MCHRC
MARYLAND COMMUNITY HEALTH RESOURCES COMMISSION

Community Health Resources Commission

December 6, 2018

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Community Health Resources Commission

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BACKGROUND ON THE CHRC

- The Community Health Resources Commission (CHRC) was created by the Maryland General Assembly in 2005 to expand access for low-income Marylanders and underserved communities.
- **Statutory responsibilities include:**
  - Increase access to primary and specialty care through community health resources
  - Promote emergency department diversion programs to prevent avoidable hospital utilization and generate cost savings
  - Facilitate the adoption of health information technology
  - Support long-term sustainability of safety net providers

BACKGROUND ON THE CHRC

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MARYLAND COMMUNITY HEALTH RESOURCES COMMISSION

- **Eleven Commissioners of the CHRC are appointed by the Governor.**

Allan Anderson, M.D., Chairman

Elizabeth Chung, Vice Chair, Executive Director, Asian American Center of Frederick

Scott T. Gibson, Vice President for Human Resources, Melwood Horticultural Training Center, Inc.

J. Wayne Howard, Former President and CEO, Choptank Community Health System, Inc.

Celeste James, Executive Director of Community Health and Benefit, Kaiser Permanente of the Mid-Atlantic States

Surina Jordan, PhD, Zima Health, LLC, President and Senior Health Advisor

Barry Ronan, President and CEO, Western Maryland Health System

Erica I. Shelton, M.D., Physician and Assistant Professor, Johns Hopkins University School of Medicine, Department of Emergency Medicine

Ivy Simmons, PhD, Clinical Director, International Association of Fire Fighters Center of Excellence

Julie Wagner, Vice President of Community Affairs, CareFirst BlueCross BlueShield

Anthony C. Wisniewski, Esq., Chairman of the Board and Chief of External and Governmental Affairs, Livanta LLC

IMPACT OF CHRC GRANTS

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- Since 2007, CHRC has awarded 210 grants totaling $64.1 million. Most grants are for multiple years. CHRC has supported programs in all 24 jurisdictions.

- These programs have collectively served over 458,000 Marylanders. Most individuals have complex health and social service needs.

- Grants awarded by the CHRC have enabled grantees to leverage $23 million in **additional** federal and private/ nonprofit resources.

- **Of this $23 million, more than $19M has been from private and local resources.**

IMPACT OF CHRC GRANTS

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Reducing avoidable hospital utilization

ESPERANZA CENTER
CATHOLIC CHARITIES IN ACTION

Esperanza Center, a free clinic in Baltimore - A program to expand service capacity at their free clinic in Baltimore City. The project outcomes included essential health services for more than 5,315 individuals and cost savings/avoided charges of $2.3 million.

CALVERT COUNTY HEALTH DEPARTMENT

Calvert County Health Department - “Project Phoenix,” a program to provide substance use treatment services, including medications, and address the social determinants of health impacting individuals with substance use disorders. The average number of ED visits dropped more than 70%, from 1.57 visits per participant to 0.45 visits per participant. In light of the reductions in avoidable hospital costs, Calvert Memorial Hospital is providing financial support for implementation of the program.

IMPACT OF CHRC GRANTS

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Improving clinical health outcomes.

SHEPHERD'S CLINIC
Health Care for the Uninsured

Shepherd's Clinic - Diabetes self-management program, providing services to 390 pre-diabetic and diabetic patients. Regular clinical measurements indicated that 66% lost weight and 70% had a reduced A1C. Among patients who participated in diabetes prevention counseling, just one patient converted to a diagnosis of diabetes.

Mary's Center for Maternal and Child Care, Inc. - Prenatal care and women's health program aimed at improving birth outcomes and reducing infant mortality in Prince George's County. Served 3,000 women. The percentage of women in the program receiving prenatal care in the first trimester increased from a baseline of 63.6% to 74%. Those in the program delivering low-birth weight babies (2,500 grams or less) was 5% (the rate in Prince George's County is 9.1%, and the state is 8.6%).

The Problem with ROI:

Challenges in Capturing Savings due to Investments in Public Health and Social Determinants of Health

Dylan H. Roby, Ph.D.

Associate Professor and Associate Chair, Department of Health Services Administration

University of Maryland School of Public Health

Return-on-Investment (ROI)

- Typically, ROI is used to summarize the benefit to a business of making a specific investment
- It is an estimate of the degree of profitability, not the profit itself, so we can compare across investments
- For example, we typically see ROI calculations based on the % of the investment returned over a specific time period (i.e. profit)
  - A $1000 investment that doubled in value to $2,000 would have an ROI of 100%
    - (Final Value of Investment – Original Investment) / (Original Investment)

Some Investments are straightforward…

- Unfortunately, investments in health and social determinants are not.
- There is no easy way to measure “profit”
- Unlike investments, there are unknown offsetting costs and benefits
- Any “profit” may not accrue to the investor
- That profit is unlikely to accrue immediately or within a short period of time
- In the case of investments made by governments, hospital systems, health care providers, communities to improve health and social welfare it is more useful to think about:

Social Return on Investment (SROI)

Social Return on Investment (SROI)

- Rather than only applying direct savings in your calculation, we should also give credit to interventions for:

1) Immediate societal benefits

- Presenteeism and absenteeism, increased wages/productivity, etc.

2) Benefits that accrue over the long-term

- Reduced mortality and morbidity
- i.e. health insurance coverage and access improves child development, educational achievement, and reduces future reliance on public programs

3) Offsetting changes in spending and/or use of services

- An intervention that reduces hospitalizations may increase primary care service use and prescription drug use, which means the direct savings accrued to the program must deduct those new costs to the system from the net savings.

One of the Best Examples of Positive ROI: Childhood Vaccinations

- Evidence suggests that spending on childhood vaccines returns substantial benefit in reduced illness and costs to the health care system for treating those illnesses
  - ROI = 1600% if we count cost of vaccines, supply chain, and service delivery and compare it to the cost of treating averted illness, (Ozawa, et al. *Health Affairs*, 2016)
- If we use a "full-income" approach where we count the value of longer, healthier lives (i.e. the societal benefits of averted illness and improved health), the ROI is much higher.
  - ROI = 4400% (for every $1 spent, we generate $44 of societal/economic good), (Ozawa, et al. *Health Affairs*, 2016)

Challenges with ROI

- Assumptions are clear with vaccines due to knowledge of effectiveness and impact of “absence” of disease
- In other wellness-related investments, the costs, effectiveness, time horizon, and environmental factors are less predictable
  - An employee wellness program may only run for one-year, could affect only 10% of employees, and have uncertain results
  - Interventions do not occur in a vacuum
  - Wellness gains (reduced rate of obesity, improved physical activity) unlikely to pay off in decrease heart attack, hypertension, and diabetes risk for 10+ years
- Offsetting costs and unintended consequences
  - When the flu vaccine is not a good match for the virus in a given year, the ROI is -2100% (Masters, et al. *Journal of Epidemiology and Community Health*, 2017)

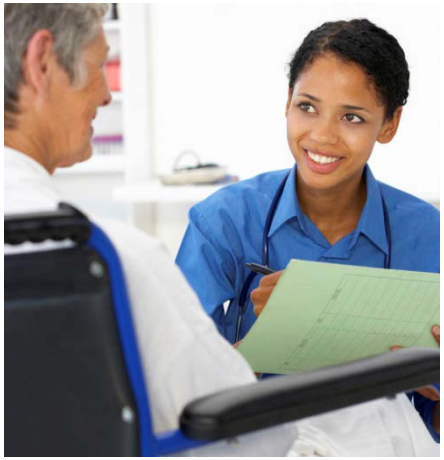
Using ROI in Delivery Systems

- By constraining time period and activities, the ROI can be easier to capture and calculate
  - However, unknown or immeasurable additional savings and spending may occur outside of the system
- Interventions focused on a specific, high-risk population can result in immediate returns in the form of avoided inpatient/emergency services
  - Need to be cautious about offsetting use (i.e. long-term care outside of the hospital, outpatient services, pharmacy, etc)
  - Savings may accrue in the short-term to other parts of the system (i.e. insurance companies, hospitals under shared savings arrangements, state government, federal government).
  - In these cases, the ROI may not be re-invested into population health
- Expanding programs to larger populations without acute needs and unpredictable risk, ROI is reduced

Final Thoughts

- Relying on ROI can reduce incentive to invest in solutions with long-term impacts that do not immediately accrue to the investor
  - Housing
  - Education
  - Healthy Eating and Wellness
  - Built Environment
- Short-term quality improvement and care coordination programs focused on specific populations can demonstrate ROI quickly and part can be captured by the investor/funder
- When engaging in budgeting, we are short-sighted
  - Cutting public health programs in one-year may allow for one-time budgetary savings (i.e. averted spending by the agency), but could have negative long-term impacts

Return on Investment from High-Utilizer and Social Determinant Interventions: Maryland Success Stories

Office of Minority Health and Health Disparities'
15th Annual Health Equity Conference,
Achieving Health Equity and Disparity Reduction: Prevention and Cost Savings Initiatives,
December 6, 2018

Ernest L. Carter MD PhD
Deputy Health Officer

Rushern L. Baker, III
County Executive

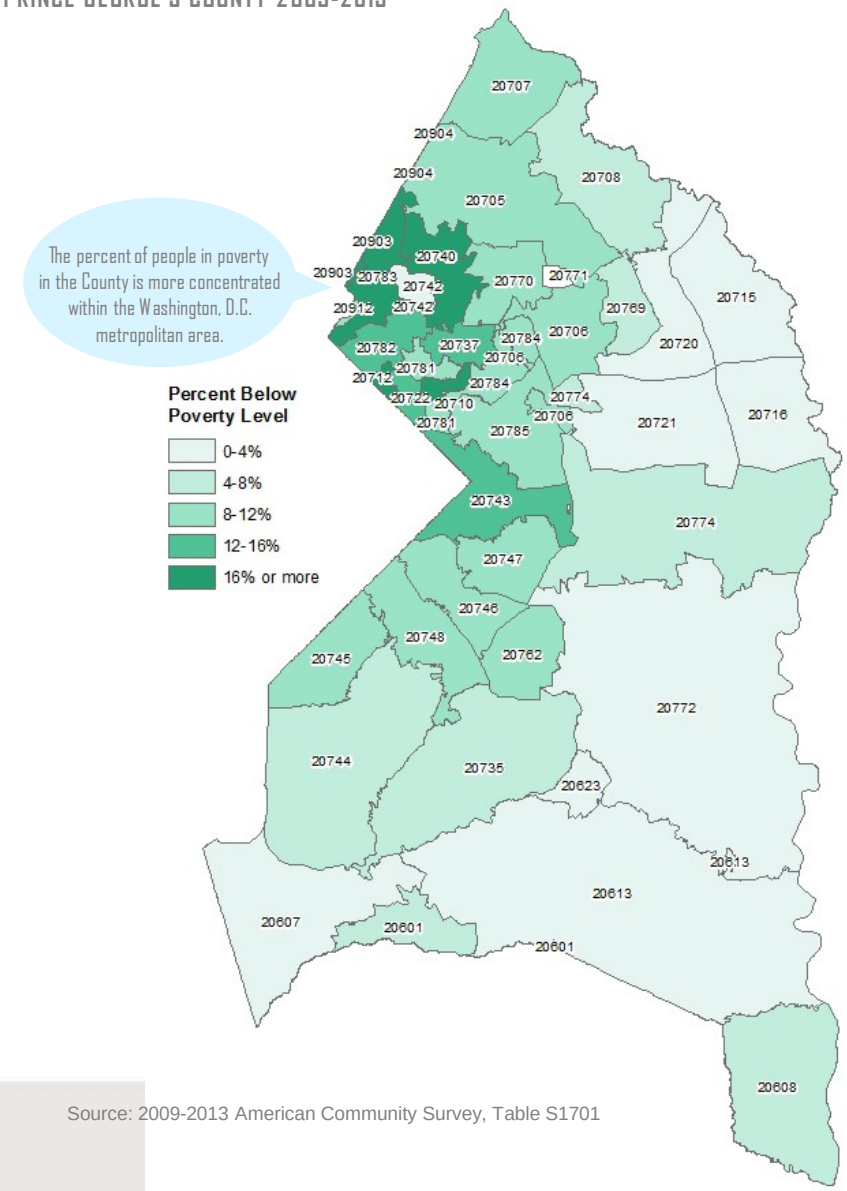
HEZ Overview: The Need

- 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

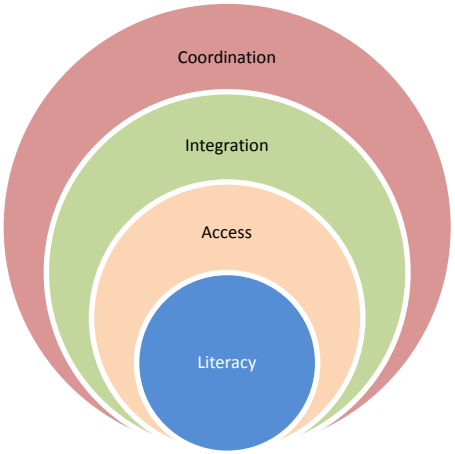
RESIDENTS LIVING IN POVERTY IN THE PAST 12 MONTHS BY ZIP CODE, PRINCE GEORGE'S COUNTY 2009-2013



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:
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

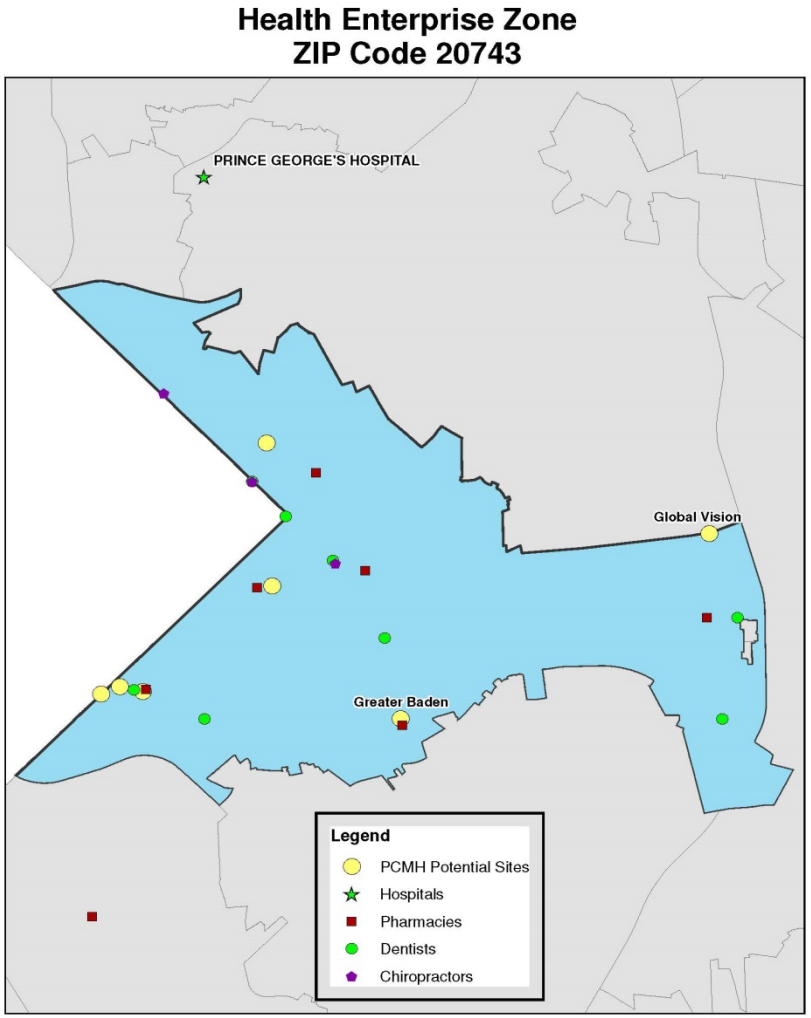
- 4.4 New Zone providers; 4.2 existing = 8.6 practitioners (MDs, PAs, NPs and nurse midwife)
- 4.9 New licensed health care providers (RNs, LPNs, social workers, CMAs, and certified counselors)
- 13.50 New and other licensed health care practitioners (All Practitioners)[7]
- 5 Full-time Community Health Workers
- 18.9 New jobs created in the Zone to date
- Total Zone FTE: 27.05 (all categories –New and Pre Zone)

1. Identify patients with persistent, high and preventable utilization of ED and hospital inpatient services who either:

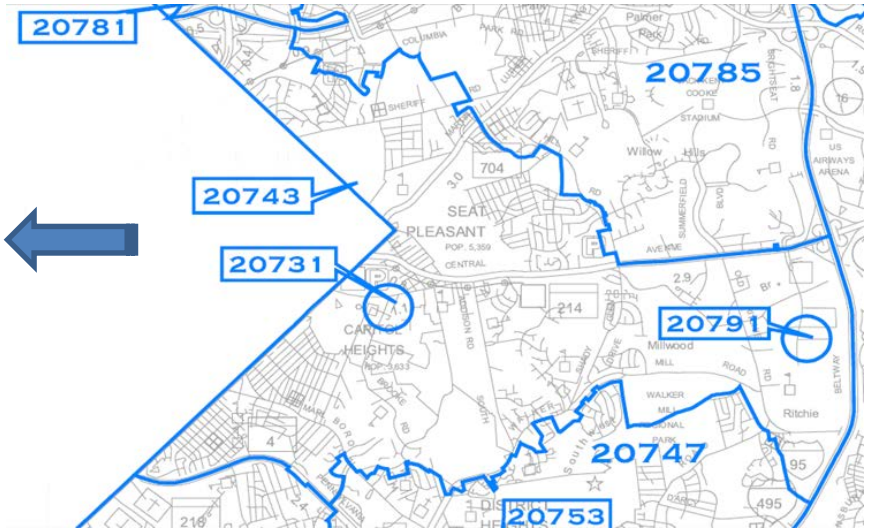
    a) have preventable disease decompensation that requires ED/hospital care, or

    b) use the ED for more minor conditions because primary care alternatives are unavailable, inconvenient, or unknown

Increase Access:
Capital Heights: zip code 20743



Density Map of HEZ

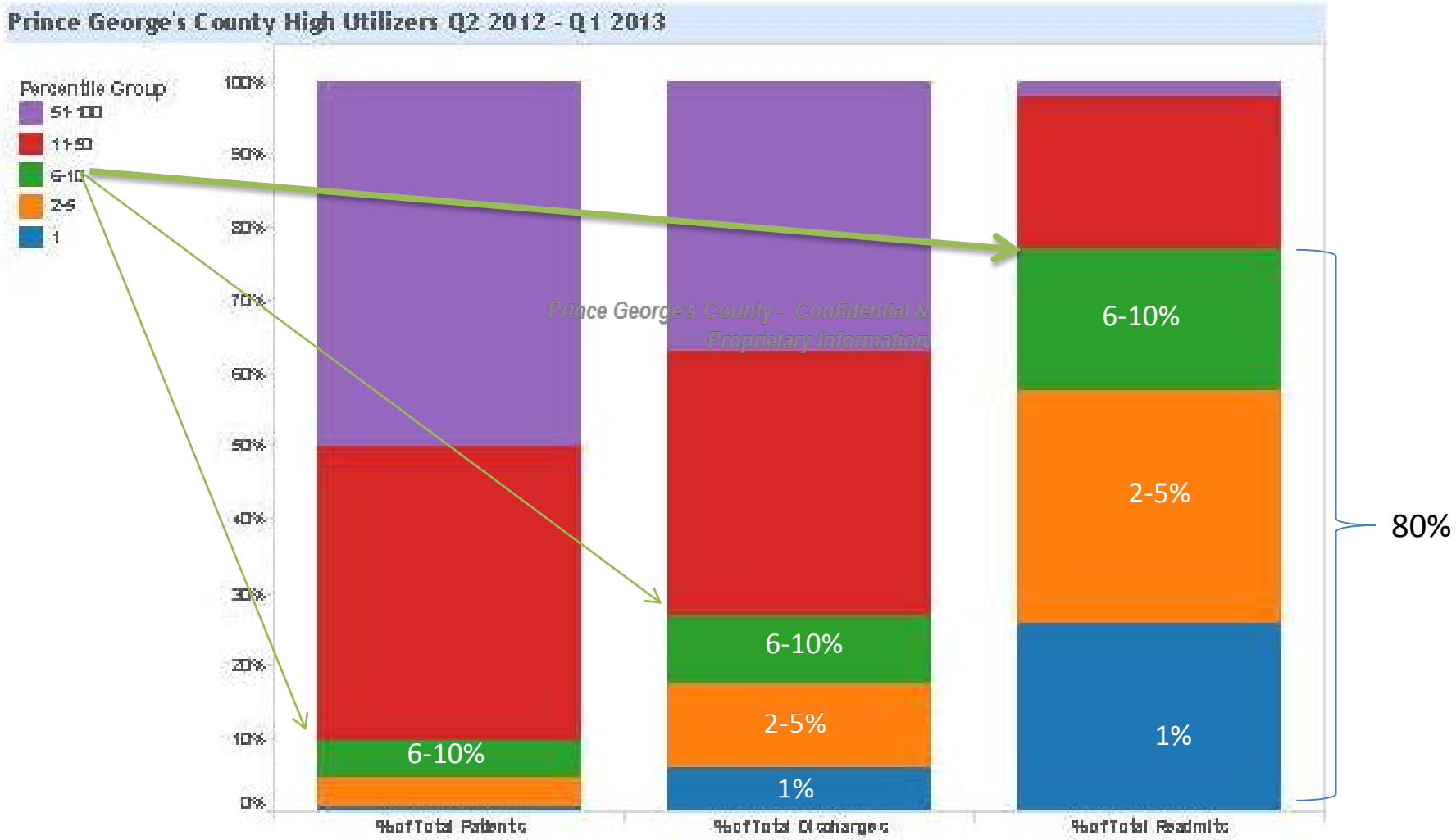


- Kingdom Square: Capitol Heights
- Southern Capitol Heights
- Coral Hills
- Seat Pleasant
- Fairmount Heights

Targeted Population

Care management and risk stratification infrastructure

Inpatient Utilization Data for HEZ - zip code 20743 from CRISP



% Total Patients

% Discharges

% Readmissions

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**

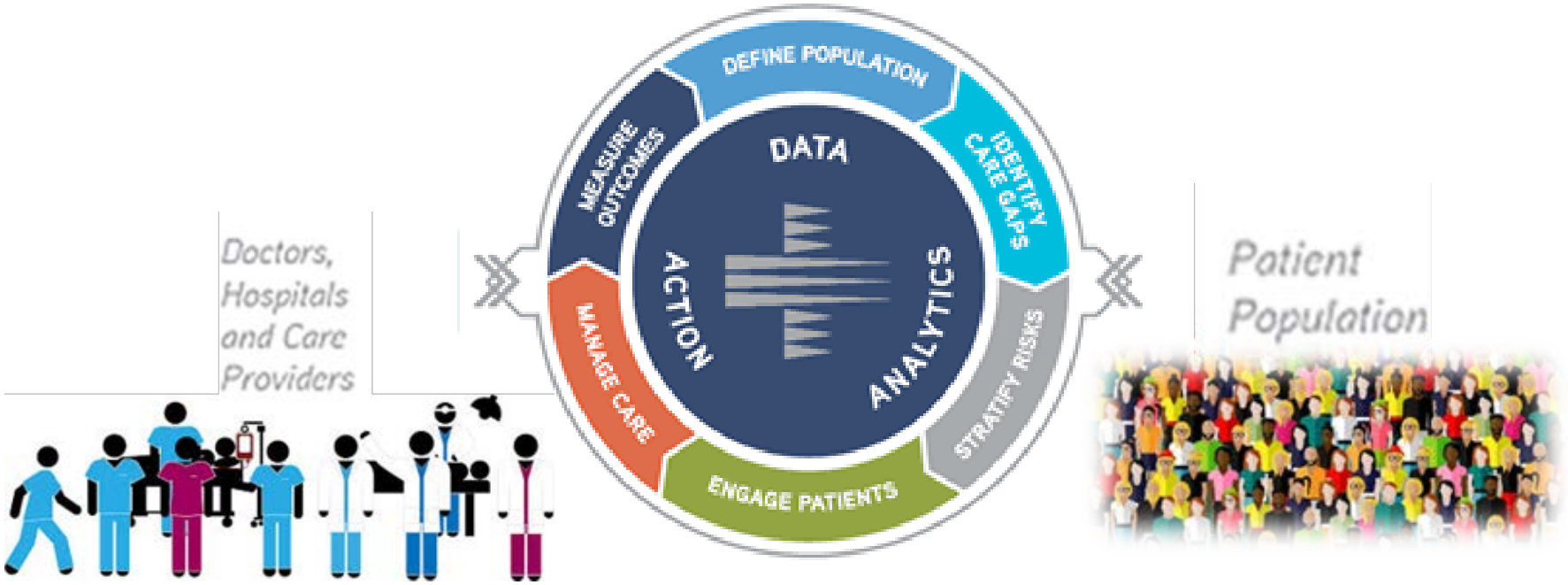
2. Develop effective interventions to reduce preventable utilization of ED and hospital inpatient services among high utilizers by

a) providing disease management support to prevent disease decompensation, and/or

b) increasing availability, convenience, knowledge of, and use of primary care alternatives for minor medical conditions.

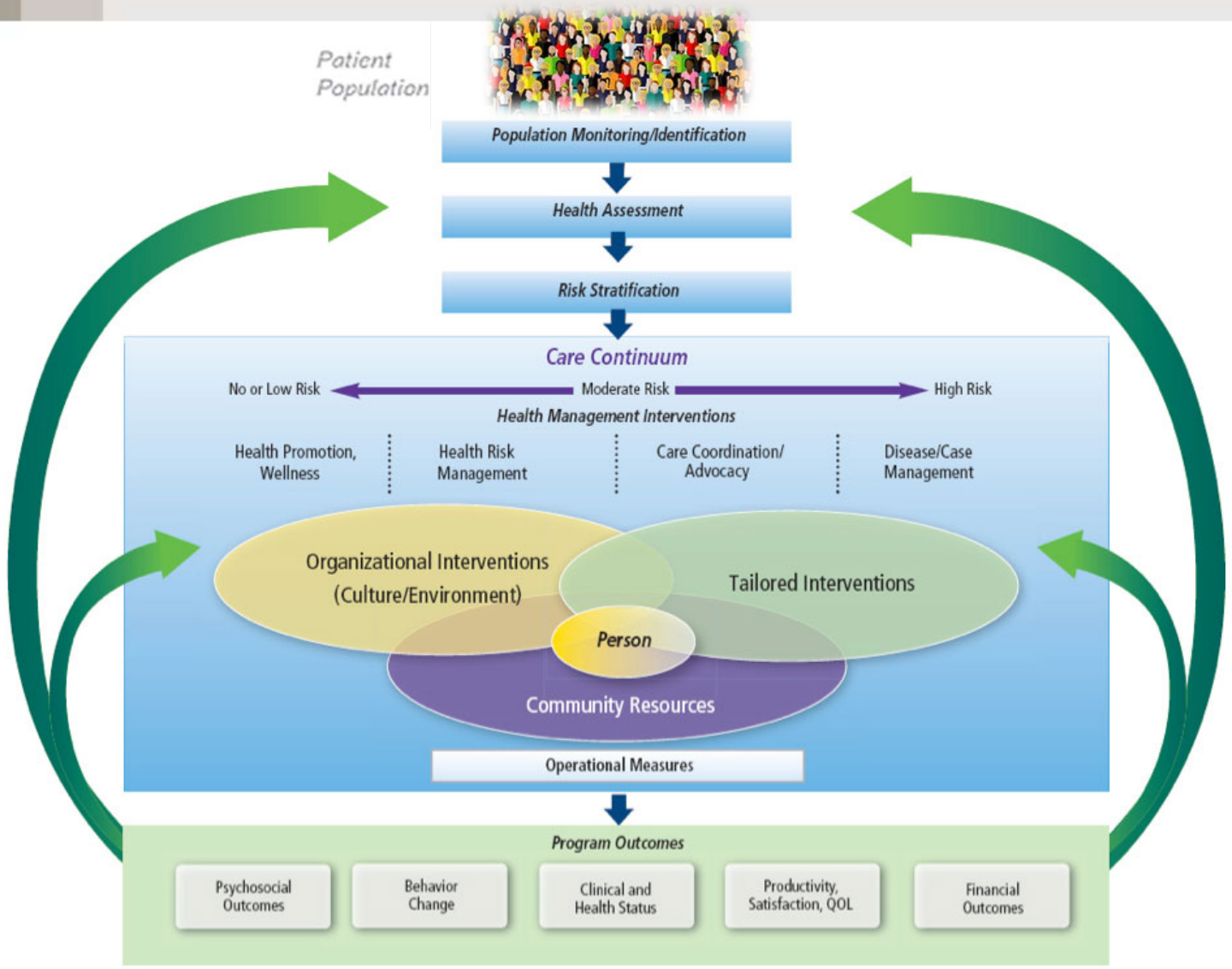
The Population Health Model

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/

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

Primary Care Providers (PCMH)
- FQHC
- Private Practices

Integrate

Associate

Family
Nurse Coordinator
Community Health Workers
Social Workers
Care Coordinators
Dieticians
Pharmacists
Behavioral Health
Health Literacy
Fire/EMS
Home Health
O/O
Payers

Bridge

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

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

Bridge

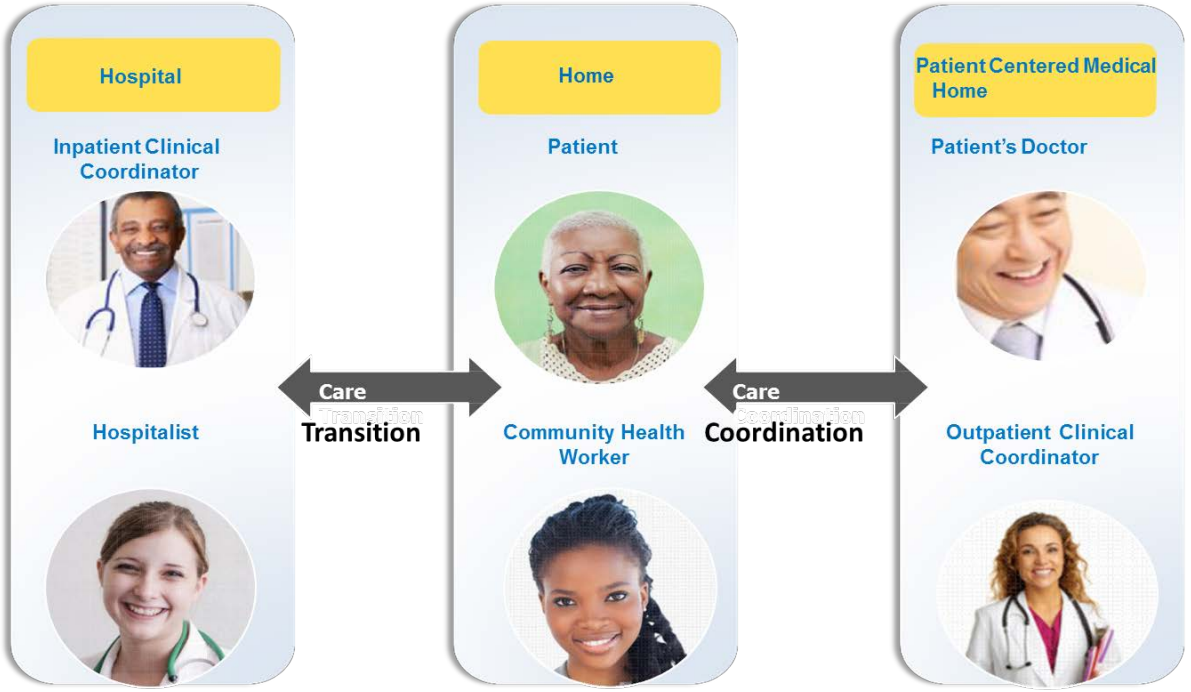
Quality Assurance

Care Coordination Management

Care management and risk stratification infrastructure

Managed partnership network

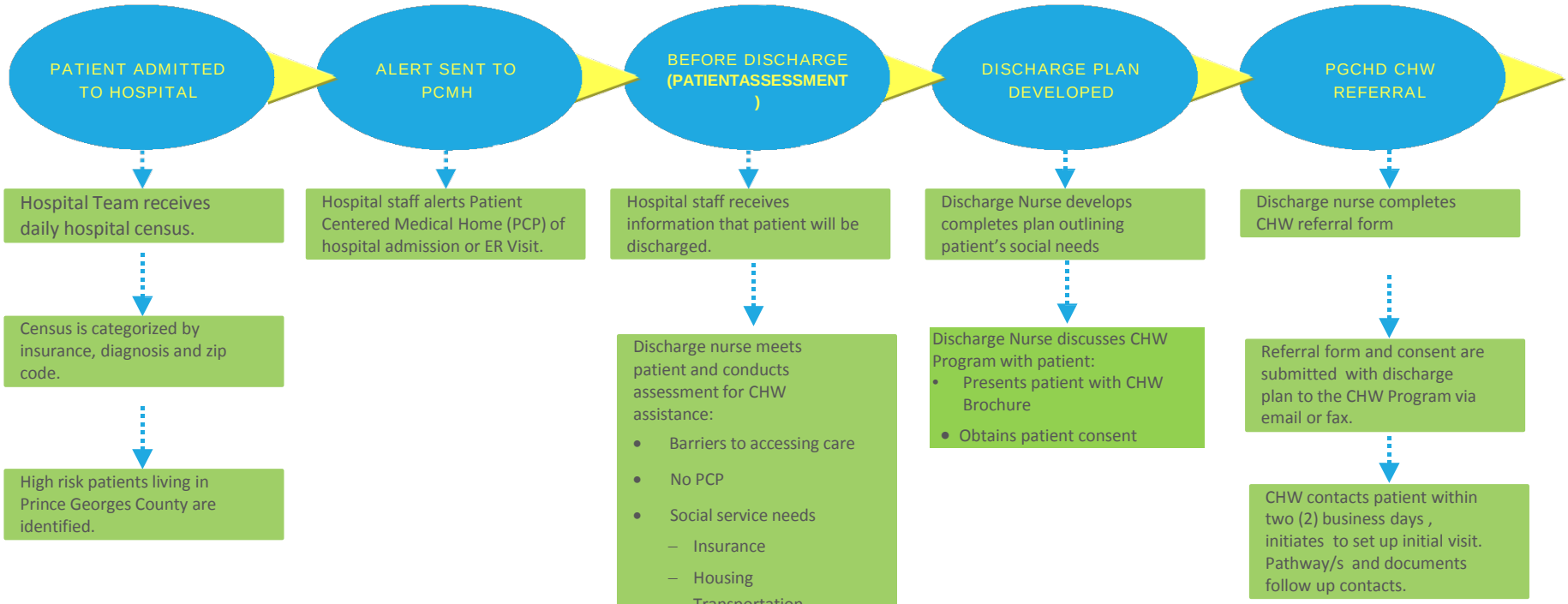
Cohesive delivery system



3. Document the health benefits of interventions and the cost-effectiveness of the intervention

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

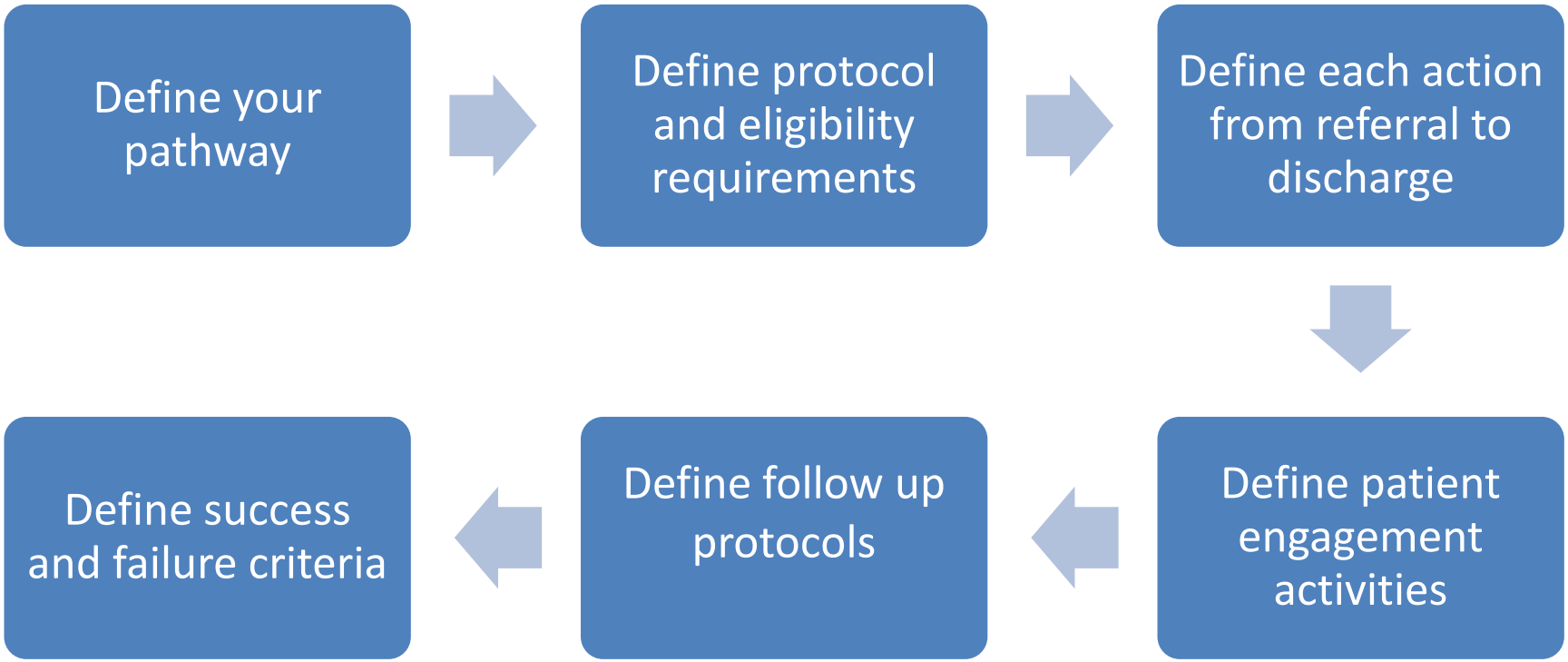
Community Health Worker (CHW) conducts assess-ment to identify:

- 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

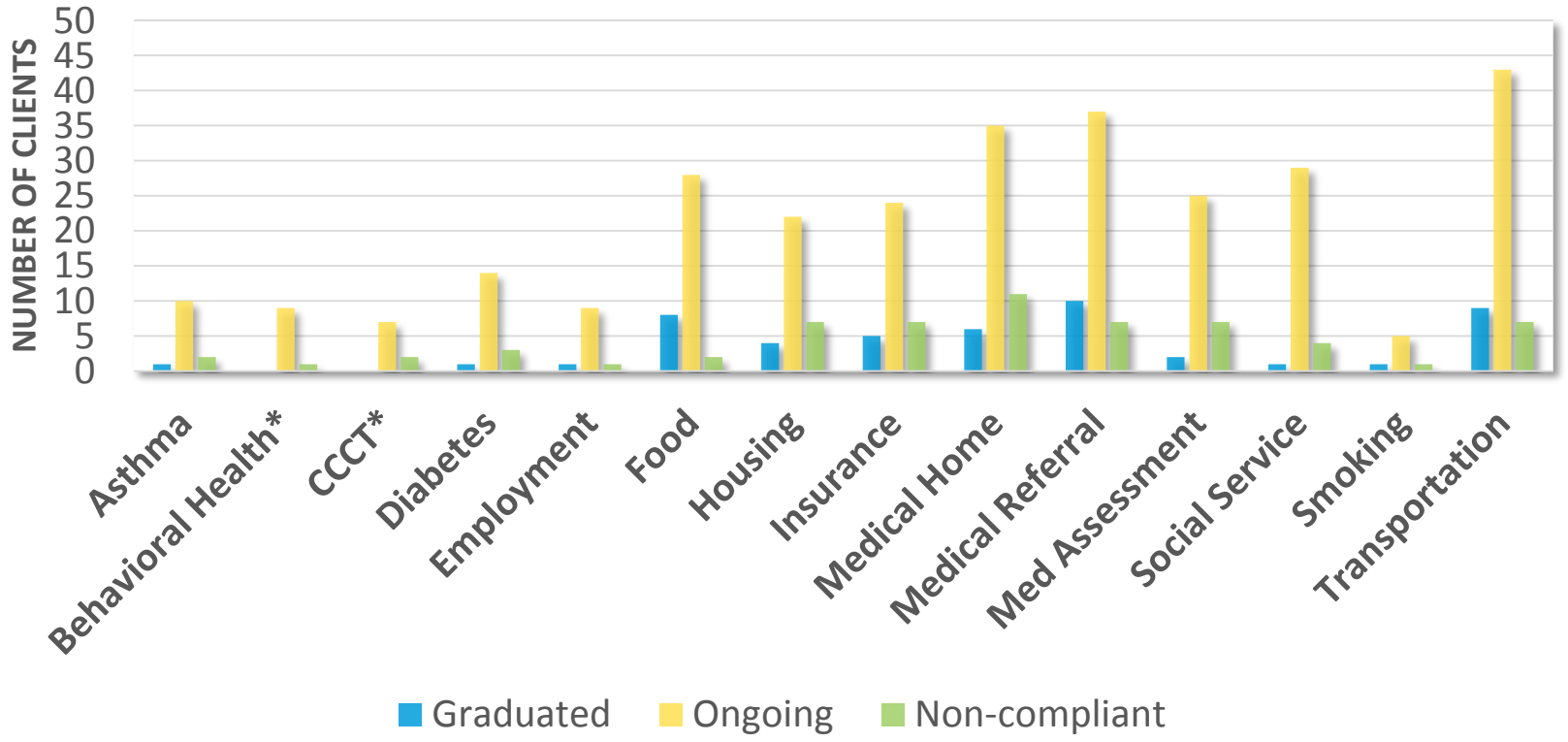
Developing a Pathway



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 Value Based Purchasing
- Enable prioritization of pathways- assigning credit to pathways relative to patient needs.

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

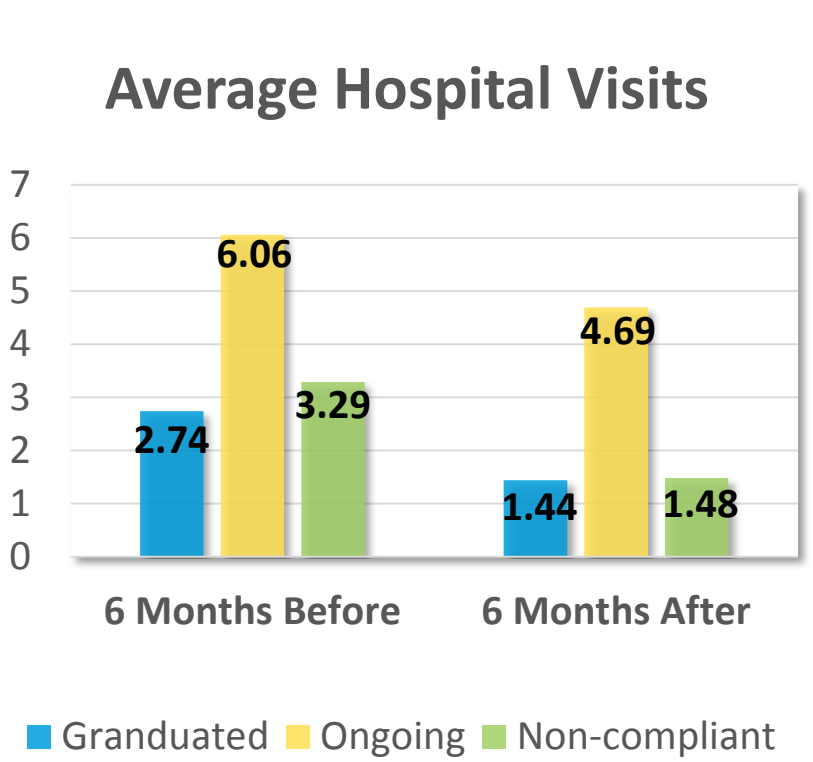


* Pathway started in 2016

4. Compute the return on investment from interventions

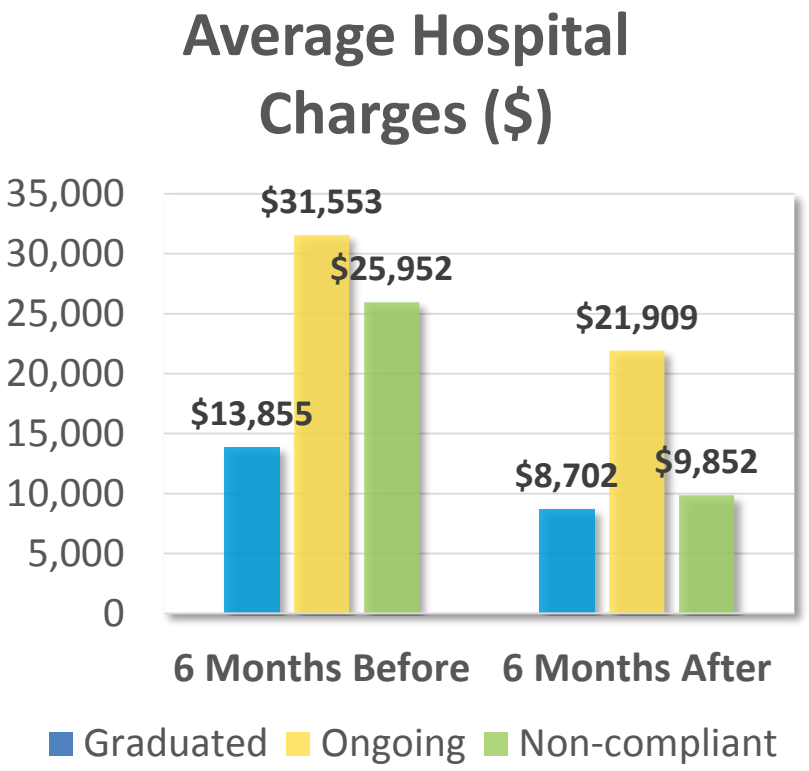
2015 – June 2016 HEZ Hospital Use Analysis

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

OVERVIEW

- **337** total Medicare clients listed
- **127** Medicare clients with referral dates within range to run a 6-month pre/post
- **102** Medicare clients with referral dates within range to run a 1-year pre/post

<u>Exclusions</u>: Not enough info, not found in Medicare database based on full name + DOB, under referral min, over referral max, duplicates

HQI
HEALTH QUALITY INNOVATORS

DATA SOURCE AND TIMEFRAMES

- **Medicare Part A claims**
- **Mar-2015 through May-2018**
- To qualify for 6-month pre/post:
  - Referral date from Sep-2015 to Nov-2017
- To qualify for 1-year pre/post:
  - Referral date from Mar-2016 to May-2017

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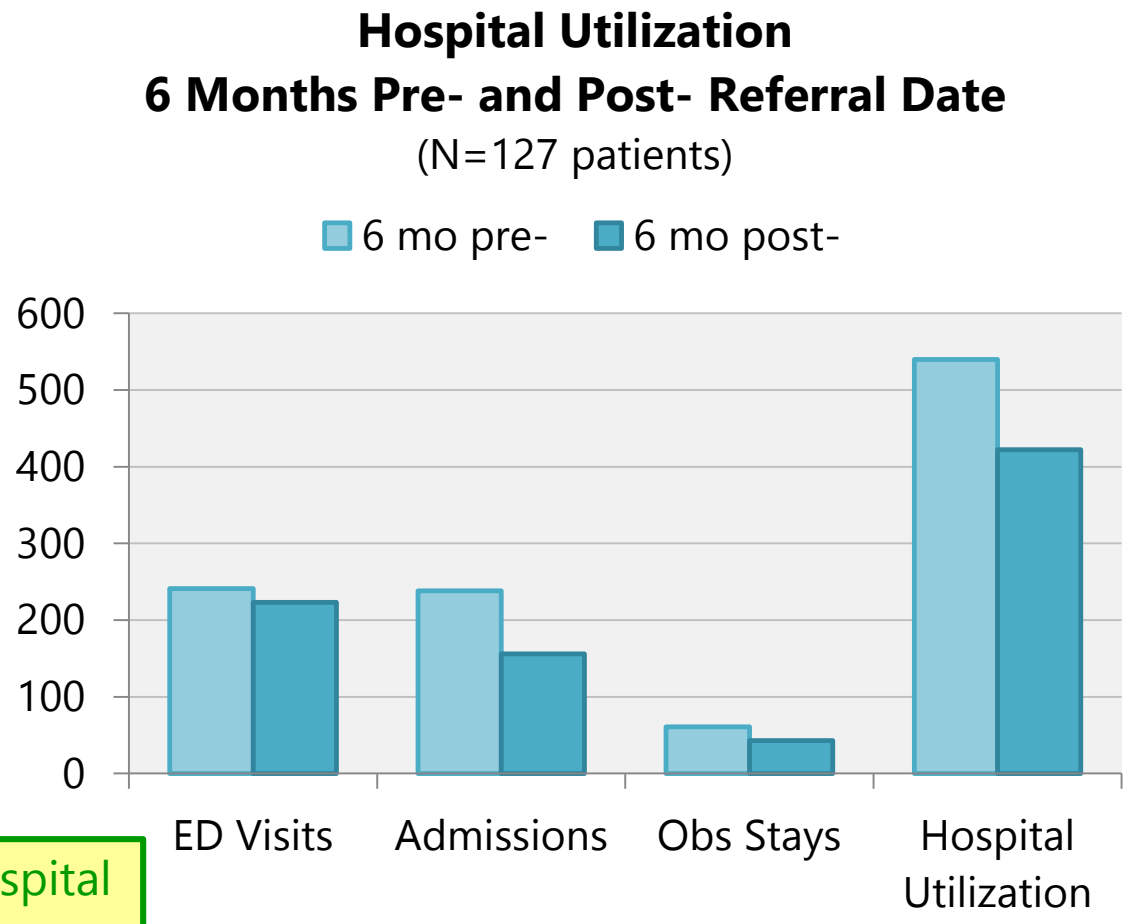
HEALTH QUALITY INNOVATORS

Hospital Utilization Volume 6 Months Pre/Post

VOLUME	6 mo pre-	6 mo post-
ED Visits	241	223
Admissions	238	156
Obs Stays	61	43
Hospital Utilization	540	422

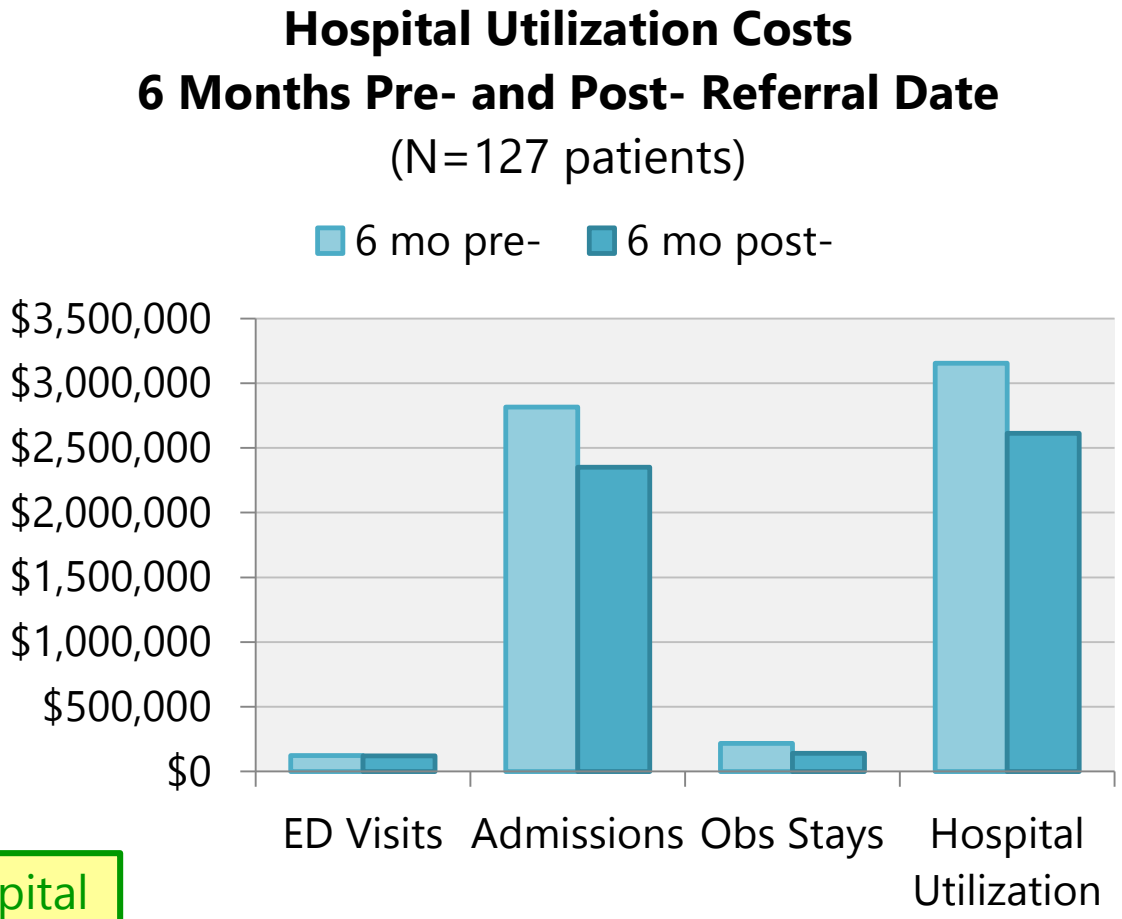


21.9% reduction in overall hospital utilization

HQI
HEALTH QUALITY INNOVATORS

Hospital Utilization Costs 6 Months Pre/Post

CLAIM PAYMENTS	6 mo pre-	6 mo post-
ED Visits	$122,828	$120,727
Admissions	$2,814,199	$2,350,541
Obs Stays	$216,162	$140,040
Hospital Utilization	$3,153,189	$2,611,307

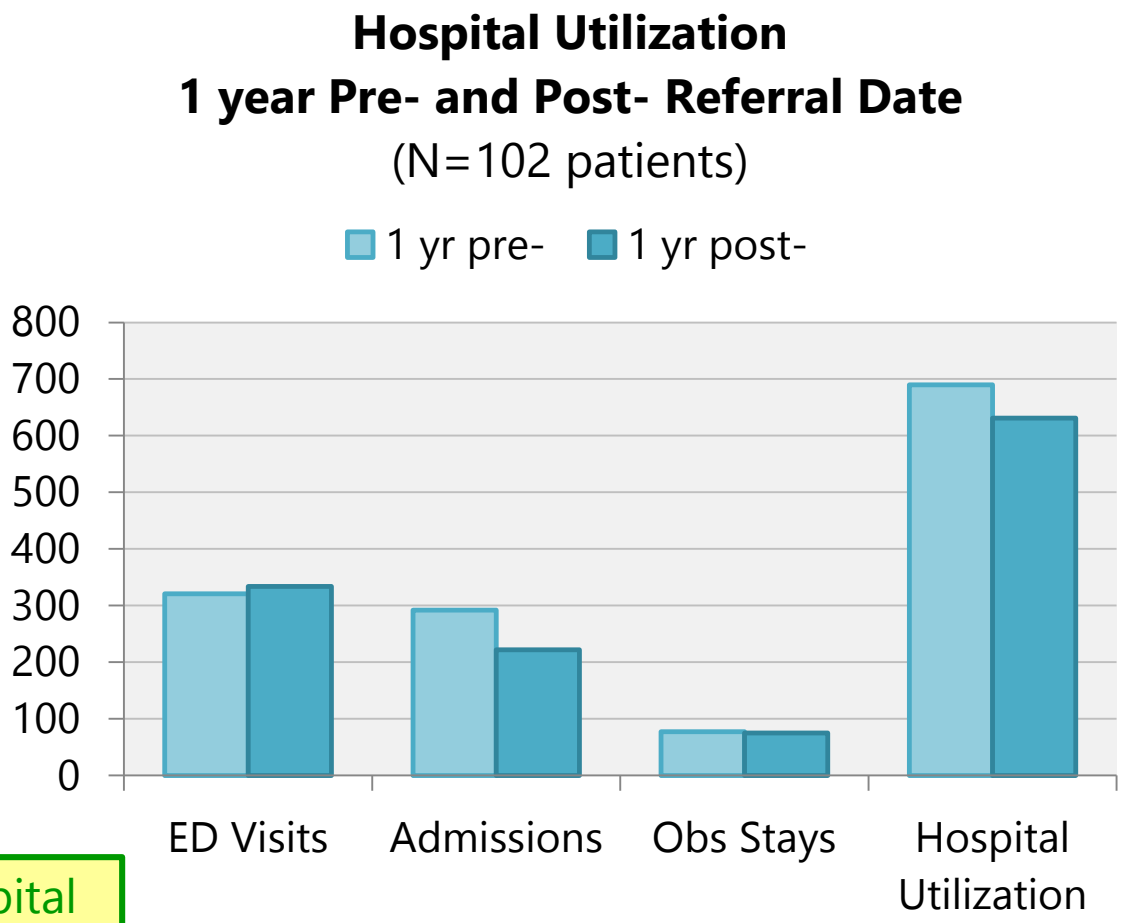


17.2% reduction in overall hospital utilization costs

HQI
HEALTH QUALITY INNOVATORS

Hospital Utilization
6 Months Pre/Post

VOLUME	1 yr pre-	1 yr post-
ED Visits	321	334
Admissions	292	222
Obs Stays	77	75
Hospital Utilization	690	631

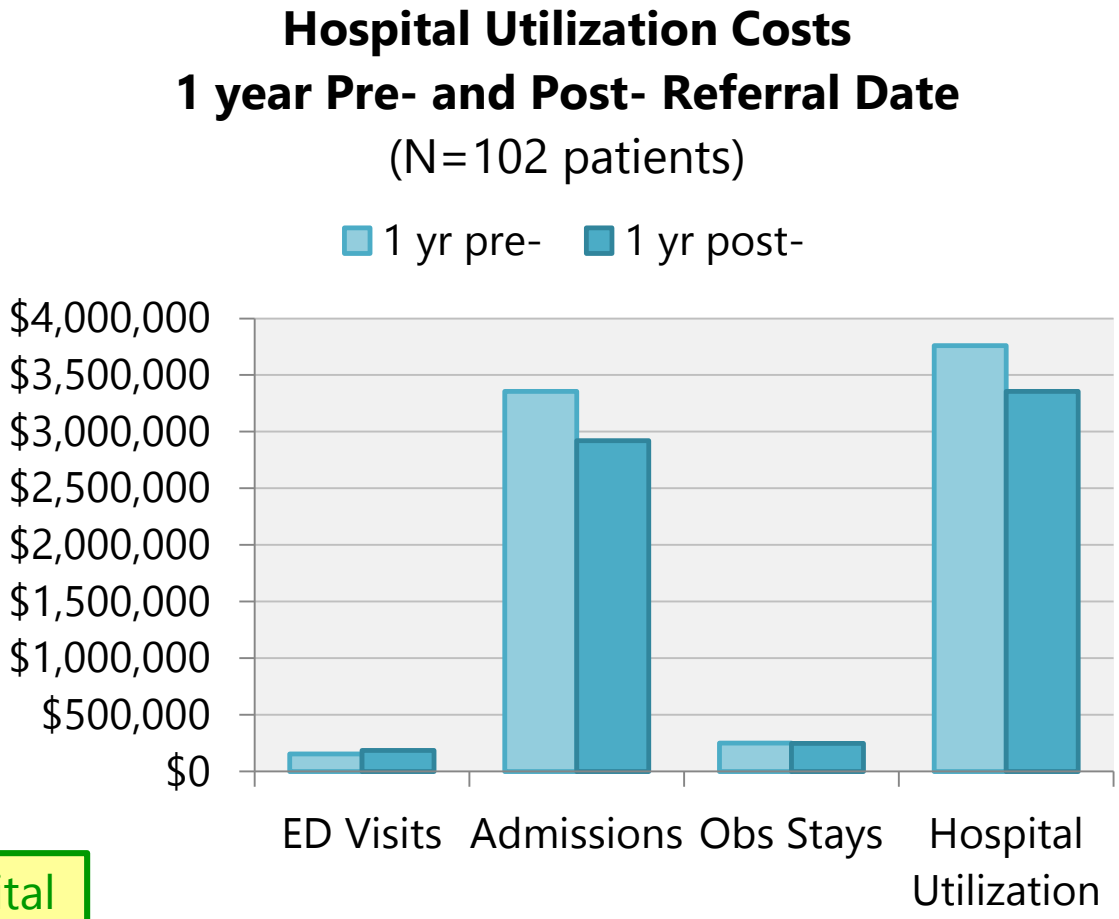


8.6% reduction in overall hospital utilization

HQI
HEALTH QUALITY INNOVATORS

Hospital Utilization Costs 6 Months Pre/Post

CLAIM PAYMENTS	1 yr pre-	1 yr post-
ED Visits	$153,644	$186,470
Admissions	$3,354,783	$2,921,820
Obs Stays	$251,841	$248,569
Hospital Utilization	$3,760,268	$3,356,859



10.7% reduction in overall hospital utilization costs

HQI
HEALTH QUALITY INNOVATORS

5. Capture the cost savings to pay the cost of the intervention, providing sustainability, and expandability of the interventions.

Prince George's Healthcare Alliance, Inc.

The Prince George's Healthcare Alliance, Inc. is a 501c3 formed in July, 2018 to continue the successes of the Prince George's County Health Department's Health Enterprise Zone Project. Our mission is to decrease over utilization of health system resources and to maximize quality of care for high need, high utilizers. Our vision is to help patients change their health behaviors, to achieve their best health, and to optimize community health.

Health Alliance Overview

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

Designate a Patient Engagement Advocate – Leverage Community Health Workers

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

PRINCE GEORGE'S HEALTHCARE ALLIANCE

Help Patients Manage – Behavioral Health, Clinical Health, Social Determinants and Medication Therapy Management

Seek interoperability opportunities – connect to CRISP and PGC PHIN

Questions

CATHOLIC CHARITIES BALTIMORE

CHERISHING THE DIVINE WITHIN ALL

ESPERANZA CENTER

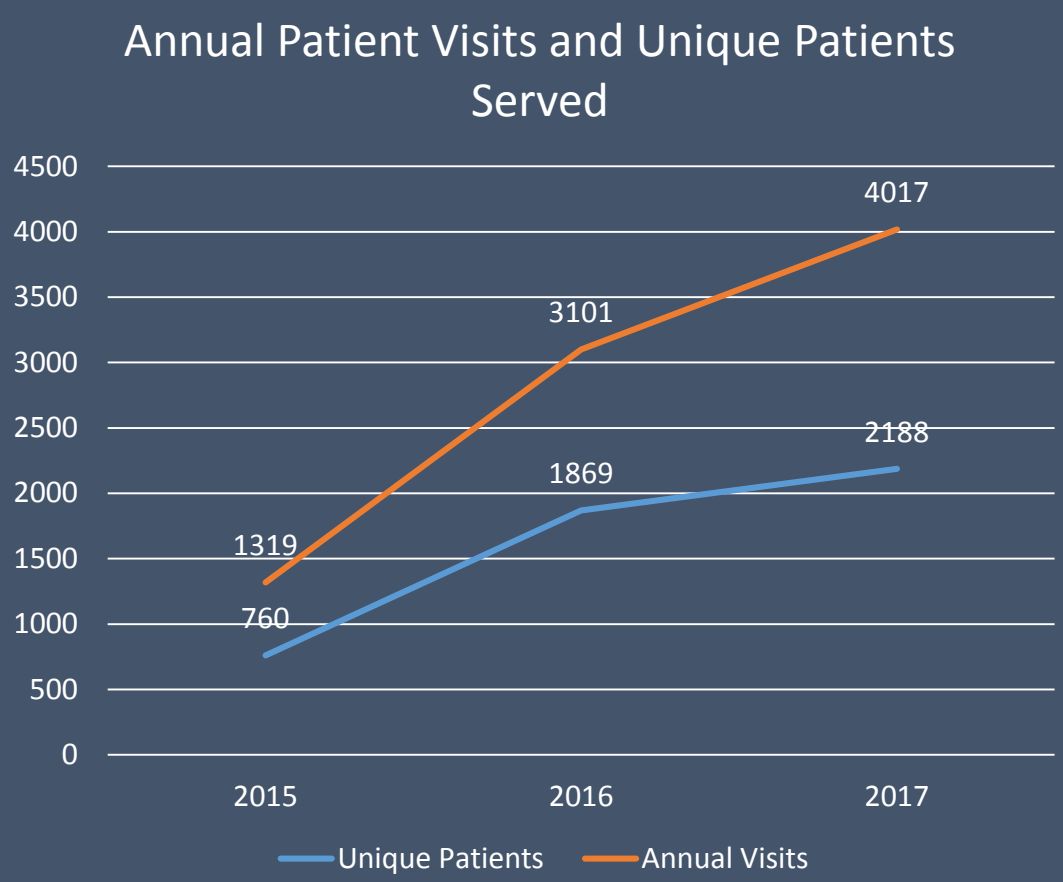
CATHOLIC CHARITIES IN ACTION

Catholic Charities Esperanza Center Health Services Clinic

Return on Investment from High-Utilizer and Social Determinant Interventions: Maryland Success Stories

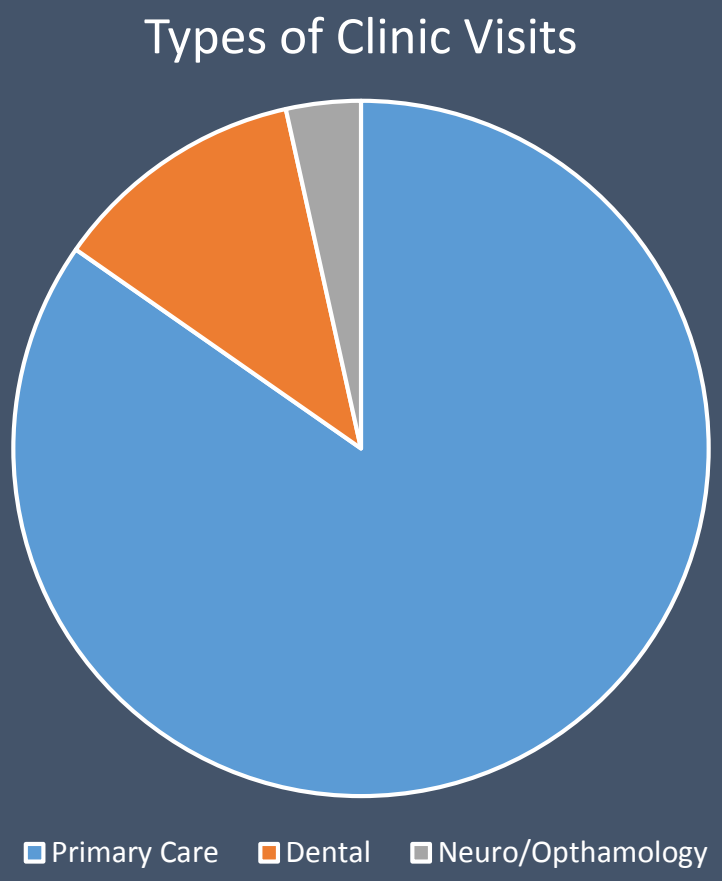
About Esperanza Health Services

- Provides free primary care for uninsured immigrant adults and children
  - Chronic disease management
  - Acute visits, including procedures
  - Wellness and prevention
- Referrals to specialty care through The Access Partnership (TAP) at Johns Hopkins
- Limited on-site specialty and dental care



Esperanza Center Patient Population

- Uninsured, undocumented immigrants (>95% Latino)
- Ineligible for Medicaid, Medicare, or coverage under the ACA Health Exchanges due to immigration status.
- Difficulty accessing care due to lack of insurance, language barriers, low or no income, and immigration status



Esperanza Center Health Services Financial Model

- No billing or revenue generation.
- Volunteers in Medicine Clinic designation.
- Funding sources include MCHRC, Kaiser Permanente, Johns Hopkins, CareFirst and United Way, along with Catholic Charities agency support.
- Annual budget for clinic is $743,910.

Calculating ROI

- In 2017, 76% of all visits provided were to patients who self-reported they would have gone to ED if the Esperanza Center did not exist.
  - This translates to roughly 2,900 patient visits.
- Median ED visit costs $1233*
- Annual cost savings of roughly $3.5 million
- For every $1 invested in the intervention, how much is returned?
  - Savings/program cost
  - $3.5 million/$743,910 = ***$4.70 ROI for every $1 invested.***

Caldwell N, Srebotnjak T, Wang T, Hsia R. "How Much Will I Get Charged for This?" Patient Charges for Top Ten Diagnoses in the Emergency Department. PLoS One 2013, 8(2): e55491.

Challenges in calculating ROI

- Staffing model does not lend itself to data collection necessary for more in-depth ROI analysis
- Reliance on self-reporting
- Only looks at ED utilization
- Does not account for reduced absenteeism and reductions in productivity losses.

Diabetes Self-Management Program – A Comprehensive Approach for Pre-Diabetic and Diabetic Patients in a Unique Hybrid Model

Health Equity Conference, Dec 6th, 2018

Dr. Mariana Izraelson

SHEPHERD'S CLINIC
Health Care for the Uninsured

History of Caring for the Uninsured

- Serving uninsured and underserved neighbors in Northeast Baltimore for 25 years.
  - Volunteer driven facility
  - Over 5500 patient visits in FY'18 to cover 750 unique patients
  - 9 zip code service area in Baltimore City

- A patient centered medical home model offering a full continuum of quality, no-cost health care
  - Primary and specialty care
  - Behavioral Health
  - Wellness and Integrative care through JWC

SHEPHERD'S CLINIC
Health Care for the Uninsured

Diabetes Self-Management for the Uninsured/Underinsured

Target Population: Uninsured and underinsured adults with pre-diabetes or diabetes. Program served 272 patients.

Purpose/Services: Provided integrative care that incorporates mental health and wellness programming to improve the care and health outcomes of diabetic and pre-diabetic patients

- Clinical care
- Diabetes self-management education
- Lifestyle modification courses: (nutrition consultations, cooking demonstrations, and exercise classes offered via our on-site wellness center)

Funding: $105,000 over two years. Increased the program's capacity, and enhanced our offerings with the addition of an on-site part-time certified diabetes educator.

SHEPHERD'S CLINIC
Health Care for the Uninsured

Nuts & Bolts

- Referral by Shepherd's Clinic medical provider (PCP, Nurse manager, etc.), community doctor, or Medstar
- Appointment with Diabetes Educator
- Receive schedule to attend: Diabetes Self-Management classes, Nutritional classes, Yoga classes, Nutritional Demonstrations, Massage, Acupuncture, Gardening, etc.
- Appointment with Nurse Coordinator to manage lab work, prescriptions and medical supplies.
- Appointment with Behavioral Health Provider.
- Follow up appointment with Medical Provider.

Everyone Involved

- Internal Medicine Physician
- Endocrinologist
- Nurse Coordinator
- Diabetes Educator
- Nutritionist Instructor
- Phlebotomist/Labs
- Pharmacist/Rx/Supplies
- Yoga Instructor
- Acupuncturist
- Gardening Instructor
- Behavioral Health Therapist

SHEPHERD'S CLINIC
Health Care for the Uninsured

Accomplished Goals

1) Provided a comprehensive diabetes self-management program to 275 uninsured/underinsured patients with pre-diabetes or diabetes.
2) Reduced barriers to accessing affordable diabetes care 275 uninsured/underinsured patients with pre-diabetes or diabetes.
3) Enhanced patient understanding of diabetes and its complications in 95% of participating patients.
4) Reduced the body weight of 70% of participating patients by 3-5 percent.
5) Reduced HbA1c levels of 70% of participating patients.
6) Improved patient compliance by achieving a medication adherence rate of 95%.
7) Reduced ED hospitalizations for diabetes related issues

SHEPHERD'S CLINIC
Health Care for the Uninsured

Let's Do The Numbers

Total # Patients Served	Total # Referrals	Average Weight Loss	Average % Patients HbA1c ↓
278	342	10 lbs	70%

Cost Per Patient	Total # of ED visits	Total # Sessions with Diabetes Educator	Total # Medical Visits
$378	1	333	1187

Total # Participants DSM classes	Total # BH Encounters	Total # Auxiliary Encounters	Total # Patient Encounters
988	392	2534	5434

SHEPHERD'S CLINIC
Health Care for the Uninsured

Sustainability

- Shepherd's Clinic has been a member of the community for 25 years with MedStar Union Memorial Hospital as a collaborating partner for patient care.
- Stulman Foundation agreed to continue the program for 2 additional years.
- Additionally, MUMH through community benefit dollars, provides salary support for two full time and two part time staff at Shepherd's Clinic.

SHEPHERD'S CLINIC
Health Care for the Uninsured