Using Research and ROI to Drive Partnerships in Public Health Delivery Systems

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Available at: https://works.bepress.com/glen_mays/220/
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Global Forum on Research and Innovation for Health 2015
Manila, Philippines • 25 August 2015

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More than

75% of total U.S. health care costs derive from preventable conditions

Less than 3% of total U.S. health expenditures are devoted to public health & prevention.

USDHHS. National Health Expenditure Accounts 2014.
U.S. communities that increased public health spending by 10% experienced an 8% reduction in preventable mortality rates over 15 years.

Mays GP, Smith SA. Evidence links increases in public health spending to declines in preventable deaths. *Health Affairs*. 2011
Every $10 invested in local public health infrastructure in the U.S. generated at least $9.2 in medical cost offsets over the next 15 years, lowering the ICER to <$600 per life-year gained.

Of the core public health activities delivered in the average U.S. community are contributed by partners outside the public health sector.

Less than 1% of federal health research spending supports delivery system research.

Woolf SH, Johnson RE. The break-even point: when medical advances are less important than improving the fidelity with which they are delivered. Annals of Family Medicine. 2005
Using **Practice-Based Research Networks** to build the science of public health delivery systems

> First cohort (December 2008 start-up)
> Second cohort (January 2010 start-up)
> Affiliate/Emerging PBRNs (2011-14)

> >2100 public health agencies
> 56 universities
> >60 CBOs
> >$30M in research funding

Mapping U.S. partnerships in public health delivery

National Longitudinal Survey of Public Health Systems

Node size = centrality of organization in network
Line size = % activities jointly contributed (tie strength)

Mays et al. Preventing Chronic Disease 2010
Understanding variation in partnership performance

National Longitudinal Survey of Public Health Systems

Percent of activities performed

National Longitudinal Survey of Public Health Systems, 2014
Classifying partnership configurations in public health


- **Scope**: High
- **Centralization**: Mod
- **Integration**: High
  - **Comprehensive (High System Capital)**
  - **Conventional (Moderate System Capital)**
  - **Limited (Low System Capital)**

Mays et al. *Milbank Quarterly* 2010
Estimating value: Comprehensive delivery system partnerships do more with less

National Longitudinal Survey of Public Health Systems, 2014

Mays et al. forthcoming 2015
Estimating health & economic impact of public health partnerships


Models also control for racial composition, unemployment, health insurance coverage, educational attainment, age composition, and state and year fixed effects. N=779 community-years **p<0.05   *p<0.10

Mays et al. forthcoming 2015
The case for equity: larger gains in low-resource communities

Effects of Public Health System Capital in Low-Income vs. High-Income Communities

Log IV regression estimates controlling for community-level and state-level characteristics

Mays et al. forthcoming 2015
Driving partnerships with comparative measurement & reporting
www.nhspi.org
For More Information

Supported by The Robert Wood Johnson Foundation

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