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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/

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

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Glen Mays, PhD, MPH



More than

75%

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

Less than

30%

**of total U.S. health expenditures are devoted
to public health & prevention**

U.S. communities that increased public health spending by 10% experienced an

80%

**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**

Mays GP, Smith SA. Geographic variation in public health spending: correlates and consequences. *Health Services Research* 2009.

Of the core public health activities delivered
in the average U.S. community

62%

are contributed **by partners outside
the public health sector.**

Mays GP et al. Economic shocks and public health protections in U.S. metropolitan areas.
American Journal of Public Health. 2015

Less than




10%

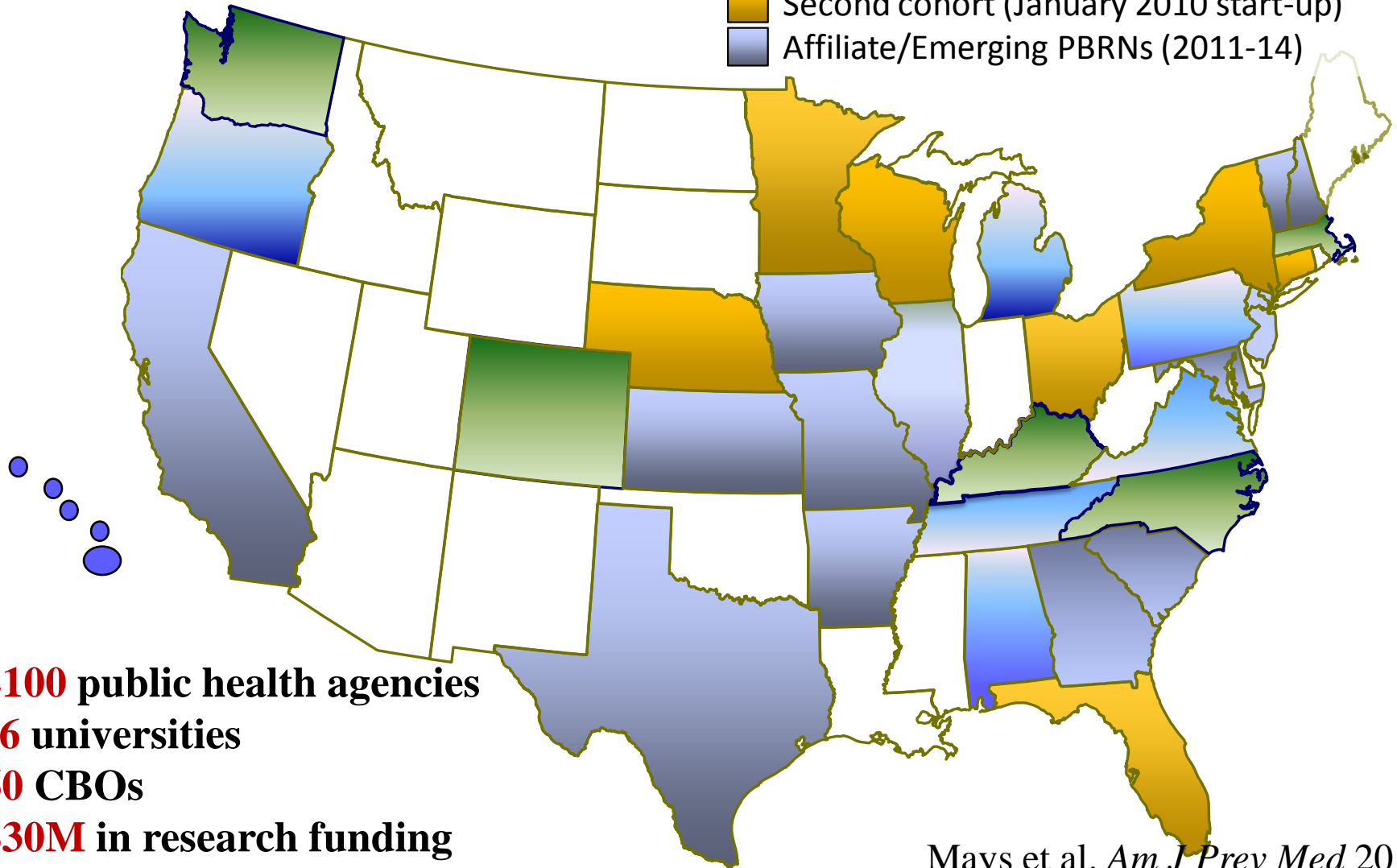
**of federal health research spending
supports delivery system research**

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 **P**ractice-**B**ased **R**esearch **N**etworks to build the science of public health delivery systems



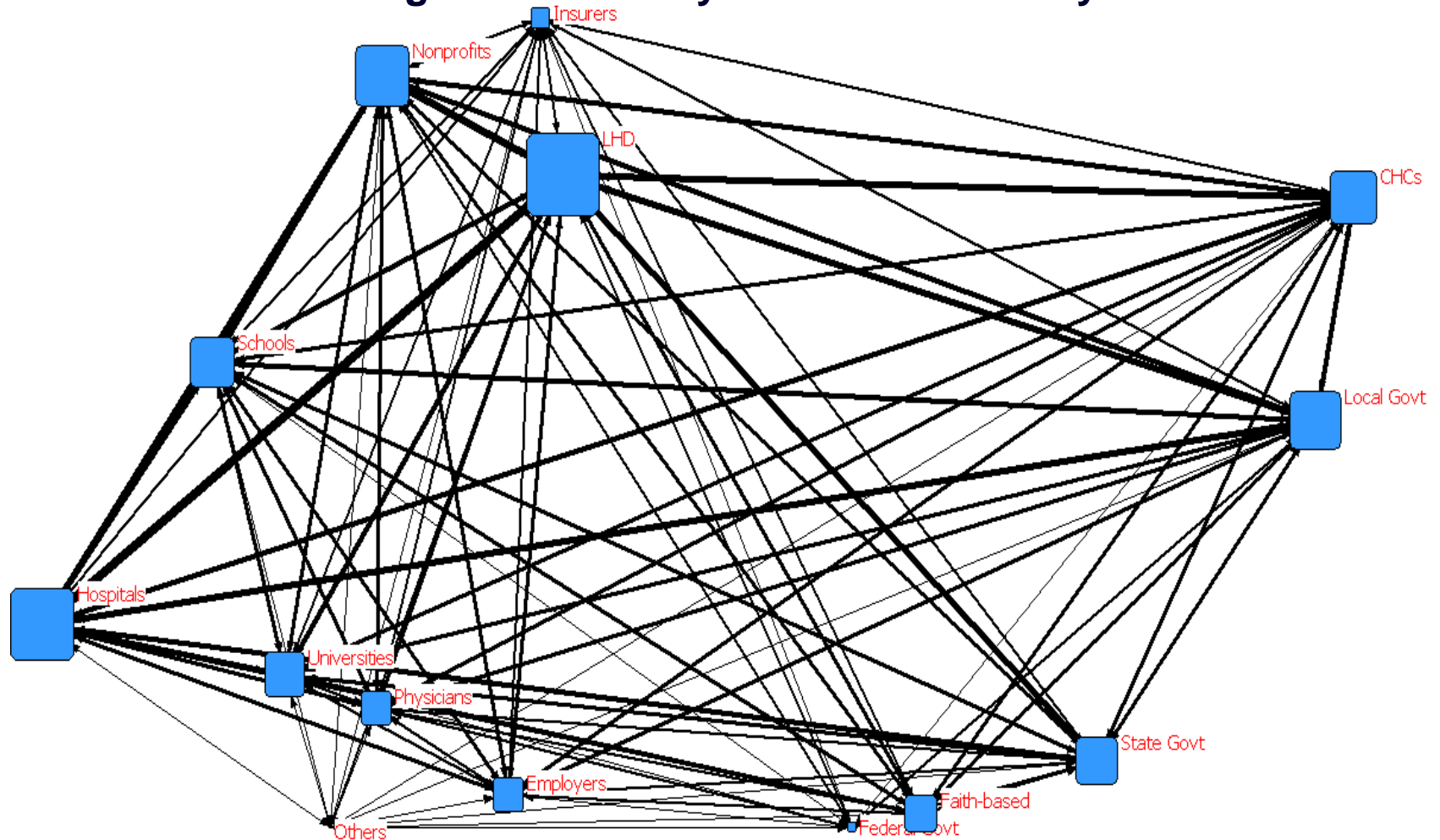
-  First cohort (December 2008 start-up)
-  Second cohort (January 2010 start-up)
-  Affiliate/Emerging PBRNs (2011-14)



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

Mapping U.S. partnerships in public health delivery

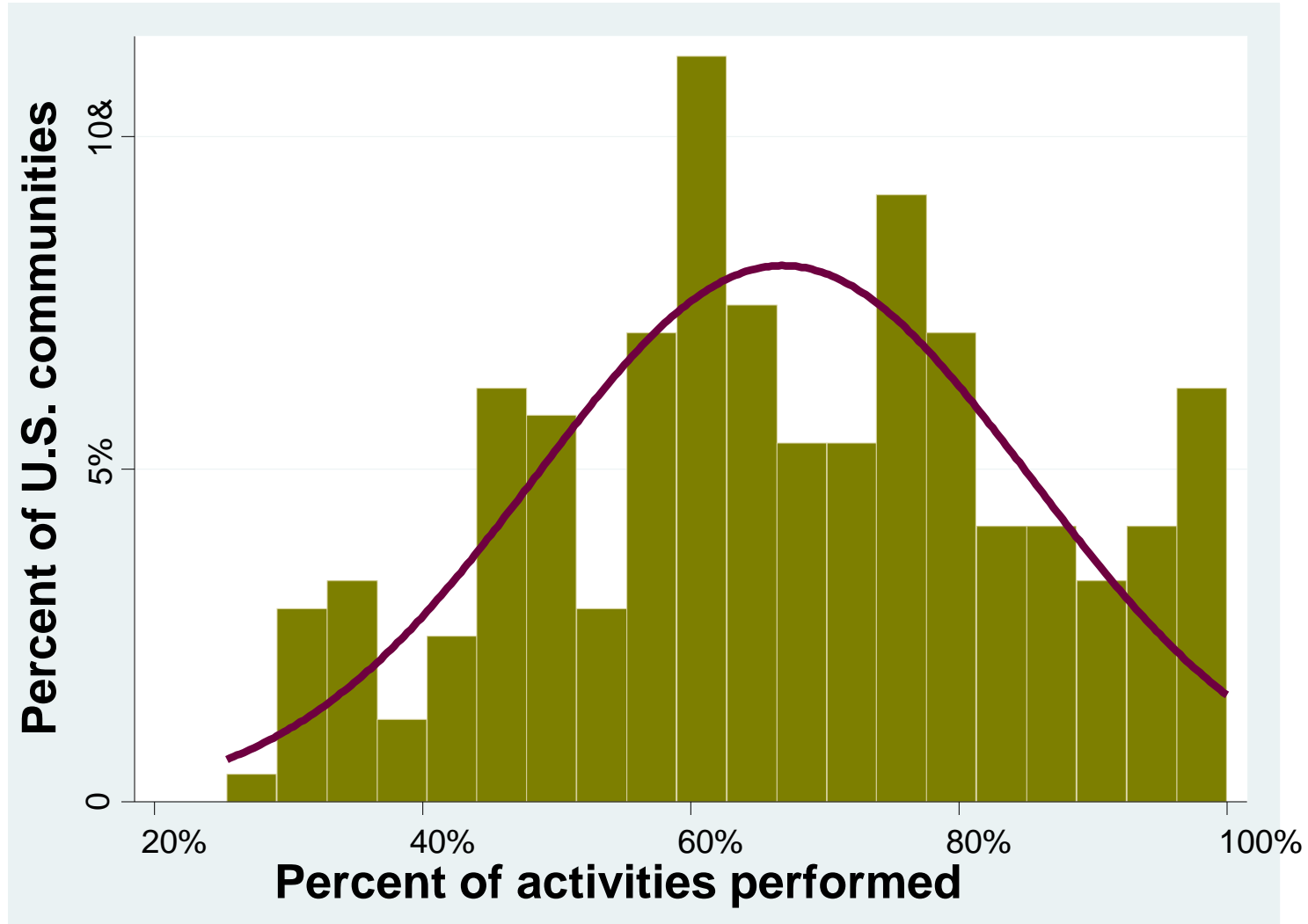
National Longitudinal Survey of Public Health Systems



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

Understanding variation in partnership performance

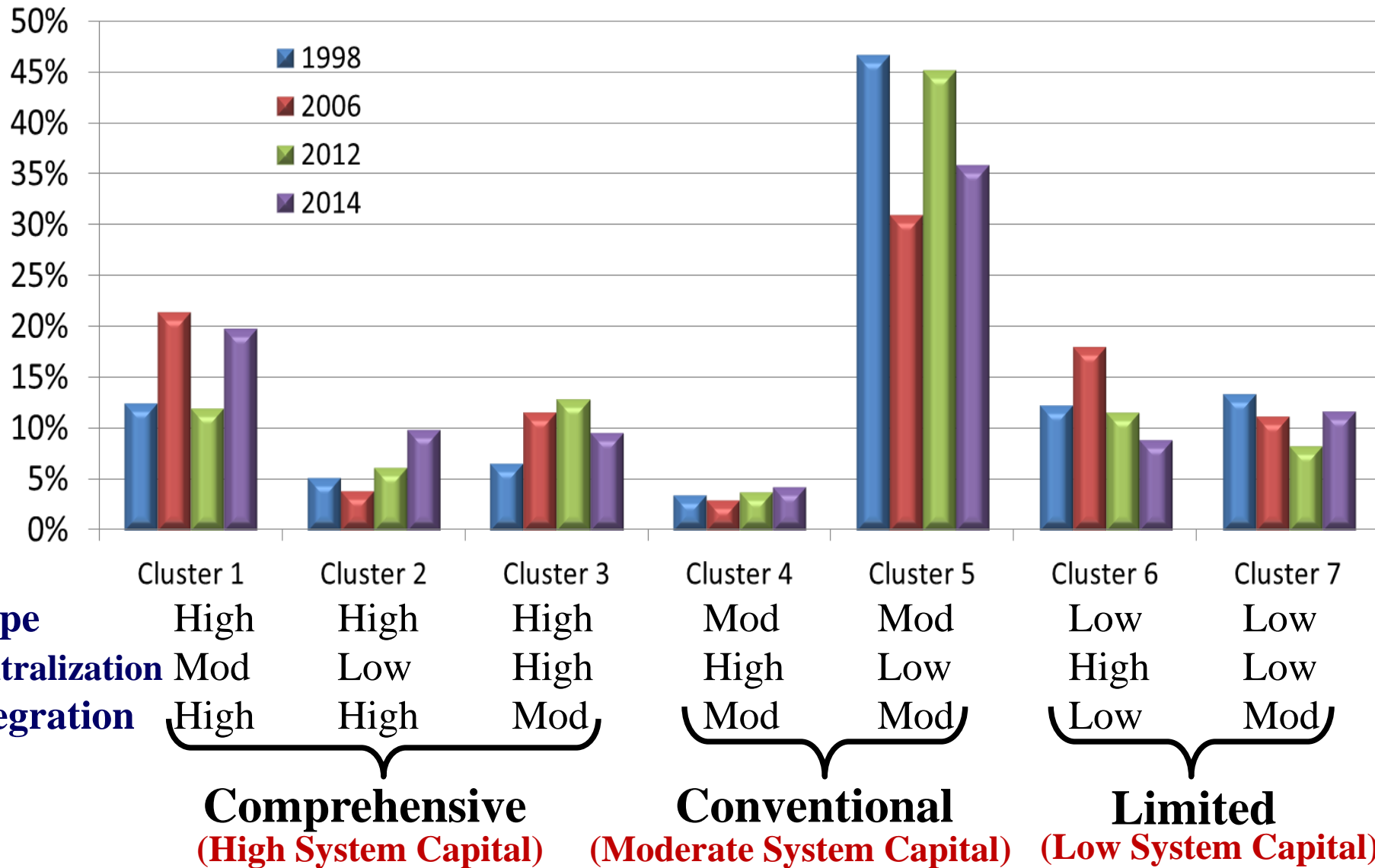
National Longitudinal Survey of Public Health Systems



National Longitudinal Survey of Public Health Systems, 2014

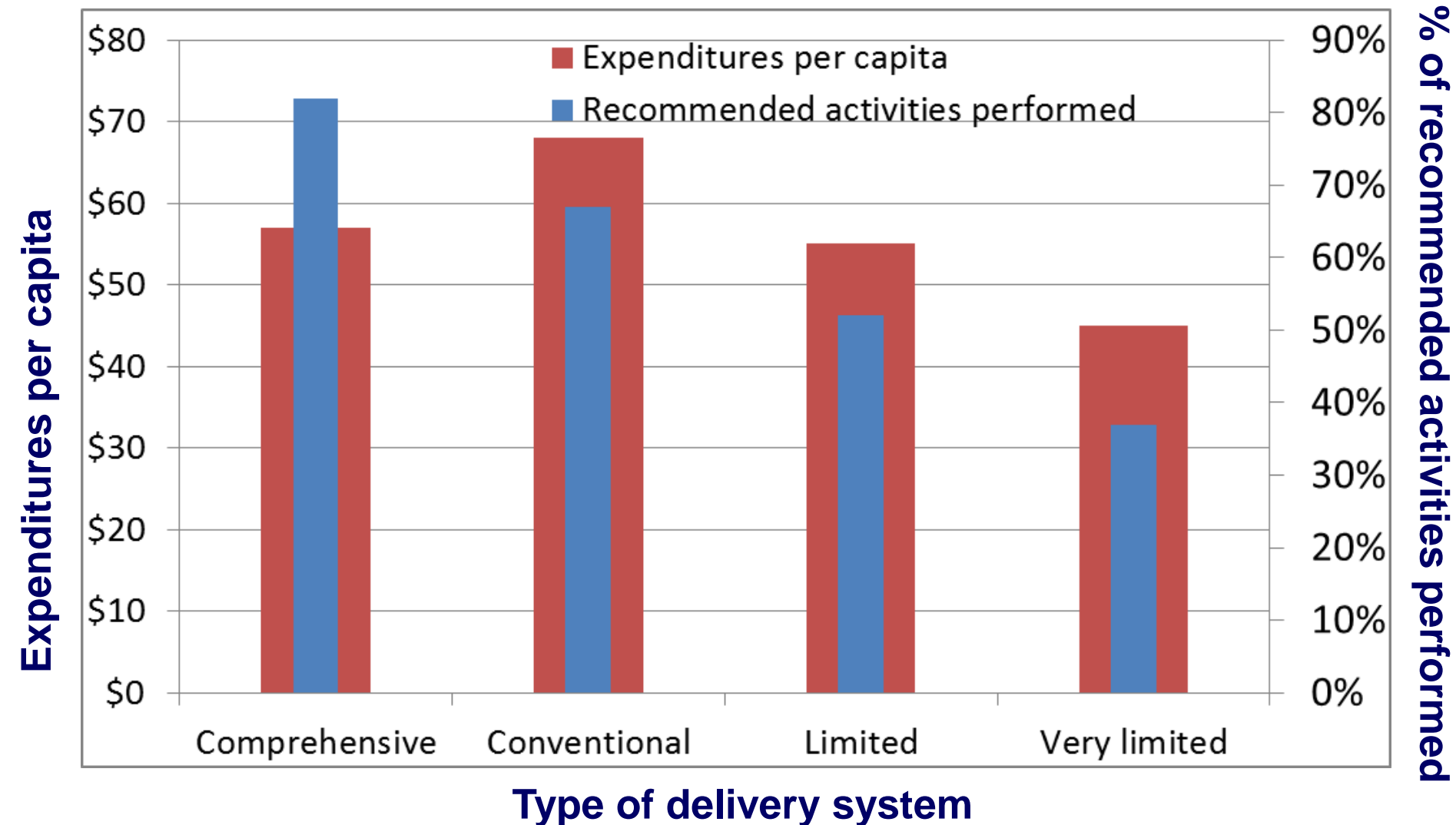
Classifying partnership configurations in public health

Typology of U.S. Public Health Delivery Systems, 1998-2014



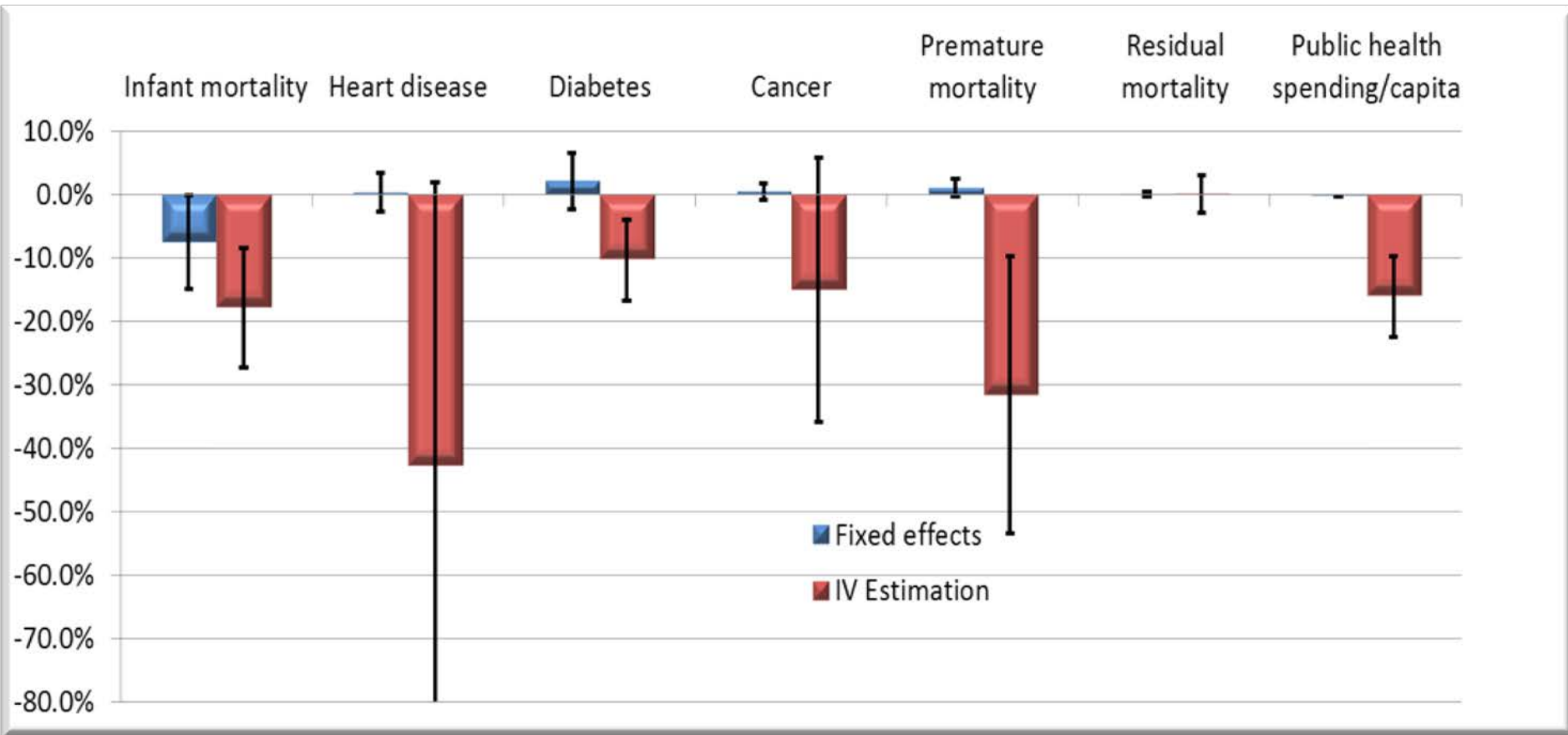
Estimating value: Comprehensive delivery system partnerships do more with less

National Longitudinal Survey of Public Health Systems, 2014



Estimating health & economic impact of public health partnerships

Effects of Comprehensive System Capital on Mortality and Spending: 1998-2014

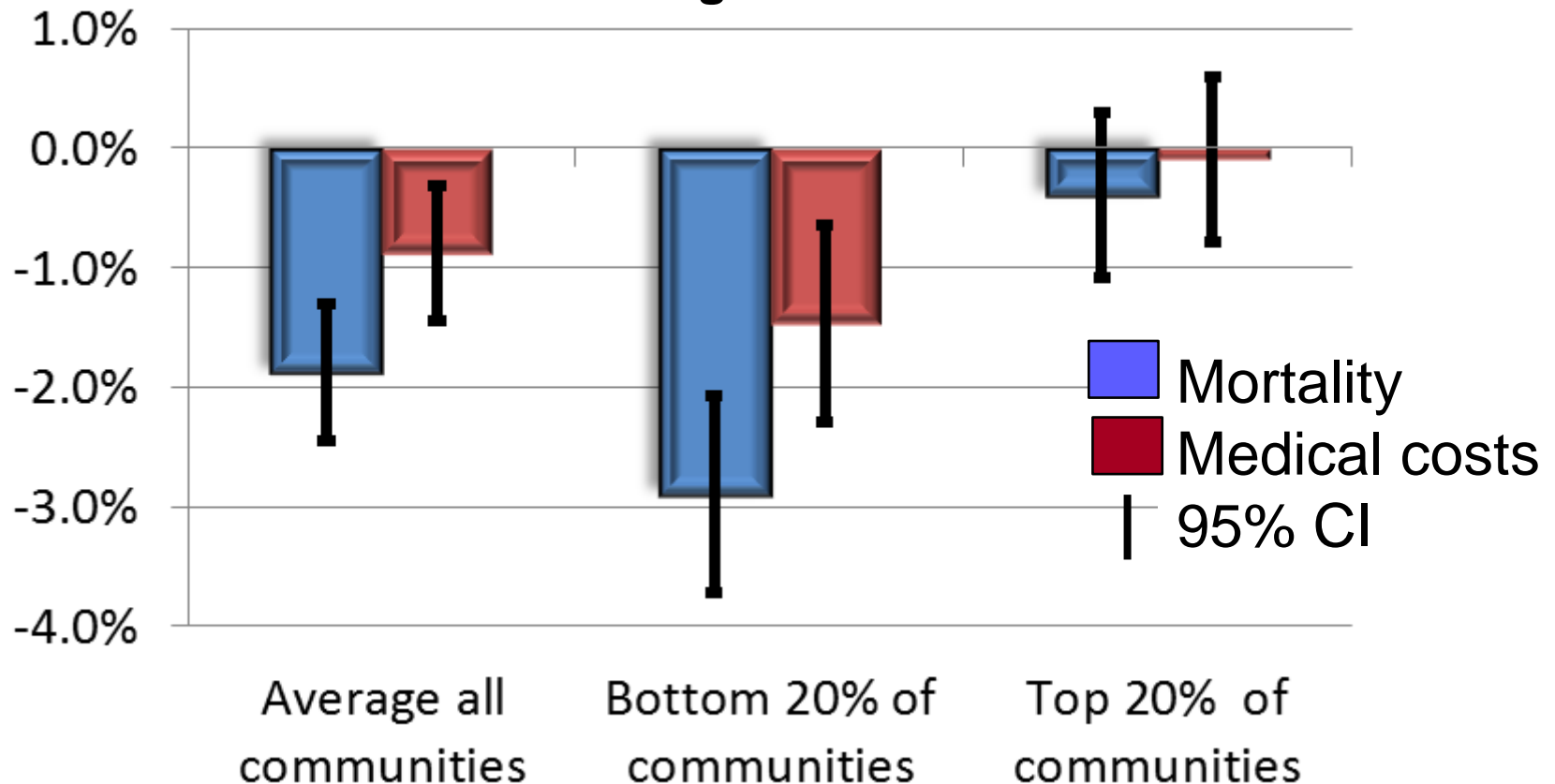


Models also control for racial composition, unemployment, health insurance coverage, educational attainment, age composition, and state and year fixed effects.
N=779 community-years **p<0.05 *p<0.10

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

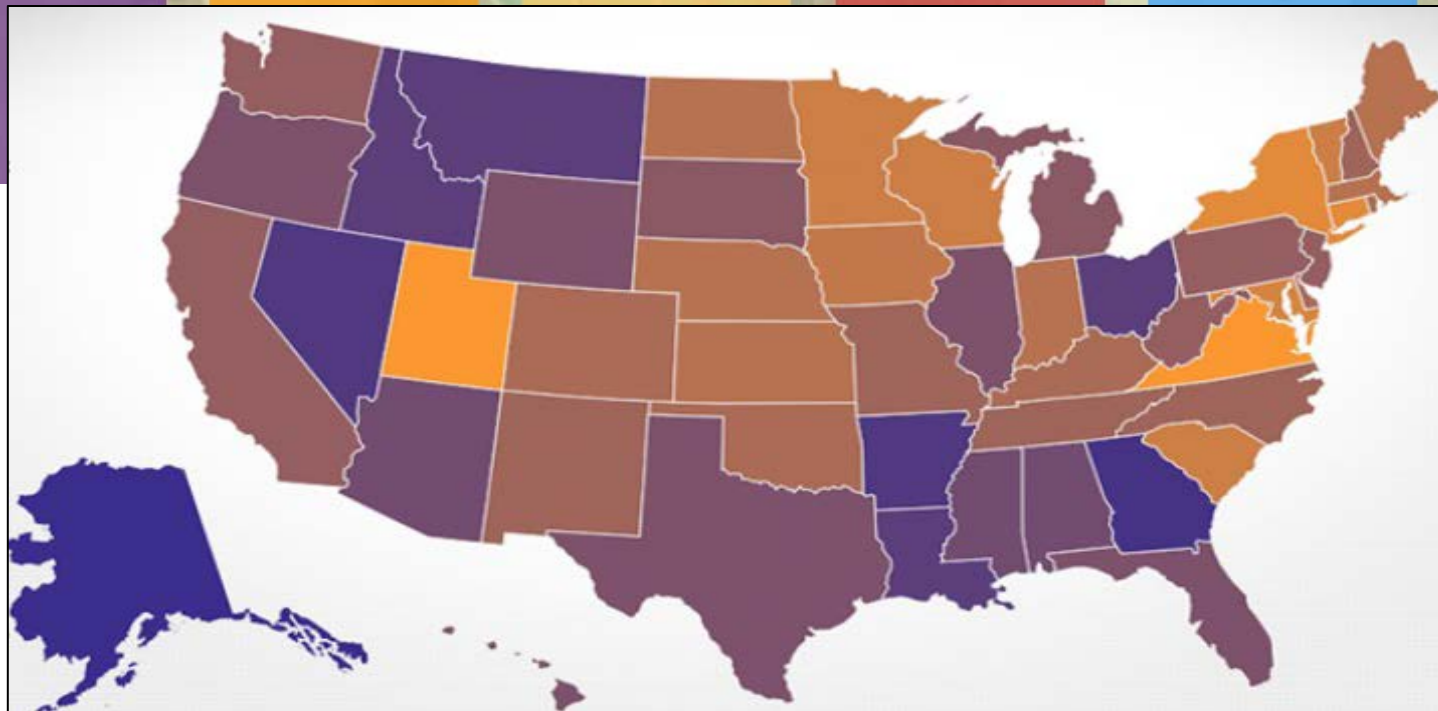
Mays et al. forthcoming 2015



Driving partnerships with comparative measurement & reporting

NATIONAL HEALTH SECURITY PREPAREDNESS INDEX

www.nhsapi.org



For More Information



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