Policies and Strategies to Bend the Cost Curve: Taking Social Determinants Seriously

Elizabeth Bradley, PhD, Professor of Public Health
Elizabeth.Bradley@yale.edu, Follow @EHBYale

Yale Global Health Leadership Institute
Health Expenditures as a % of GDP, 2009
Some Very Real Benefits

Kidney Transplants

Knee Replacements

MRIs
And yet, we have enduring challenges

Out of 34 OECD Countries

25\textsuperscript{th} in maternal mortality
26\textsuperscript{th} in life expectancy
28\textsuperscript{th} in low birth weight
What determines health?

- Genetics (20%)
- Social, Environmental, and Behavioral Factors (60%)
- Health Care (20%)
job training and employment programs
supportive housing & rent subsidies
nutritional support & family assistance
other social services that exclude health benefits
Opportunity Costs

1 emergency department visit = 1 month’s rent

2 hospitalizations = 1 year of child care

20 MRIs = 1 social worker for a year

60 echocardiograms = 1 public school teacher for a year
Total Investment in Health as a % GDP

- Social Service Spending, %GDP
- Health Care Spending, %GDP
Ratio of Social-to-Health Spending, 2009

*Switzerland and Turkey are missing data for 2009*
Countries with higher ratios of social-to-health spending have statistically better health outcomes.

*Lower infant mortality*
*Fewer low birth weight babies*
*Less premature death*
*Longer life expectancy*

Bradley, Elkins, Herrin, Elbel et al., BMJ Open, 2011
What does the evidence tell us about which types of social services produce the best health-related outcomes?
## Literature review

<table>
<thead>
<tr>
<th>Category</th>
<th>Count (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Papers</td>
<td>74</td>
</tr>
<tr>
<td>Positive Findings</td>
<td>60</td>
</tr>
<tr>
<td>Null Findings</td>
<td>14</td>
</tr>
<tr>
<td>Health Improvement</td>
<td>22</td>
</tr>
<tr>
<td>Health Care Cost Savings</td>
<td>38</td>
</tr>
<tr>
<td>Both</td>
<td>10</td>
</tr>
</tbody>
</table>

**CONCLUSION:**
The literature is **mixed**.
Supportive housing, and
Integrated health care and housing

Bud Clark Commons

Minnesota Supportive Housing
Nutritional assistance for high-risk women, infants, and children as well as older adults with disabilities
Case management and community outreach
The Work Ahead

Changing Our **Mental Models**: Health and social services are distinct levers to achieve common goals.

Changing **Financial Incentives**: To promote collaboration between health care and social services.

Exposing Latent **Networks**: Connections already exist between health care and social services but are not always leveraged.
Thank you

@EHBYale
Extra
In the US, for $1 spent on health care, about $0.90 is spent on social services.

In OECD, for $1 spent on health care, about $2 is spent on social services.
Is the same pattern found inside the U.S. across the states?
Ratio of social-to-health care spending*

*Medicare and Medicaid spending
States with higher ratios of social-to-health spending have statistically better health outcomes.

Less adult obesity, less adult asthma
Fewer adults reporting 14+ mental unhealthy days
Fewer adults reporting 14+ days of activity limitations in last 30
Lower lung cancer and type II diabetes mortality rates
Lower post-neonatal mortality rates
Greater physical activity and consumption of fruits and vegetables
Less smoking tobacco

Bradley et al., Health Affairs, under review