**Initial Findings HEZ External Evaluation** Darrell J. Gaskin, PhD Roland J. Thorpe Jr., PhD Hopkins Center for Health Solutions November 3, 2016

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## **HEZ Evaluation Team**

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## A Good Idea



#### Jack Kemp



#### Donna Christensen



# What is a Health Enterprise Zone?

- 1. In the spirit of Economic Enterprise/Empowerment Zones, first proposed by Jack Kemp.
- 2. Instead of government providing a one-sizefits-all program to address economic problems in distressed communities.
- 3. Government provide incentives through the tax credit, grants, loan repayment and technical support.
- 4. Measurable health and healthcare outcome objectives.



## What is the HEZ initiative?

It is an effort by the State of Maryland to establish in underserved communities coalitions of stakeholders who work together to address unmet healthcare needs.

The overall goal of the HEZ initiative is to reduce health disparities among racial and ethnic groups within geographic areas; to improve health care access and health outcomes in underserved communities; and to reduce health care costs and hospital admissions and readmissions.



The Maryland Community Health Resources Commission (CHRC) and the Department of Health and Mental Hygiene (DHMH) support HEZs in 5 communities:

- 1) Annapolis/Morris Blum;
- 2) Capitol Heights in Prince George's County;
- 3) Dorchester and Caroline Counties;
- 4) Greater Lexington Park in St. Mary's County; and
- 5) West Baltimore in Baltimore City.



## **The Scope of the Evaluation**

- 1. the overall impact of the HEZ initiative;
- 2. the performance of each individual HEZ;
- 3. the economic impact of each individual HEZ;
- 4. the participation and experience of residents using the HEZ; and
- 5. the participation and experience of clinical and non-clinical providers.



## **Evaluation Strategies**

- 1. Site Visits to Each HEZ
- 2. Telephone Interviews with Providers
- 3. Telephone Interviews with Residents
- 4. Economic Impact Analysis
- 5. Hospital Administrative Data Analysis



# **Once You Seen a HEZ**

# You have seen one HEZ



## **Conclusions from Site Visits**

- Addressing Common Health Problems with Creative Community Based Solutions.
- Heterogeneity of Underlying Causes of Common Health Problems.
- Heterogeneity of Community Based Resources.
- Variation in Approaches to Long term Sustainability.



# **Increasing Access to Primary Care**

- Recruiting and retaining primary care physicians have been challenging.
  - Loan repayment has not been an effective incentive.
  - 2. Providers have other opportunities.
  - 3. Identifying appropriate space has been a challenge.



# HEZ: More than Additional Physician Care

- 1. Community health workers performing care coordination, especially targeting high utilizers.
- 2. Transportation services
- 3. Behavioral health care
- 4. School based health care
- 5. Social Workers
- 6. Dental Care
- 7. Care Teams that coordinate health and social services for high needs patients
- 8. Lifestyle modification
- 9. Health education and health promotion



## **Impact on Hospital Use**

- 1. Emergency Room Visits per 1000 residents
- 2. Emergency Room Visits with a primary diagnosis for a HEZ related condition per 1000 residents
- 3. Emergency Room Visits with a primary diagnosis for a potentially preventable condition per 1000 residents.
- 4. Hospital Discharges per 1000 residents
- 5. Hospital Discharges with a primary diagnosis for a HEZ related condition per 1000 residents
- 6. Hospital Discharges with a primary diagnosis for the preventable conditions per 1000 residents
- 7. Hospital Readmissions per 1000 residents



## **Hospital Utilization Analysis**

- Compare HEZ zip codes, HEZ eligible zip codes, and Non HEZ zip codes.
- Inpatient Discharges and ER Visits. (Excluding Births, Cancer, and Trauma discharges)
- Data from 2009 to 2015 (Q1-Q3). 2015 data only represents three quarters of data.
- Trend analysis
- Difference-in-difference analysis comparing HEZ and HEZ-eligible zip codes.



#### **Emergency Room Visits (per 1000)**





## **Emergency Room Visits for HEZ Related Conditions (per 1000)**





## **Emergency Room Visits for Prevention Quality Indicators (per 1000)**





### **Hospital Discharges (per 1000)**





### **Hospital Discharges for HEZ Related Conditions (per 1000)**





## **Hospital Discharges for Prevention Quality Indictors (per 1000)**





#### **Hospital Readmissions (per 1000)**





#### **Estimated Differences in Per Capita Hospital Use Between HEZ and HEZ Eligible Zip Codes**

Inpatient Discharges		<b>Emergency Visits</b>	
All Discharges	<mark>- 10.08</mark>	All ER Visits per capita	<b>24.54</b>
per capita -	(-14.515.65)		(12.36 – 36.71)
HEZ Related Conditions Discharges per capita	- <b>1.17</b> (-2.320.03)	HEZ Related Conditions ER Visits per capita	<b>2.31</b> (0.52 - 4.09)
PQI Discharges	- <b>1.82</b>	PQI ER Visits	<b>3.23</b>
per capita	(-3.030.61)	per capita	(0.87 - 5.58



#### **Estimated Differences in Hospital Readmissions Per Capita Between HEZ and HEZ Eligible Zip Codes**

YEAR	Change in Readmissions per Capita
2013	<b>-1.21</b> (-2.71 - 0.29)
2014	<mark>-2-29</mark> -3.79 - 0.80)



## **Preliminary Conclusion**

- Lower use of inpatient hospital services in HEZ zip codes than expected.
- Higher use of ER in HEZ zip codes than expected.



## **Status of Evaluation**

- 1. Physician Telephone Interviews
- 2. Resident Telephone Interviews
- 3. Updating Economic Analysis using BEA RIMS-II model.
- 4. Revised Hospital Utilization analysis by incorporating 2015 data.
- 5. Next year Resident Focus Groups and a 2<sup>nd</sup> round of provider telephone interviews



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