6-13-2015

Learning from Delivery System Behavior, Dynamics & Interactions to Advance a Culture of Health

Glen P. Mays
University of Kentucky, glen.mays@uky.edu

Click here to let us know how access to this document benefits you.

Follow this and additional works at: https://uknowledge.uky.edu/hsm_present

Part of the Health and Medical Administration Commons, Health Economics Commons, Health Policy Commons, and the Health Services Research Commons

Repository Citation
https://uknowledge.uky.edu/hsm_present/103

This Presentation is brought to you for free and open access by the Health Management and Policy at UKnowledge. It has been accepted for inclusion in Health Management and Policy Presentations by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.
Learning from Delivery System Behavior, Dynamics & Interactions to Advance a Culture of Health

Glen Mays, PhD, MPH
University of Kentucky
Widening the Lens of Health Services Research

How best to align the delivery and financing systems for medical care, public health, and community services & supports to promote wellbeing and resiliency, realize efficiencies in resource use, and reduce inequities in health.
The case for improving delivery system alignments and interactions

Proportional Contribution to Premature Death

- Genetic predisposition: 30%
- Environmental exposure: 5%
- Social circumstances: 15%
- Health care: 10%
- Behavioral patterns: 40%

The case for improving delivery system alignments and interactions

<table>
<thead>
<tr>
<th>Estimate</th>
<th>Cost to Medicare and Medicaid</th>
<th>Total cost to US health care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Midpoint</td>
<td>High</td>
</tr>
<tr>
<td>Failures of care delivery</td>
<td>$26</td>
<td>$36</td>
</tr>
<tr>
<td>Failures of care coordination</td>
<td>21</td>
<td>30</td>
</tr>
<tr>
<td>Overtreatment</td>
<td>67</td>
<td>77</td>
</tr>
<tr>
<td>Administrative complexity</td>
<td>16</td>
<td>36</td>
</tr>
<tr>
<td>Pricing failures</td>
<td>36</td>
<td>56</td>
</tr>
<tr>
<td>Subtotal (excluding fraud and abuse)</td>
<td>166</td>
<td>235</td>
</tr>
<tr>
<td>Percentage of total health care spending</td>
<td>6%</td>
<td>9%</td>
</tr>
</tbody>
</table>

http://www.healthaffairs.org/healthpolicybriefs/
Medical Care
- Fragmentation
- Duplication
- Variability in practice
- Limited accessibility
- Episodic and reactive care
- Insensitivity to consumer values & preferences
- Limited targeting of resources to community needs

Social Services & Supports

Public Health
- Fragmentation
- Variability in practice
- Resource constrained
- Limited reach
- Insufficient scale
- Limited public visibility & understanding
- Limited evidence base
- Slow to innovate & adapt

Waste and inefficiency
Inequitable outcomes
Limited population health impact
Connecting social needs, public health functions and medical outcomes

- Unmet social needs have large effects on medical resource use and outcomes

- Most primary care physicians lack confidence in their capacity to address unmet social needs

- Linking people to needed health and social support services is a core public health function that can add health and economic value
The case for improving delivery system alignments and interactions

Evidence-based prevention & public health strategies reach less than 2/3 of populations at risk:

- Smoking cessation
- Influenza vaccination
- Hypertension control
- Nutrition & physical activity programs
- HIV prevention
- Family planning
- Substance abuse prevention
- Interpersonal violence prevention
- Maternal and infant home visiting for high-risk populations
Wide lens: implicated sectors

- Public health
- Medical care: ACOs, PCMCs, ACHs
- Social services & supports
- Education and workforce development
- Housing
- Transportation
- Criminal justice
- Economic development and finance
Overcoming collective action problems across delivery systems & sectors

- Incentive compatibility → public goods
- Concentrated costs & diffuse benefits
- Time lags: costs vs. improvements
- Uncertainties about what works
- Asymmetry in information
- Difficulties measuring progress
- Weak and variable institutions & infrastructure
- Imbalance: resources vs. needs
- Stability & sustainability of funding

Ostrom E. 1994
Learning how to succeed with population health strategies

- Designed to achieve large-scale health improvement: neighborhood, city/county, region
- Target fundamental and often multiple determinants of health
- Mobilize the collective actions of multiple stakeholders in government & private sector

Example research topics

- Population health effects of social systems and services: housing, transportation, child welfare, nutrition, income support, criminal justice
- Spill-over effects of public health & social systems on medical care costs & outcomes
- Novel financing and incentives for system integration: Accountable communities of health, pay-for-success, shared savings, public-private joint ventures
- Novel delivery system approaches for alignment & coordination: navigators, CHWs, community engagement, health IT and HIE
Relevant research areas

- Systems science & network behavior
- Social capital & community resilience
- Health & behavioral economics
- Governance & collective action management
- Social & environmental determinants of health
- Health equity
“Rapid-Learning Systems” for a Culture of Health

In a learning health care system, research influences practice and practice influences research.

Evaluate
Collect data and analyze results to show what does and does not work.

Adjust
Use evidence to influence continual improvement.

Disseminate
Share results to improve care for everyone.

Implement
Apply the plan in pilot and control settings.

Design
Design care and evaluation based on evidence generated here and elsewhere.

Internal and External Scan
Identify problems and potentially innovative solutions.
