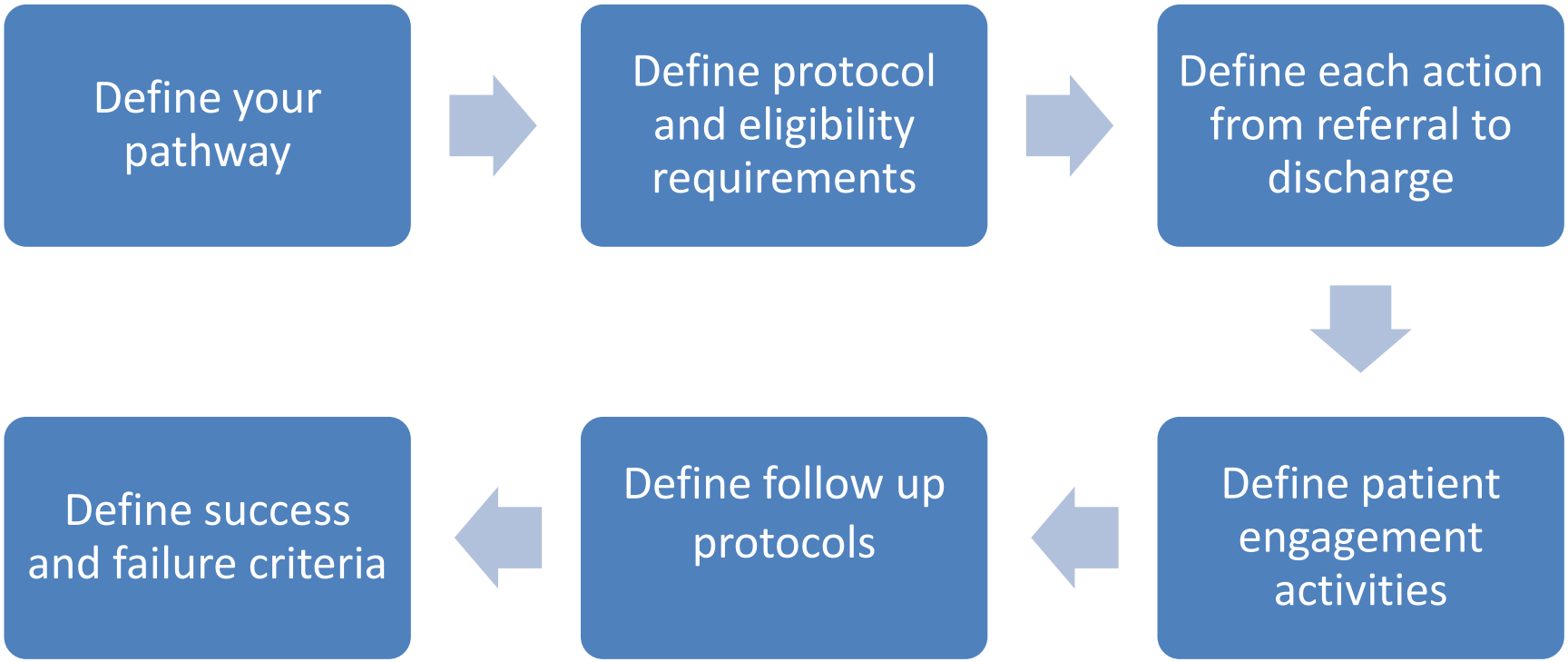
Community Health Worker (CHW) conducts assess-ment to identify:

- Barriers to accessing care
- Social service needs
  - Housing
  - Transportation
  - Food
  - Cash Assistance
- Asthma Self Mgmt
- Diabetes Self Mgmt
- Specialty Referral
- Medication management or pharmacy assis- tance
- Understanding provid-er instructions
- Need for Insurance coverage
- Domestic Violence
- Behavioral Health referral

- Link patient to PCP and schedule appointment
- Link patient to re-sources to address social and financial needs
- Provide patient with assistance in obtaining official documents
- For patients with non-urgent ED visits, pro-vide information and Resource list for:
  - Urgent care loca-tions
  - 24-hour medical advice lines
  - Preventive care tools for their chronic condition
  - PCMH evening and weekend hours

- Conduct Phone call 72 hours after initial visit
- Conduct Home visit 7 days after initial visit
- At each contact, re-view the patient's Pathway Goals and care assistance plans
- Document progress and follow up contacts
- Fax progress note to Hospital ED

Developing a Pathway



Pathway Objectives

- Achieve efficiencies by enabling all steps to be done within specified time frame
- Enable CHW to manage multiple clients in various stages of step completion over extended time via daily actions
- Serve as many clients as possible under CHW workload constraints.
- Increase value (outcome/cost) by reducing readmissions to emergency rooms
- Enable replicating to other contexts - requires standardization of activities and costing for VBPurchasing
- Enable prioritization of pathways- assigning credit to pathways relative to patient needs.

Services

CHWs assist individuals and communities with adopting healthy behaviors that promote, maintain, and improve individual and community health. Our CHWs have three distinct goals:

Connect and Assist
Provide and Improve
Utilize Evidence-Based Methodologies

Connect and Assist: CARE COORDINATION	Provide and Improve: HEALTH LITERACY	Evidence-Based: PATHWAYS
• Connect with patients • Identify unmet medical and social needs • Arrange and connect patients to doctors and other medical services • Connect patients to social services and community resources • Assist patients with getting what they need • Assist patients with taking better care of their health	• Educate patients on becoming self-advocates and active participants in their own healthcare • Provide tips to self– manage their condition. • Provide patients with information to help them better understand their condition • Educate patients on proper utilization of health care services – such as PCP vs. ED visit, because the best care does not always cost most • Help improve overall wellness	• Our community health workers use evidence based pathways that guide them in resource linkages, document contacts and tasks, track outcomes and report the services • Coordinate actions among multiple users that interact with the client • Measure, track and monitor individual progress utilizing Care Coordination System • Collect and aggregate data to provide analytics for overall supervision and management

Community Care Coordination Team (CCCT) – "Bridge Organization"

Managed partnership network

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.

- Identifies needs
- Sets coordination priorities
- Quality Assurance
- Establishes communications among stakeholders

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

Community Care Coordination Team

Managed partnership network

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

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

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

Organize

Communicate

Health & Human Services:
Health Department, Social Services, Family Services

Integrate

Associate

Primary Care Providers (PCMH)
- FQHC
- Private Practices

Cooperate

CCCT workflows focus on linkages to care and services

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

CCCT pathways ensure quality, evidence based practices

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

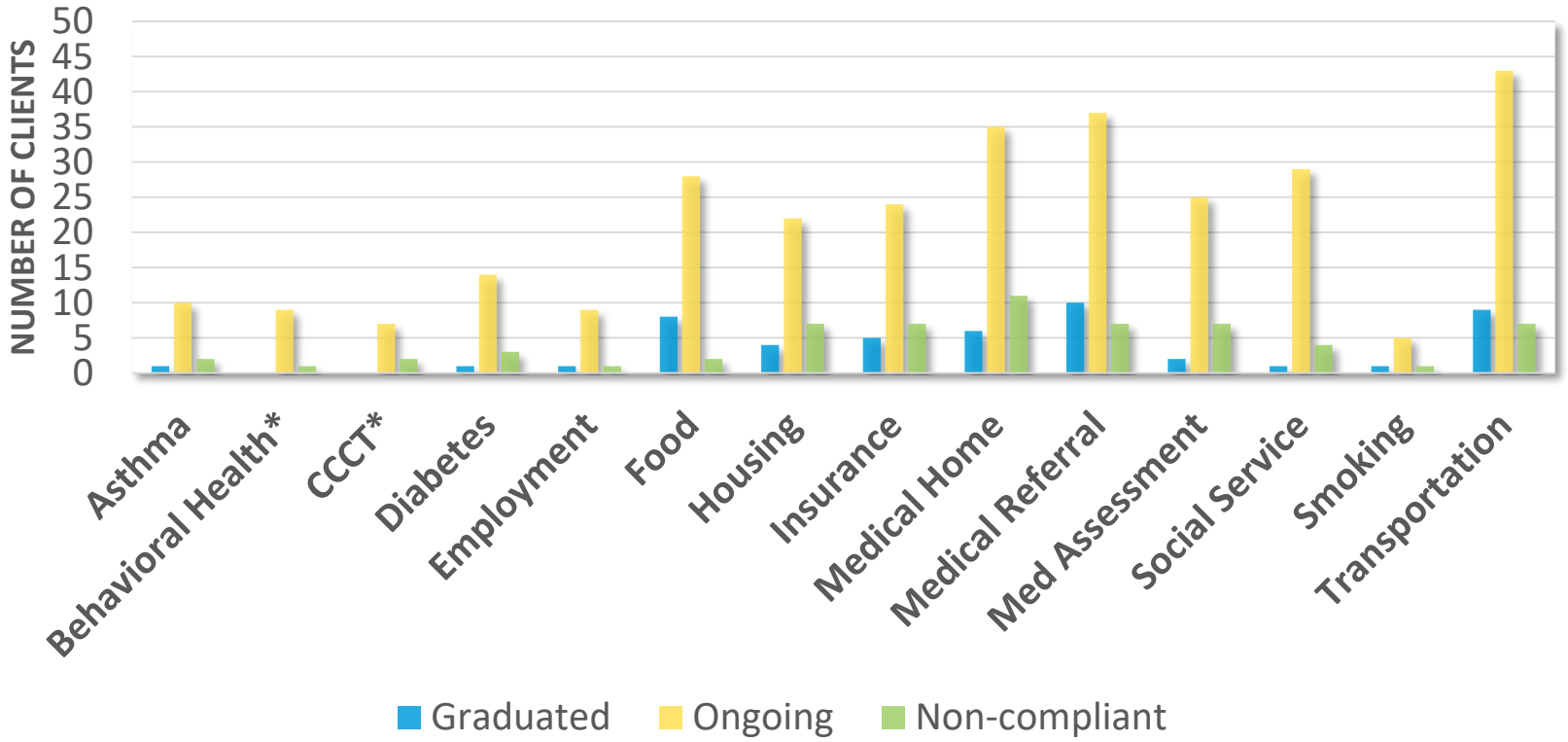
- At intake: Multiple needs, Illiterate, family abandonment
- Pathways Completed:
  - Medical home
  - Transportation
  - Medication Assessment
  - Medication Reconciliation/Pictorial Aids
  - Specialty referrals for home health, behavioral health, cardiology, pulmonology, nephrology, ophthalmology
  - 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-June 2016 HEZ Hospital Use Analysis: Characteristics

Status at 6 months post-enrollment	Graduated	Ongoing	Non-Compliant
Total	**27**	**85**	**31**
Average Age (years)	46.7	51.6	48.7
% Female	74%	61%	42%
% Black	85%	91%	90%
% seen at PGHC	70%	68%	71%
% seen at DCH	56%	67%	58%
Average # Pathway Issues	2.30	3.98	2.32

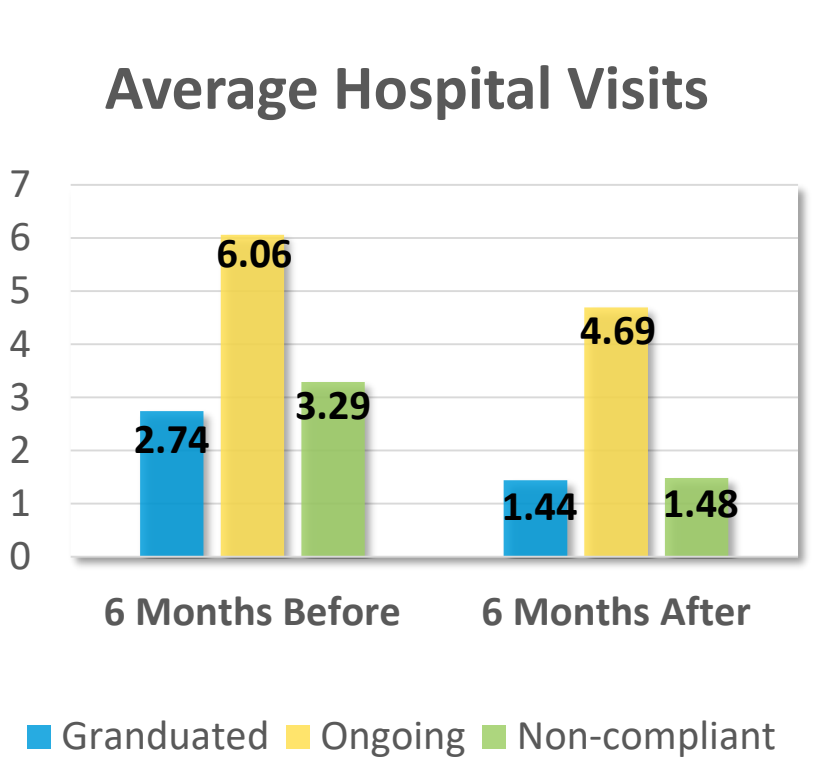
2015 – June 2016 HEZ Hospital Use Analysis: Pathway Issues Identified



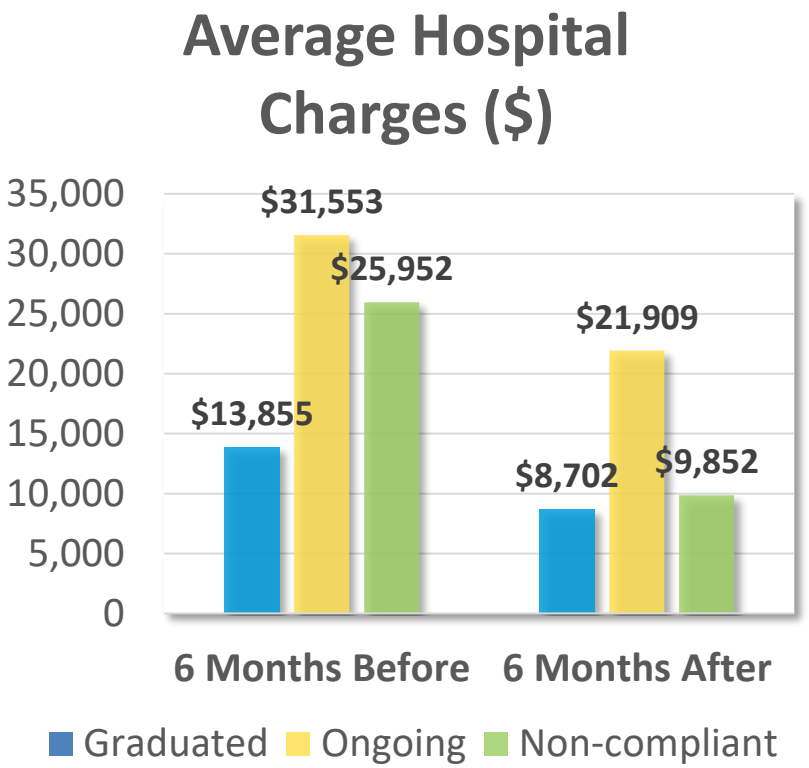
* Pathway started in 2016

2015 – June 2016 HEZ Hospital Use Analysis

N = 143 patients managed over an 18 month period



47.4%	22.6%	55%
Reduction in Visits		



37.2%	30.6%	62%
Reduction in Cost		

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.

Behavioral Health Intervention: Prime Time Sister Circles (PTSC)©

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

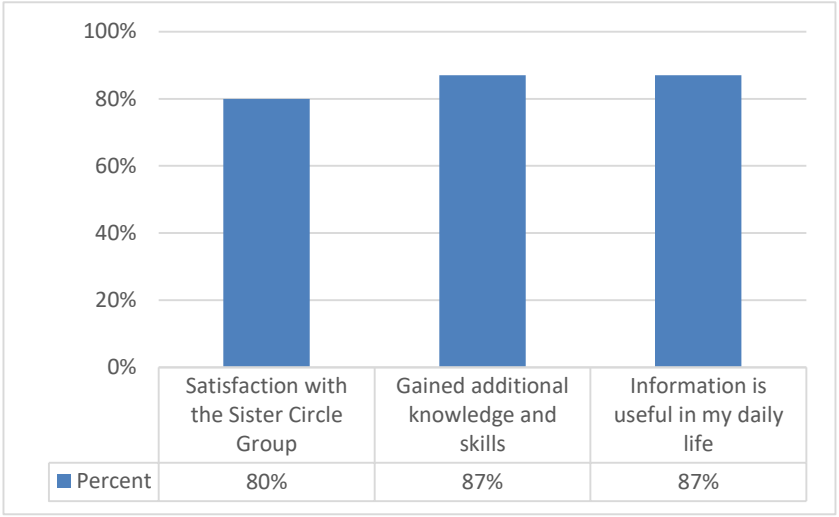
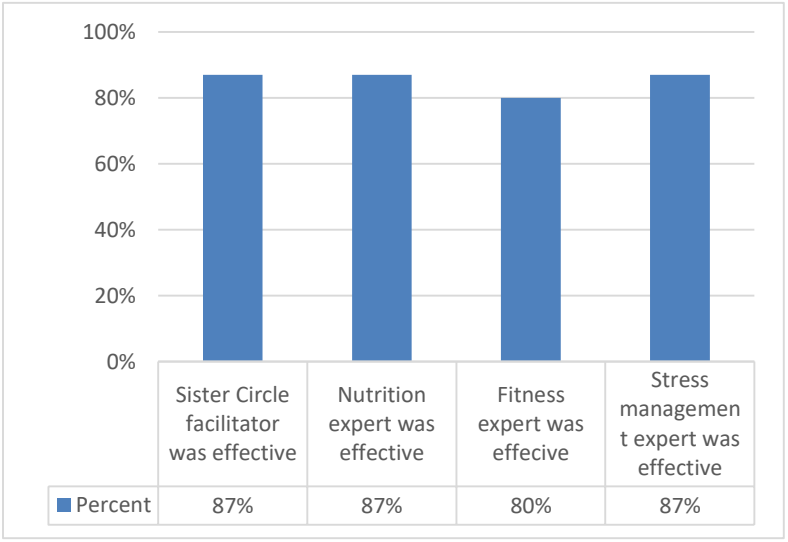


Figure 4. Participants' satisfaction with facility and experts



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, and Sustainability Challenges and Strategies.

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 "bridge" 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