The Intersection of Homelessness and Medicaid

Preliminary Analysis and Research Plans for New Jersey

Center for State Health Policy
Institute for Health, Health Care Policy, and Aging Research

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Project Team

- Joel C. Cantor, ScD – Principal Investigator
- Sujoy Chakravarty, PhD
- Derek DeLia, PhD (now at MedStar Health Research Institute)
- Margaret Koller, MS
- Oliver Lontok, MD, MPH
- Jose Nova, MS
- Emmy Tiderington, PhD, MSW
- Taiisa Kelly
- Richard Brown
Acknowledgement

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Katelyn Cunningham of the Hudson County Division of Housing and Community Development (formerly of Monarch Housing Associates) contributed to the project in its early stages. Paul Rossi of Foothold Technologies played a central role in preparing study data.

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*The views expressed in this presentation are exclusively those of project team, and may not reflect those of the project sponsors or the state agencies contributing data.*
Outline

• New Jersey Homeless Support Services Project Overview
• Preliminary findings
• Discussion
Research Questions

1. What are the size, characteristics, and potentially reducible Medicaid spending of the Medicaid-enrolled homeless population that may be eligible for permanent supportive housing (PSH) services?

2. How much has PSH saved Medicaid in recent years?
Project Data

• **Homeless Management Information System (HMIS)**
  – NJ Housing and Mortgage Finance Agency
  – Encounter-level data for homeless services and client characteristics
  – All NJ counties for some services (e.g., emergency shelter) and 19 of 21 counties for other services (e.g., supportive housing)

• **Medicaid Management Information System (MMIS)**
  – NJ Div. of Medical Assistance and Health Services
  – Enrollment and encounter data for covered services, spending, and characteristics of all NJ Medicaid beneficiaries

• **Data for 2011-16 linked by trusted third party using client/beneficiary identifiers**
  – Trillium™ matching software (using SSN, DOB, gender, names, etc.)
  – Research team received linked, de-identified data only
Number of Persons in HMIS Linked and Not Linked to MMIS

Note: Individuals may appear in more than one year

<table>
<thead>
<tr>
<th>Year</th>
<th>Linked</th>
<th>Not Linked</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>32,631</td>
<td>37,797 54%</td>
</tr>
<tr>
<td>2012</td>
<td>34,410</td>
<td>40,114 54%</td>
</tr>
<tr>
<td>2013</td>
<td>41,315</td>
<td>45,638 53%</td>
</tr>
<tr>
<td>2014</td>
<td>41,508</td>
<td>58,097 58%</td>
</tr>
<tr>
<td>2015</td>
<td>44,027</td>
<td>65,707 60%</td>
</tr>
<tr>
<td>2016</td>
<td>54,231</td>
<td>64,717 54%</td>
</tr>
</tbody>
</table>

% Medicaid in HMIS:
- 2011: 2.4%
- 2012: 2.5%
- 2013: 2.9%
- 2014: 3.0%
- 2015: 3.1%
- 2016: 3.0%

Medicaid expansion
The Study Population, 2016

Medicaid
2.2 million beneficiaries at some time during the year (about 1.7 million in a given month)

Medicaid & HMIS
64,717 in 2016 linked file

Note: Graphic not to scale
For Today: Describe “Homeless” & “PSH” Populations

• Last HMIS encounter recorded in 2016, for preliminary analysis only
  – Will incorporate 3 year HMIS history & other information
• HMIS “Type of Residence” prior to encounter and “Project Type” at the encounter
• Exclude persons receiving Medicaid Long-Term Services & Supports
  – Nursing facility
  – Facility for persons with developmental disabilities
  – Home and Community Based Services
## Preliminary Classification of “Homeless”

### At last HMIS Encounter in 2016

<table>
<thead>
<tr>
<th>HMIS &quot;Project Type&quot; (this encounter)</th>
<th>HMIS &quot;Type of Residence&quot; (prior to encounter)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Homeless</td>
</tr>
<tr>
<td>Coordinated Assessment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>705</td>
</tr>
<tr>
<td>Day Shelter</td>
<td>59</td>
</tr>
<tr>
<td>Emergency Shelter</td>
<td>3,109</td>
</tr>
<tr>
<td>Homelessness Prevention</td>
<td>177</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
</tr>
<tr>
<td>PH - Housing Only</td>
<td>-</td>
</tr>
<tr>
<td>PH - Housing with Services</td>
<td>-</td>
</tr>
<tr>
<td>PH - Permanent Supportive Housing</td>
<td>2,005</td>
</tr>
<tr>
<td>PH - Rapid Re-Housing</td>
<td>1,509</td>
</tr>
<tr>
<td>Safe Haven</td>
<td>19</td>
</tr>
<tr>
<td>Services Only Program</td>
<td>3,588</td>
</tr>
<tr>
<td>Street Outreach</td>
<td>383</td>
</tr>
<tr>
<td>Transitional Housing</td>
<td>599</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12,171</strong></td>
</tr>
</tbody>
</table>

Frequency Missing = 5

**NOTE:** dash (-) indicates suppressed for confidentiality.
## Preliminary Classification of “PSH”
### At last HMIS Encounter in 2016

<table>
<thead>
<tr>
<th>HMIS &quot;Project Type&quot; (this encounter)</th>
<th>HMIS &quot;Type of Residence&quot; (prior to encounter)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Homeless</td>
<td>Permanent Housing</td>
</tr>
<tr>
<td>Coordinated Assessment</td>
<td>705</td>
<td>-</td>
</tr>
<tr>
<td>Day Shelter</td>
<td>59</td>
<td>-</td>
</tr>
<tr>
<td>Emergency Shelter</td>
<td>3,109</td>
<td>67</td>
</tr>
<tr>
<td>Homelessness Prevention</td>
<td>177</td>
<td>24</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PH - Housing Only</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PH - Housing with Services</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PH - Permanent Supportive Housing</td>
<td>2,005</td>
<td>85</td>
</tr>
<tr>
<td>PH - Rapid Re-Housing</td>
<td>1,509</td>
<td>-</td>
</tr>
<tr>
<td>Safe Haven</td>
<td>19</td>
<td>-</td>
</tr>
<tr>
<td>Services Only Program</td>
<td>3,588</td>
<td>477</td>
</tr>
<tr>
<td>Street Outreach</td>
<td>383</td>
<td>-</td>
</tr>
<tr>
<td>Transitional Housing</td>
<td>599</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>12,171</td>
<td>684</td>
</tr>
</tbody>
</table>

Frequency Missing = 5

NOTE: dash (-) indicates suppressed for confidentiality.
Preliminary Classification
At last HMIS Encounter in 2016

62,097 Linked Records*

*Excludes persons living in Medicaid-funded facilities or receiving home/community-based long-term care services, also excludes a small number of individuals with missing homeless services data.
## Demographics of Homeless & PSH Populations

2016 HMIS-MMIS Linked Data, Column Percent Distributions

<table>
<thead>
<tr>
<th>Age</th>
<th>All</th>
<th>Homeless</th>
<th>PSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;18</td>
<td>29.7</td>
<td>21.0</td>
<td>28.7</td>
</tr>
<tr>
<td>18-29</td>
<td>18.5</td>
<td>22.9</td>
<td>16.9</td>
</tr>
<tr>
<td>30-49</td>
<td>30.3</td>
<td>34.0</td>
<td>25.7</td>
</tr>
<tr>
<td>50-64</td>
<td>19.0</td>
<td>20.7</td>
<td>25.7</td>
</tr>
<tr>
<td>65+</td>
<td>2.5</td>
<td>2.2</td>
<td>3.0</td>
</tr>
</tbody>
</table>

| Male    | 45.4  | 56.1     | 47.1  |

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>All</th>
<th>Homeless</th>
<th>PSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black/AA</td>
<td>51.2</td>
<td>49.3</td>
<td>59.6</td>
</tr>
<tr>
<td>White</td>
<td>30.8</td>
<td>35.6</td>
<td>27.3</td>
</tr>
<tr>
<td>Hispanic</td>
<td>12.9</td>
<td>10.4</td>
<td>8.5</td>
</tr>
<tr>
<td>Asian</td>
<td>0.4</td>
<td>0.4</td>
<td>*</td>
</tr>
<tr>
<td>Other</td>
<td>4.5</td>
<td>4.1</td>
<td>*</td>
</tr>
</tbody>
</table>

*Data not shown due to small numbers
Program Characteristics of Homeless & PSH Populations
2016 HMIS-MMIS Linked Data, Column Percent Distributions

<table>
<thead>
<tr>
<th>Medicaid Eligibility Category</th>
<th>All</th>
<th>Homeless</th>
<th>PSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aged-Blind-Disabled (ABD)</td>
<td>18.3</td>
<td>15.5</td>
<td>29.1</td>
</tr>
<tr>
<td>NJ FamilyCare (children &amp; adults)</td>
<td>52.7</td>
<td>38.9</td>
<td>46.9</td>
</tr>
<tr>
<td>Children’s Serv./Other</td>
<td>1.3</td>
<td>1.4</td>
<td>2.0</td>
</tr>
<tr>
<td>Expansion*</td>
<td>27.7</td>
<td>44.2</td>
<td>22.0</td>
</tr>
<tr>
<td>HMIS - Family</td>
<td>57.4</td>
<td>38.1</td>
<td>53.8</td>
</tr>
<tr>
<td>HMIS – Chronic Homeless</td>
<td>2.8</td>
<td>4.4</td>
<td>14.6</td>
</tr>
</tbody>
</table>

*Includes pre-expansion “general assistance” population.
Medicaid Behavioral Health Diagnoses by HMIS Status, 2016

- Mental Health Only
- Substance Use Only
- Both

% With Serious Mental Illness

- All Linked
  - Mental Health Only: 20%
  - Substance Use Only: 10%
  - Both: 17%
  - All Linked: 47%

- Homeless
  - Mental Health Only: 14%
  - Substance Use Only: 14%
  - Both: 22%
  - Homeless: 59%

- PSH
  - Mental Health Only: 20%
  - Substance Use Only: 9%
  - Both: 28%
  - PSH: 50%

- All Linked
  - Mental Health Only: 28%
  - Substance Use Only: 0%
  - Both: 33%

- Homeless
  - Mental Health Only: 40%
  - Substance Use Only: 15%
  - Both: 50%

- PSH
  - Mental Health Only: 33%
  - Substance Use Only: 20%
  - Both: 28%

Inpatient (IP) Stays by HMIS Status, 2016

- All Linked: 13.2% (Any) and 1.8% (Three or more)
- Homeless: 20.1% (Any) and 3.5% (Three or more)
- PSH: 11.3% (Any)

*Data not shown due to small numbers
Ambulatory Care Sensitive IP Admission Rate* per 1,000 Adults by HMIS Status, 2016

- All Linked: 26.2
- Homeless: 34.4
- PSH: 28.3

*Prevention Quality Indicators from the Agency for Healthcare Quality and Research. Available at: http://www.qualityindicators.ahrq.gov/modules/pqi_overview.aspx
30-Day Hospital Readmission Rate by HMIS Status, 2016

- All Linked: 16.4%
- Homeless: 21.1%
- PSH: 16.8%
Treat-and-Release Emergency Department (ED) Visits by HMIS Status, 2016

- **All Linked**: 50.5% (Any), 5.8% (Six or more)
- **Homeless**: 57.9% (Any), 10.1% (Six or more)
- **PSH**: 45.1% (Any), 3.5% (Six or more)
No Primary Care Visit by HMIS Status, 2016

- All Linked: 33.9%
- Homeless: 36.2%
- PSH: 32.7%
Distribution of Annual Medicaid Spending* by Service and HMIS Status, 2016

*Adjusted for number of months enrolled.
Preliminary Observations

- HMIS-Medicaid linked population has very high rates of mental health and substance use disorders, especially high among the homeless
- High rates of ED and potentially avoidable IP use, especially among the homeless
- Homeless and PSH populations both have high average spending, but homeless have more hospital costs and PSH spend more on Rx
Additional Analysis Plans: Research Question #1

What are the size, characteristics, and potentially reducible Medicaid spending of the Medicaid-enrolled homeless population that is potentially eligible for permanent supportive housing (PSH) services?

• Simulate eligibility for Medicaid-funded homeless support services
  – Based on HUD chronic homelessness definition using three year HMIS history and Medicaid diagnostic data
  – Plus “at risk of homelessness” groups not meeting HUD definition

• Estimate potential Medicaid savings from PSH placement
  – Apply assumptions based on published PSH literature
  – Compare spending for homeless to matched non-homeless Medicaid beneficiaries
Additional Analysis Plans: Research Question #2

How much has PSH saved Medicaid in recent years?

• Econometric “difference-in-differences” analysis
• Selected case studies
Thank You

Further questions or comments?
Contact: Oliver Lontok at olontok@ifh.rutgers.edu