An Update on Baltimore’s Accountable Health Communities (AHC)

Maryland Philanthropic Network SDOH Series
February 2020

Shelly Choo, MD, MPH

Bernard C. “Jack” Young
Mayor, Baltimore City

Dr. Letitia Dzirasa, M.D.
Commissioner of Health, Baltimore City
Background

The Baltimore City Health Department is the only public health-led, citywide CMS Accountable Health Community (AHC) initiative out of the 32 grantees.
Baltimore City Context

Life Expectancy by Community Statistical Area and Hospital Locations, Baltimore City, 2012-2016

BCHD analysis of data provided by the Maryland Department of Health Vital Statistics Administration

Legend
- Hospital

Life Expectancy (years at birth)
- 66.4 - 68.9
- 69.0 - 71.3
- 71.4 - 73.1
- 73.2 - 76.2
- 76.3 - 85.2

Bernard C. “Jack” Young
Mayor, Baltimore City

Dr. Letitia Dzirasa, M.D.
Commissioner of Health, Baltimore City
Determinants of Health Framework

- Systems of power that determine the range of social contexts and the distribution of populations into those social contexts

- Racism, Sexism and other “isms”

Accountable Health Communities Goals

1. Adoption of a universal social needs screening tool
2. Strengthening of clinical to community linkages through community health worker navigation
3. Data sharing amongst clinical and community partners
4. Align partners around the social determinants of health to address city-wide social needs
Baltimore AHC

1. Individual Impact
2. Data Sharing
3. Community Impact

Social Needs
Technology
Social Determinants of Health
Timeline of Baltimore AHC

2016
Selection
Baltimore is selected to become an Accountable Health Community (AHC)

2017
Planning
Planning for Baltimore AHC begins

2018
Official Start
Screening, referral, and navigation begin in four sites on October 1st

2019
Expansion
Screening, referral, and navigation begin in 10 sites on May 1st

Technology
Soft launch of CHARMcare

Bernard C. “Jack” Young
Mayor, Baltimore City

Dr. Letitia Dzirasa, M.D.
Commissioner of Health, Baltimore City
Preliminary Results

- **Population** = 1,005 Medicare and Medicaid beneficiaries with two or more ED visits from October 2018 through September 2019 for AHC.

- **What**: They were screened and navigated for HRSNs by CHWs in Baltimore City.

- In presentation, refer to as “navigated” beneficiaries.
Health-Related Social Needs (HRSNs) – Bottom Line

• On average, a navigated beneficiary reported 5 HRSNs (max = 10).

• 6 (1%) reported 10 HRSNs (max).

• Mental Health, Financial Strain, Food Insecurity were the highest social needs.
Navigated Beneficiaries by Zip Code

- 21229 had the most beneficiaries navigated followed by 21223
# Health-Related Social Needs by 5 Core Domains

<table>
<thead>
<tr>
<th>Rank</th>
<th>Core Domain</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Food Insecurity</td>
<td>670</td>
<td>65%</td>
</tr>
<tr>
<td>2</td>
<td>Transportation Problems</td>
<td>481</td>
<td>47%</td>
</tr>
<tr>
<td>3</td>
<td>Housing Instability</td>
<td>476</td>
<td>46%</td>
</tr>
<tr>
<td>4</td>
<td>Utility Needs</td>
<td>202</td>
<td>20%</td>
</tr>
<tr>
<td>5</td>
<td>Interpersonal Safety</td>
<td>108</td>
<td>11%</td>
</tr>
</tbody>
</table>

Eighty-six percent of navigated beneficiaries had at least one core HRSN and 11% had 4 or all core HRSNs.
## Supplemental HRSNs

<table>
<thead>
<tr>
<th>Rank</th>
<th>Supplemental Domain</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mental Health</td>
<td>804</td>
<td>78%</td>
</tr>
<tr>
<td>2</td>
<td>Financial Strain</td>
<td>758</td>
<td>74%</td>
</tr>
<tr>
<td>3</td>
<td>Employment</td>
<td>470</td>
<td>46%</td>
</tr>
<tr>
<td>4</td>
<td>Substance Use</td>
<td>466</td>
<td>45%</td>
</tr>
<tr>
<td>5</td>
<td>Education</td>
<td>295</td>
<td>29%</td>
</tr>
</tbody>
</table>

Ninety-six percent of navigated beneficiaries had at least one supplemental HRSN and 30% had 4 or all supplemental HRSNs.
Reported Health-Related Social Needs Sorted Most to Least

Percent of Navigated Beneficiaries

- Mental Health: 78%
- Financial Strain: 74%
- Food Insecurity: 65%
- Transportation Problems: 47%
- Employment: 46%
- Housing Instability: 46%
- Substance Use: 45%
- Education: 29%
- Utility Needs: 20%
- Interpersonal Safety: 11%
Link between Food and Mental Health

“Interventions that target dual enrollees and individuals with other risk factors may be essential to reducing the burden of food insecurity.”

“Food insecurity also was associated with having 4 or more chronic conditions, depression and anxiety.”


Mental Health Questions

Over the past 2 weeks, how often have you been bothered by any of the following problems?

- Little interest or pleasure in doing things?
- Feeling down, depressed, or hopeless?

Stress means a situation in which a person feels tense, restless, nervous, or anxious, or is unable to sleep at night because his or her mind is troubled all the time. Do you feel this kind of stress these days?
Mental Health

reported a mental health HRSN 78%
## Mental Health Screening

Over the past 2 weeks, how often have you been bothered by…

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>Several days</th>
<th>More than half the days</th>
<th>Nearly every day</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little interest or pleasure in doing things?</td>
<td>41%</td>
<td>25%</td>
<td>13%</td>
<td>17%</td>
<td>4%</td>
</tr>
<tr>
<td>Feeling down, depressed, or hopeless?</td>
<td>36%</td>
<td>26%</td>
<td>14%</td>
<td>20%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Do you feel stress these days? Tense, nervous, anxious, or unable to sleep? Forty-one percent reported either “very much” (25%) or “somewhat” (16%).

**Bernard C. “Jack” Young**
Mayor, Baltimore City

**Dr. Letitia Dzirasa, M.D.**
Commissioner of Health, Baltimore City
# Substance Use Screening

How many times in the past 12 months, have you…

<table>
<thead>
<tr>
<th>Question</th>
<th>Never</th>
<th>1-2 times</th>
<th>Monthly</th>
<th>Weekly</th>
<th>Daily/ Almost daily</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Had 5 or more drinks in a day (men) or 4 or more (women)?</td>
<td>41%</td>
<td>7%</td>
<td>3%</td>
<td>3%</td>
<td>5%</td>
<td>42%</td>
</tr>
<tr>
<td>Used tobacco products?</td>
<td>40%</td>
<td>4%</td>
<td>3%</td>
<td>3%</td>
<td>26%</td>
<td>25%</td>
</tr>
<tr>
<td>Prescription-drugs (non-medical use)</td>
<td>44%</td>
<td>4%</td>
<td>1%</td>
<td>1%</td>
<td>3%</td>
<td>47%</td>
</tr>
<tr>
<td>Illegal drugs</td>
<td>33%</td>
<td>6%</td>
<td>2%</td>
<td>3%</td>
<td>9%</td>
<td>48%</td>
</tr>
</tbody>
</table>

= highlights
Mental Health and Substance Use

- **Eighty-six percent** of navigated beneficiaries reported either a mental health or substance use-related HRSN.

- **Forty-percent** reported both a mental health and a substance use-related HRSN.
Financial Strain Question

How hard is it for you to pay for the very basics like food, housing, medical care, and heating?

- 74% of respondents reported financial strain.
Food Insecurity Questions

Within the past 12 months, you worried that your food would run out before you got money to buy more?

Within the past 12 months, the food you bought just didn't last and you didn't have money to get more.

- 65% of respondents reported food insecurity.
Food Deserts

- 343/843 (41%) of navigated beneficiaries lived in a Healthy Food Priority Area (HFPA).

- 216/343 (63%) that lived in a HFPA also had a reported food need.

- Of the 500 outside HFPAs, 68% also reported a food need.

Definition: “A Healthy Food Priority Area in Baltimore City is an area where: 1) The average Healthy Food Availability Index score for all food stores is low, 2) The median household income is at or below 185% of the Federal Poverty Level, 3) Over 30% of households have no vehicle available, and 4) The distance to a supermarket is more than a quarter mile.”

- https://mdfoodsystemmap.org/
Food is Medicine, Mental Health, Chronic Disease

“Spectrum of services and health interventions that recognize and respond to the critical link between nutrition and chronic diseases.”
Baltimore Food is Medicine Landscape

Key Stakeholder Interviews

Most frequent conditions addressed:
- diabetes
- congestive heart failure
- COPD
- Cancer

![Bar chart showing the number of interviews for different programs]

- Medically Tailored Meals: 1
- Produce Delivery/Food Vouchers: 9
- Population Level Healthy Programs (SNAP, WIC): 6
Food as Medicine Landscape

• 85% of food programs started in the past 2 years

• Four programs screening for food insecurity & using AHC tool

• Top 3 most frequently partnered community organization: Meals on Wheels, Moveable Feast, Hungry Harvest

• Lack of sustainable funding & lack of alignment with CBOs are barriers
SOCIAL DETERMINANTS AND SOCIAL NEEDS: MOVING BEYOND MIDSTREAM

STRATEGIES
- Improve Community Conditions

COMMUNITY IMPACT

TACTICS
- Laws, policies, and regulations that create community conditions supporting health for all people.

INDIVIDUAL IMPACT

- Addressing Individuals' Social Needs

upstream

- Include patient screening questions about social factors like housing and food access; use data to inform care and provide referrals.

midstream

- Social workers, community health workers, and/or community-based organizations providing direct support/assistance to meet patients' social needs.
Meeting Individual Social Needs Falls Short Of Addressing Social Determinants Of Health

Brian Castrucci, John Auerbach

JANUARY 16, 2019

Takeaways

• Individual social needs are multiple and complex. Need to navigate complex systems of care.

• Overarching goals of AHC are health system transformation and alignment across multiple stakeholders on addressing social needs and SDOH, but still need to address individual needs.

• Need to design policies and programs with community at the center and consider those on the frontlines

• Need to invest in Public Health and Social Determinants of Health
The Only Time You Are Actually Growing is When You’re Uncomfortable

Oppong, Thomas. The Only Time You are Actually Growing is When You’re Uncomfortable. https://medium.com/the-mission/the-only-time-you-are-actually-growing-is-when-youre-uncomfortable-33198a619ab0 Accessed February 28, 2020
Acknowledgements

Thank you to our partners on this project including Baltimore’s hospitals, FQHCs, community-based organizations, HCAM, CRISP and Maryland Medicaid.

We’d also like to thank the project participants for their time and trust. Because of them we have the information we need to create a brighter future for Baltimore.

Baltimore’s Accountable Health Community is made possible through funding from the Centers for Medicare and Medicaid Services.
Contact Shelly Choo at Shelly.Choo@baltimorecity.gov if you have any questions.