The Emerging Crisis of Aged Homelessness: Could Housing Solutions Be Funded by Avoidance of Excess Shelter, Hospital, and Nursing Home Costs?

Dennis Culhane, PhD, Dan Treglia, PhD
Thomas Byrne, PhD
Stephen Metraux, PhD
Randall Kuhn, PhD
Kelly Doran, MD MHS
Eileen Johns MPA, Maryanne Schretzmann, DSW
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County of Los Angeles
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MassHealth
Boston Department of Neighborhood Development
Agenda for Presentation

- Projections of the Aging Homeless Population
- Understanding Healthcare Service Usage of Older Homeless Adults
- Identifying Subgroups by Shelter & Healthcare Service Use
- Identifying Potential Cost Offsets
- Considering Stakeholders & Possible Next Steps
Homelessness, A Birth Cohort Phenomenon

Single Adult Male Shelter Users, United States

Sheltered Homeless Single Adult Males Aged 46-54

- 1990: 1 in 8 in 1990
- 2000: 1 in 5 in 2000
- 2010: 1 in 3 in 2010
Forecasting Change in 65+ Homeless Population

Population Growth Relative to 2017

- Los Angeles
- Boston
- New York City
NYC Age 50+ Shelter population forecast

![Chart showing the forecast and actual data for different age groups from 2004 to 2030. The chart includes age groups 50-54, 55-59, 60-64, 65-69, and 70+. The forecast data is projected to increase over time.]
NYC Age 65+ Shelter population forecast

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
<th>Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>7,000</td>
<td>6,000</td>
</tr>
<tr>
<td>2006</td>
<td>8,000</td>
<td>7,000</td>
</tr>
<tr>
<td>2008</td>
<td>9,000</td>
<td>8,000</td>
</tr>
<tr>
<td>2010</td>
<td>10,000</td>
<td>9,000</td>
</tr>
<tr>
<td>2012</td>
<td>11,000</td>
<td>10,000</td>
</tr>
<tr>
<td>2014</td>
<td>12,000</td>
<td>11,000</td>
</tr>
<tr>
<td>2016</td>
<td>13,000</td>
<td>12,000</td>
</tr>
<tr>
<td>2018</td>
<td>14,000</td>
<td>13,000</td>
</tr>
<tr>
<td>2020</td>
<td>15,000</td>
<td>14,000</td>
</tr>
<tr>
<td>2022</td>
<td>16,000</td>
<td>15,000</td>
</tr>
<tr>
<td>2024</td>
<td>17,000</td>
<td>16,000</td>
</tr>
<tr>
<td>2026</td>
<td>18,000</td>
<td>17,000</td>
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<tr>
<td>2028</td>
<td>19,000</td>
<td>18,000</td>
</tr>
<tr>
<td>2030</td>
<td>20,000</td>
<td>19,000</td>
</tr>
</tbody>
</table>
Change in Shelter Population for 5-Year Birth Cohorts: New York City, 2005 - 2030
Aging Homelessness Trends Across U.S

Year: 1990, 2000, 2010

% of Single Adult Male Homeless Population

- Arizona
- Florida
- Michigan
- North Carolina
- Oregon
- Texas
Examining Shelter, Healthcare, and Nursing Home Use & Costs of Older Homeless Adults

Data Sources

- **Boston**
  - **Shelter:** City of Boston HMIS
  - **Healthcare:** MassHealth Medicaid Claims

- **Los Angeles**
  - **Shelter:** Los Angeles Homeless Services Authority & Point-in-Time Count
  - **Healthcare:** LA Enterprise Linkage Project (Departments of Public Health, Mental Health, & Health Services), CMS (through Mission Analytics); California Office of Statewide Healthcare Planning & Development

- **New York City**
  - **Shelter:** NYC Department of Social Services
  - **Healthcare:** NYS Department of Health SPARCS Database, CMS (through Mission Analytics)
Average Annual Per Person Costs by Age: New York City

- **55-59**: $25,159
- **60-64**: $24,455
- **65-69**: $27,314
- **70+**: $28,457

Legend:
- Nursing Home
- Inpatient Care
- ED Visit
- Shelter
Nursing Home Use by Age: LA County
Projecting Total Costs through 2030: New York City
Segmenting into Subgroups to Assess Potential Housing & Service Needs

Cluster Analysis: A tool for grouping observations based on similarities and dissimilarities

Clusters were created based on a small set of variables, and validity was assessed through other variables of service use and medical acuity
--- | --- | --- | --- | ---
1 Moderate shelter use, Moderate medical need | 11,354 (84.6%) | 270 | 2.2 | 16
2 High shelter use, Moderate medical need | 1,536 (11.4%) | 1,191 | 3.1 | 20
3 Very high shelter use, Moderate medical need | 193 (1.4%) | 2,201 | 1.9 | 14
4 Low shelter use, High medical need | 344 (2.6%) | 56 | 32.5 | 253
<table>
<thead>
<tr>
<th>Cluster</th>
<th>Shelter Days</th>
<th>Inpatient Days</th>
<th>ED Visits</th>
<th>Nursing Home Days</th>
<th>Shelter Cost</th>
<th>Health Services Cost</th>
<th>Total Services Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 1</td>
<td>44</td>
<td>3</td>
<td>1</td>
<td>9</td>
<td>$5,167</td>
<td>$13,369</td>
<td>$18,536</td>
</tr>
<tr>
<td>Cluster 2</td>
<td>196</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>$23,018</td>
<td>$15,870</td>
<td>$38,888</td>
</tr>
<tr>
<td>Cluster 3</td>
<td>329</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>$38,638</td>
<td>$10,281</td>
<td>$48,919</td>
</tr>
<tr>
<td>Cluster 4</td>
<td>9</td>
<td>51</td>
<td>10</td>
<td>32</td>
<td>$1,075</td>
<td>$175,437</td>
<td>$176,494</td>
</tr>
</tbody>
</table>

Subgroups: Annualized Shelter & Healthcare Use

- **Shelter Use**: 4
- **Medical Need**: 1, 2, 3
Envisioning a Continuum of Potential Interventions
Subgroup 1: Progressive Engagement

Expect homelessness to selfresolve for one-third of this cluster, as people move in with friends, family, partners, etc.

For the remaining 2/3, we assume an equal division of:

Rapid Rehousing: relocation and case management services and time-limited rental assistance

Shallow rental subsidies: for those needing ongoing modest rental assistance for shared living arrangements and minimal financial and social service support

Rental vouchers, like those available through HUD’s Section 202 program, in addition to light case management, and likely to be living alone
Subgroups 2, 3, and 4: Permanent Supportive Housing

- Long-term housing + supportive services for chronically homeless populations
- All three groups may need advanced case management and home care services that allow for aging in place
- Subgroup 4 are likely candidates for palliative care and additional nursing home transition services
### Estimating Costs for Each Intervention

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Annual Housing Cost</th>
<th>Annual Service Cost</th>
<th>Total Annual Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cluster 1</strong> Subsidy + Services</td>
<td>$4,795</td>
<td>$1,650</td>
<td>$6,444</td>
</tr>
<tr>
<td><strong>Cluster 2</strong> PSH</td>
<td>$15,468</td>
<td>$11,500</td>
<td>$26,968</td>
</tr>
<tr>
<td><strong>Cluster 3</strong> PSH</td>
<td>$15,468</td>
<td>$11,500</td>
<td>$26,968</td>
</tr>
<tr>
<td><strong>Cluster 4</strong> PSH + Additional Supports</td>
<td>$15,468</td>
<td>$23,000</td>
<td>$38,468</td>
</tr>
</tbody>
</table>

**Shelter Use**

1. Medical Need

2. Shelter Use

3. **PSH**

4. **Cluster 1** Subsidy + Services
Estimating Service Cost Reductions


13. Mares AS, Rosenheck RA. Twelve-Month Client Outcomes and Service Use in a Multisite Project for Chronically Homelessness Adults.

Service Cost Reduction Scenarios

- **Scenario 1**
  More conservative
  Based on a pooled average of the percentage change in health care costs associated with housing placement that were observed in all studies that were reviewed. Studies were weighted so those with stronger methodological rigor had larger weights and greater impact on the pooled average.

- **Scenario 2**
  Less conservative
  Based on a pooled average of the percentage change in health care costs associated with housing placement that were observed in all studies that identified a significant reduction in health care costs.
<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Scenario 1 (More conservative)</th>
<th>Scenario 2 (Less conservative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient medical</td>
<td>-18%</td>
<td>-33%</td>
</tr>
<tr>
<td>Emergency Department</td>
<td>-6%</td>
<td>-45%</td>
</tr>
<tr>
<td>Outpatient medical</td>
<td>-6%</td>
<td>-45%</td>
</tr>
<tr>
<td>Outpatient behavioral health</td>
<td>48%</td>
<td>-29%</td>
</tr>
<tr>
<td>Inpatient behavioral health</td>
<td>-35%</td>
<td>-56%</td>
</tr>
<tr>
<td>Nursing home</td>
<td>-42%</td>
<td>-90%</td>
</tr>
<tr>
<td>Shelter</td>
<td>-71%</td>
<td>-71%</td>
</tr>
</tbody>
</table>
Cost Reduction Possibilities by Age Group:
LA County Average per Person Per Year

<table>
<thead>
<tr>
<th>Age</th>
<th>More Conservative</th>
<th>Less Conservative</th>
<th>Housing Intervention Cbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>55-59</td>
<td>$5,498</td>
<td>$5,951</td>
<td>$6,978</td>
</tr>
<tr>
<td>60-64</td>
<td>$6,570</td>
<td>$9,834</td>
<td>Age 60-64</td>
</tr>
<tr>
<td>65-69</td>
<td>$6,969</td>
<td>$10,668</td>
<td>Age 65-69</td>
</tr>
<tr>
<td>70+</td>
<td></td>
<td>$11,346</td>
<td>Age 70+</td>
</tr>
</tbody>
</table>
Cost Reduction Possibilities in NYC Average Per Person Per Year

- More Conservative: $9,171
- Less Conservative: $13,215
- Housing Intervention Cost: $11,033
Cost Reduction Possibilities in Boston Average Per Person Per Year

<table>
<thead>
<tr>
<th></th>
<th>Service Cost Reductions</th>
<th>Housing Intervention Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>More Conservative</td>
<td>$4,946</td>
<td>$9,052</td>
</tr>
<tr>
<td>Less Conservative</td>
<td>$9,073</td>
<td>$9,073</td>
</tr>
</tbody>
</table>
# Annualized Average Projected Costs & Potential Cost Reductions
(in millions of $)

<table>
<thead>
<tr>
<th></th>
<th>Service Costs without an Intervention</th>
<th>Intervention Costs</th>
<th>Average Service Cost Reductions</th>
<th>Net Offsets (Service Cost Reductions - Intervention Costs)</th>
<th>Return Per Dollar Spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York City</td>
<td>$408</td>
<td>$157</td>
<td>$177</td>
<td>$20</td>
<td>1.13</td>
</tr>
<tr>
<td>Boston*</td>
<td>$67</td>
<td>$39</td>
<td>$30</td>
<td>($9)</td>
<td>0.77</td>
</tr>
<tr>
<td>LA County</td>
<td>$621</td>
<td>$241</td>
<td>$274</td>
<td>$33</td>
<td>1.14</td>
</tr>
</tbody>
</table>

* Boston service costs and cost reductions exclude Medicare-reimbursed services. A forthcoming analysis estimating Medicare costs suggests that an intervention would be break-even or provide net savings.
Could Housing Solutions be Funded by Resultant Service Cost Reductions? Yes
National Projections (with cautions)
Key Stakeholders

U.S. HUD & VA
U.S. DHHS – CMS
State Medicaid Regulatory Agencies
Medicaid Managed Care Organizations
Hospitals & nursing homes
Homeless Service Providers (CoC’s)
Housing Authorities
Local Area Agencies on Aging
• How to advance fund the housing “investment”?

• MCOs as rapid rehousing funder under a critical time intervention model?

• Start now targeting hospital and ER discharges and nursing home diversion?

• Ramp up over time, starting with 65+ or 62+ to gain momentum and develop policies and procedures?

• Federal challenge grant program to states for pilots?

• Local/state pay for shallow subsidies as alternative to shelter, and sunsetting over time?

• Hospitals as key local leaders and conveners? Dissuade from “medical respite” push?