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

Glen P. Mays, *University of Kentucky*



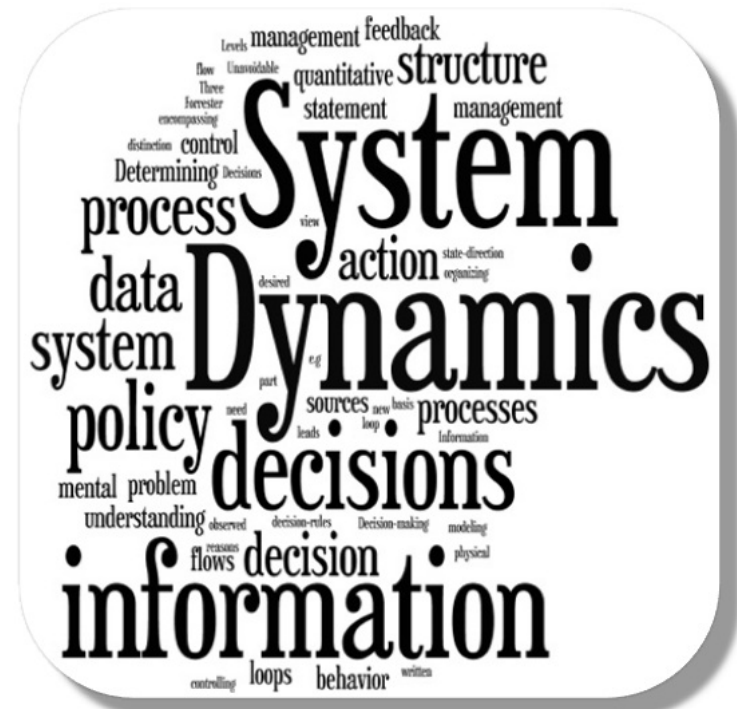
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# **Learning from Delivery System Behavior, Dynamics & Interactions to Advance a Culture of Health**

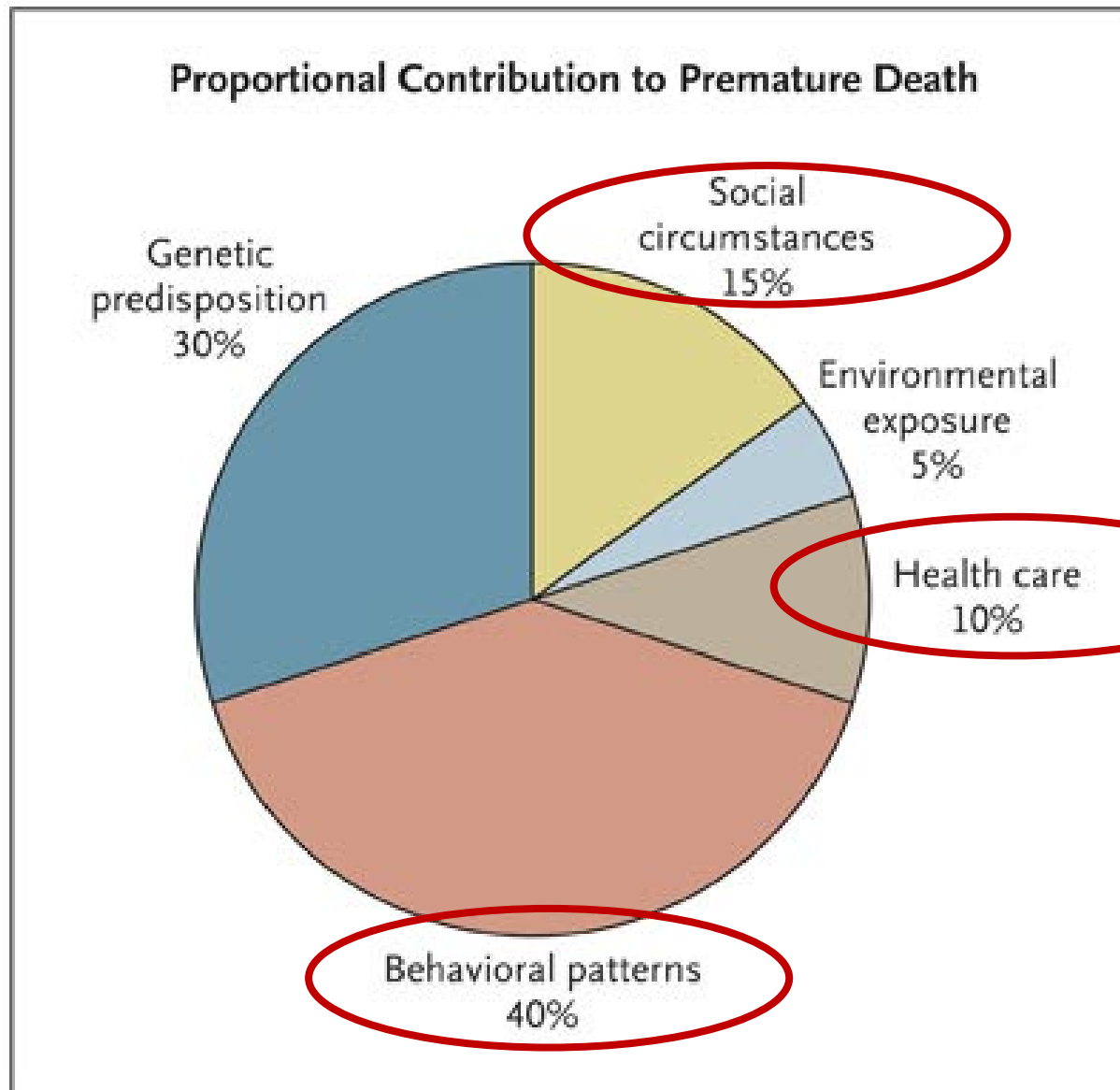
Glen Mays, PhD, MPH  
University of Kentucky

# 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

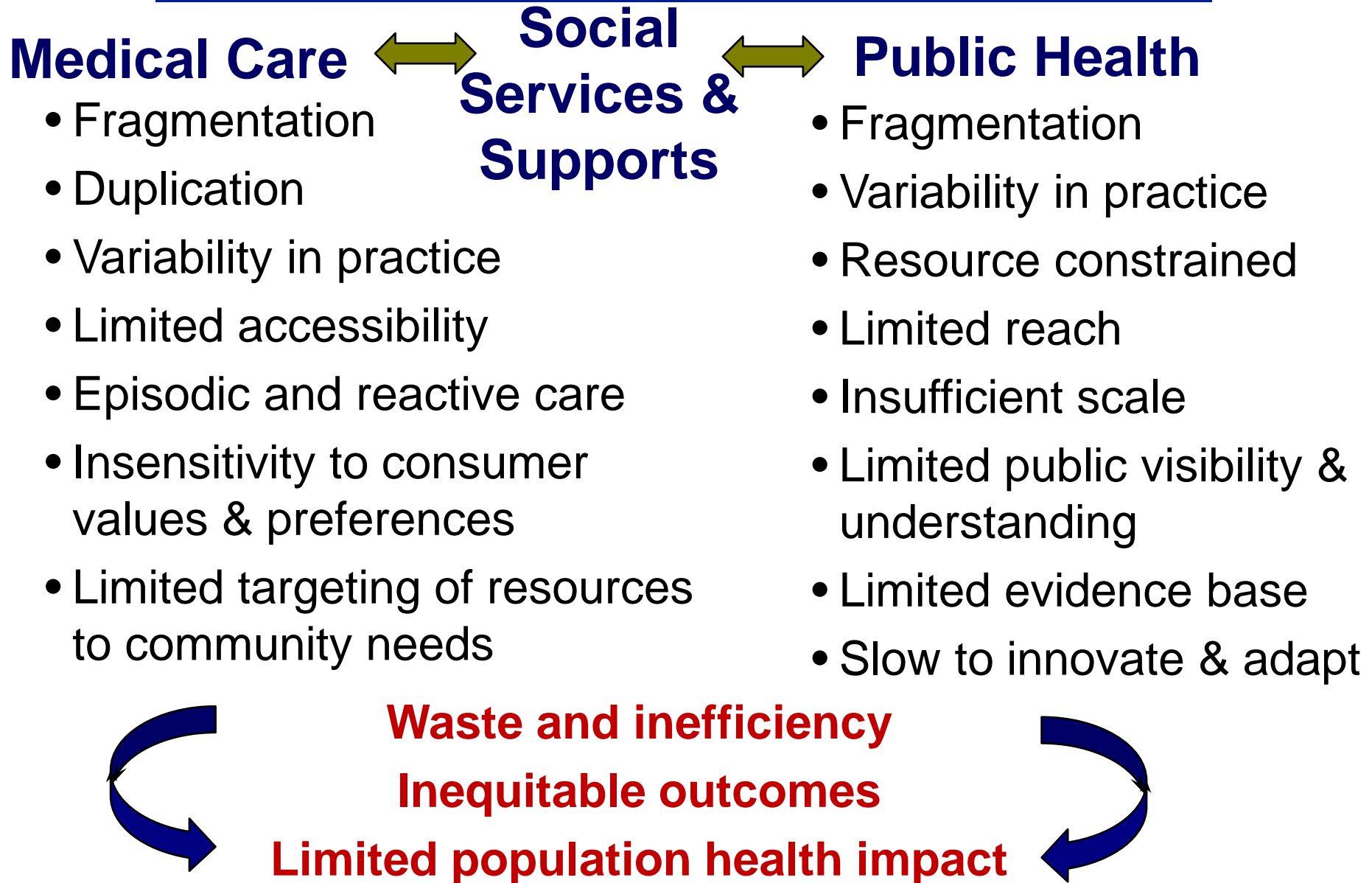
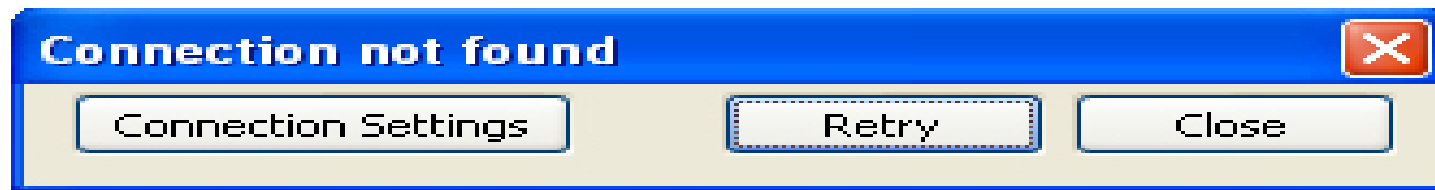


# The case for improving delivery system alignments and interactions

## EXHIBIT 1

### Estimates of Waste in US Health Care Spending in 2011, by Category

	Cost to Medicare and Medicaid <sup>a</sup>			Total cost to US health care <sup>b</sup>		
	Low	Midpoint	High	Low	Midpoint	High
Failures of care delivery	\$26	\$36	\$45	\$102	\$128	\$154
Failures of care coordination	21	30	39	25	35	45
Overtreatment	67	77	87	158	192	226
Administrative complexity	16	36	56	107	248	389
Pricing failures	36	56	77	84	131	178
<b>Subtotal (excluding fraud and abuse)</b>	166	235	304	476	734	992
<b>Percentage of total health care spending</b>	6%	9%	11%	18%	27%	37%



# 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

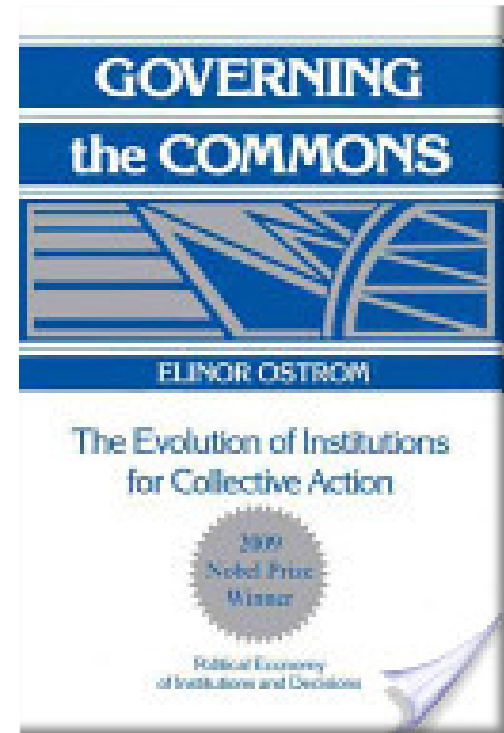
- Public health
- Medical care: ACOs, PCMCs, ACHs
- Social services & supports
- Education and workforce development
- Housing
- Transportation
- Criminal justice
- Economic development and finance



**USDA**  
Supplemental  
Nutrition  
Assistance  
Program

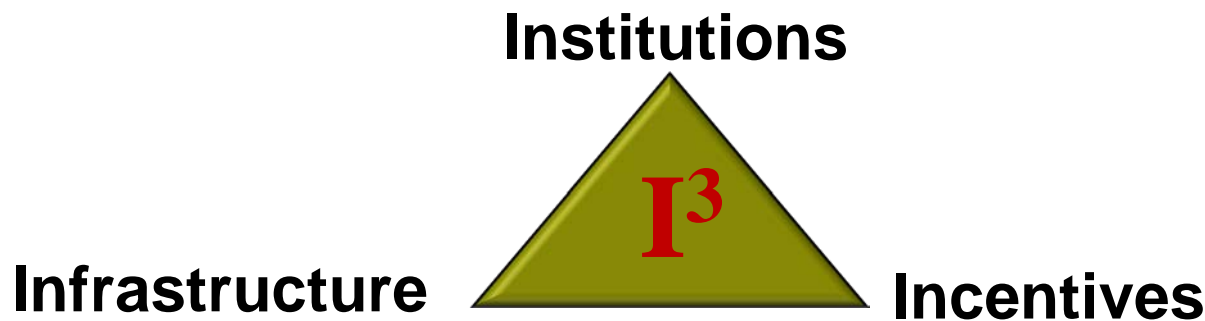
# Overcoming collective action problems across delivery systems & sectors

- 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



# 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



# For More Information



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