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

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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
Projecting the 65+ Homeless Adult Population: Boston, MA
Projecting the 55+ Homeless Adult Population: Boston, MA
Aging Homelessness Trends Across U.S

% of Single Adult Male Homeless Population

Year 1990 2000 2010

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
  - Nursing Home: $5,000
  - Inpatient Care: $15,000
  - ED Visit: $5,159
  - Shelter: $0

- **60-64**: $24,455
  - Nursing Home: $5,000
  - Inpatient Care: $15,000
  - ED Visit: $4,455
  - Shelter: $0

- **65-69**: $27,314
  - Nursing Home: $5,000
  - Inpatient Care: $15,000
  - ED Visit: $7,314
  - Shelter: $514

- **70+**: $28,457
  - Nursing Home: $5,000
  - Inpatient Care: $15,000
  - ED Visit: $6,457
  - Shelter: $457
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.
### Subgroups: Annualized Shelter & Healthcare Use

<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>

### Medical Need

- **Shelter Use**
  - Cluster 1: 1
  - Cluster 2: 2
  - Cluster 3: 3
  - Cluster 4: 4

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Shelter Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 1</td>
<td>1</td>
</tr>
<tr>
<td>Cluster 2</td>
<td>2</td>
</tr>
<tr>
<td>Cluster 3</td>
<td>3</td>
</tr>
<tr>
<td>Cluster 4</td>
<td>4</td>
</tr>
</tbody>
</table>
Envisioning a Continuum of Potential Interventions
### 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>

**Medical Need**

- 1
- 2
- 3

**Shelter Use**

- 4
A Range of Potential Service Cost Reductions

<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
Cost Reduction Possibilities in NYC Average Per Person Per Year

Service Cost Reductions

- More Conservative: $9,171
- Less Conservative: $13,215

Housing Intervention Cost: $11,033
Cost Reduction Possibilities in Boston Average Per Person Per Year

More Conservative: $4,946

Less Conservative: $9,073

Housing Intervention Cost: $9,052
**Annualized Average Projected Costs & Potential Cost Reductions**

*(in millions of $)*

<table>
<thead>
<tr>
<th>Location</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