Social Determinant of Health: Clinical Care Implications

NCHV Annual Meeting
June, 2016
Veteran Homelessness

- Poverty
- Lack of Affordable Housing
- Unemployment/Economics
- Medical/Mental Health Issues
- Substance Use
- Domestic Violence
- Unsuccessful Transition from Military
- Prior history of homelessness
- Family Decompenstation
<table>
<thead>
<tr>
<th>Medical and Mental Health Conditions</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depressive Disorder</td>
<td>67.4%</td>
</tr>
<tr>
<td>Arthritis/joint pain</td>
<td>53.3%</td>
</tr>
<tr>
<td>Alcohol dependence</td>
<td>52.5%</td>
</tr>
<tr>
<td>Drug abuse</td>
<td>41.9%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>up to 45.2%</td>
</tr>
<tr>
<td>Anxiety</td>
<td>36.9%</td>
</tr>
<tr>
<td>Hepatitis</td>
<td>up to 28.0%</td>
</tr>
<tr>
<td>COPD/Emphysema</td>
<td>up to 17.3%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>up to 9.3%</td>
</tr>
<tr>
<td>Heart disease</td>
<td>7.1%</td>
</tr>
</tbody>
</table>
Health and Homelessness

Institute of Medicine, 1988

Health conditions causing homelessness

Health conditions made worse by homelessness

Homelessness

Health conditions caused by homelessness
Health and Homelessness

**Biologic**
- Accelerated Aging/Premature Morbidity
- Increased Cell Death
- Stress hormones
- Micronutrient Malnutrition

**Environmental**
- High Risk Environment
- Inadequate care system capacity to address social determinants of health

**Homeless-Driven Adverse Health Outcomes**

**Behavioral**
- Poor compliance due to behavioral and substance use issues, competing sustenance needs

Competing priorities as a barrier to medical care among homeless adults in Los Angeles.

Gelberg L¹, Gallagher TC, Andersen RM, Koegel P.
Frequent subsistence difficulty appears to be an important nonfinancial barrier to the utilization of health services perceived as discretionary among homeless adults.


Needing Primary Care But Not Getting It: The Role of Trust, Stigma and Organizational Obstacles reported by Homeless Veterans.

O'Toole TP, Johnson EE, Redihan S, Borgia M, Rose J
Reasons for delaying care fell into three domains: 1) trust; 2) stigma; and 3) care processes. Our findings support the importance of considering health access within an expanded framework that includes perceived stigma, inflexible care systems and trust issues.
Study Goals and Design

• Describe characteristics of health care delivery that are associated with high rates of treatment engagement and improved clinic outcomes among homeless Veterans

• Observational study of 33 VHA “Homeless Medical Homes” (HPACTs) evaluating care use by 3,543 Veterans in 2013.
The mission of the HPACT is to identify and engage in care the highest-risk, highest-need homeless veterans who are not able to get the care they need through traditional channels and provide high-intensity, wrap-around, integrated team care that stabilizes them clinically, incorporates social determinants of health into their care delivery, and expedites their placement in housing.

Four tenets of the H-PACT model:

- **Open-access care** that does not rely on scheduling processes that are not amenable to a homeless persons’ circumstances.
- **Wrap-around services/incorporation of social determinants of health/housing** into the care model/treatment plan.
- **Intensive case and care management** with pre-emptive/predictive care modeling.
- **Dedicated staff with specific skill sets, cultural competency**.
H-PACT MODEL FOR TREATMENT ENGAGEMENT

Disengaged/Disenfranchised from Care
- Unstable Sheltering
- Significant Treatment Barriers
- Health Care Low Priority
- High Rate of ED & Inpatient Care
- Premature Morbidity/Mortality

Treatment Engagement
- Housing First
- Facilitated Access
- Care Management of Conditions leading to and perpetuating Homelessness
- Address Competing Needs

Stabilization
- Chronic Disease Management
- Prevent Recidivism
- Early Identification of New Needs

Identification & Referral
- Emergency Departments
- Inpatient Wards
- Community Outreach & Referrals

Intervention
- Homeless PACT
  - Enhanced, Open Access
  - Intensive Case Management
  - Designated staff with specialized training
  - One-Stop Care/Wrap around services: Addressing Competing Needs

Disposition
- Homeless Situation Stabilized: Transfer to general PACT team with Specialty Care
- Homeless Situation not Stabilized: Remain in H-PACT due to ongoing homelessness/risk of homelessness
- Homeless Situation Stabilized: Transfer to Special Population PACT:
  - SMI PACT
  - Women’s Health PACT
  - HIV PACT
## Results (2013)

<table>
<thead>
<tr>
<th>Access</th>
<th>High-Performing teams (N=17)</th>
<th>Mid-performing teams (N=9)*</th>
<th>Low-Performing teams (N=7)*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Availability &gt; 20 hours/week</strong></td>
<td>&gt;30% reduction in ER use (or)</td>
<td>0-30% reduction in ER use (or)</td>
<td>Increase in ER visits/ hospitalizations</td>
</tr>
<tr>
<td><strong>After-hours care/consult capacity</strong></td>
<td>&gt;20% reduction in hospitalizations</td>
<td>0-20% reduction in hospitalizations</td>
<td></td>
</tr>
<tr>
<td><strong>&lt;14 days to access MH</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Multiple ways to access care</strong></td>
<td>94.1% (16)</td>
<td>75.0% (6)</td>
<td>83.3% (5)</td>
</tr>
</tbody>
</table>

* N refers to the number of teams in each category.
Results – cont’d

<table>
<thead>
<tr>
<th>Homeless-specific care modeling</th>
<th>High-Performing site</th>
<th>Mid-performing site</th>
<th>Low-performing site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical protocols:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post ED/hosp. admission</td>
<td>58.8% (10)</td>
<td>75.0% (6)</td>
<td>50.0% (3)</td>
</tr>
<tr>
<td>Disease-specific care</td>
<td>52.9% (9)</td>
<td>50.0% (4)</td>
<td>33.3% (2)</td>
</tr>
<tr>
<td>Housing integrated into care:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part of H&amp;P</td>
<td>94.1% (16)</td>
<td>100% (8)</td>
<td>83.3% (5)</td>
</tr>
<tr>
<td>Housing status tracking</td>
<td>82.4% (14)</td>
<td>75.0% (6)</td>
<td>50.0% (3) p=0.05</td>
</tr>
<tr>
<td>On-site social supports</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>94.1% (16)</td>
<td>87.5% (7)</td>
<td>33.3% (2) p&lt;0.01</td>
</tr>
<tr>
<td>Food</td>
<td>64.7% (11)</td>
<td>25.0% (2)</td>
<td>16.7% (1) p=0.03</td>
</tr>
<tr>
<td>Clothes</td>
<td>76.5% (13)</td>
<td>37.5% (3)</td>
<td>33.3% (2) p=0.03</td>
</tr>
<tr>
<td>Community Integration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical outreach</td>
<td>94.1% (16)</td>
<td>62.5% (5)</td>
<td>66.7% (4) p=0.03</td>
</tr>
<tr>
<td>Scheduled meetings</td>
<td>64.7% (11)</td>
<td>37.5% (3)</td>
<td>33.3% (2)</td>
</tr>
<tr>
<td>Community events</td>
<td>82.4% (14)</td>
<td>87.5% (7)</td>
<td>33.3% (2) p=0.01</td>
</tr>
</tbody>
</table>
Conclusions – Rethinking health care delivery beyond the medical model

Value-added elements:

• Incorporating on-site social services such as food, clothing, and hygiene care, is associated with better health care for homeless Veterans

• Community partnering – shared care management, community outreach and co-hosting community events improves health outcomes for homeless Veterans
Acknowledgements

Project Team
  Tom O’Toole
  Erin Johnson
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