

February 13, 2012

Public Health Spending, Preventable Outcomes, and Medical Cost Offsets: Questions for Health Reform

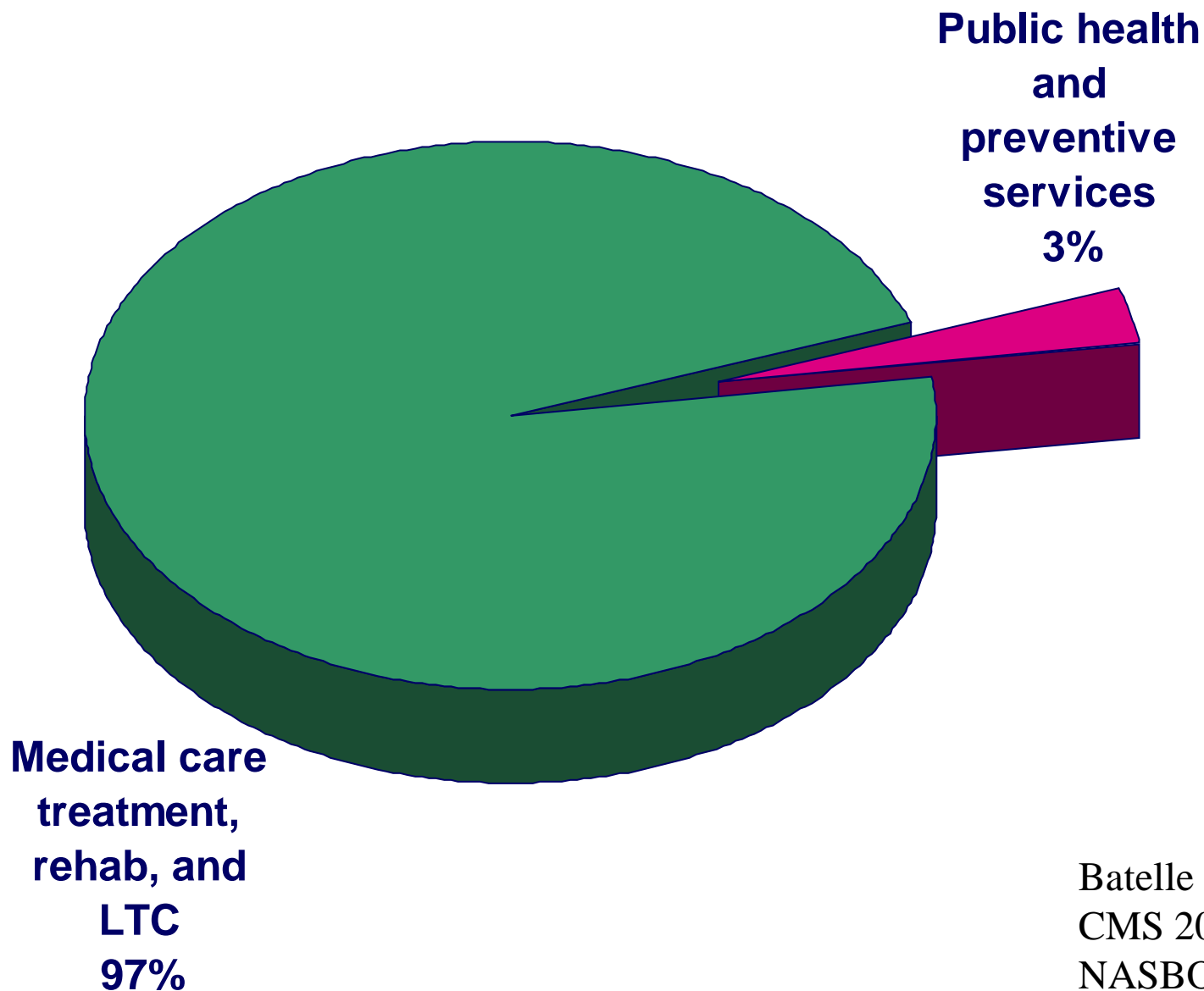
Glen Mays, *University of Kentucky*

Public Health Spending, Preventable Outcomes, and Medical Cost Offsets: Questions for Health Reform

Glen Mays, PhD, MPH
University of Kentucky

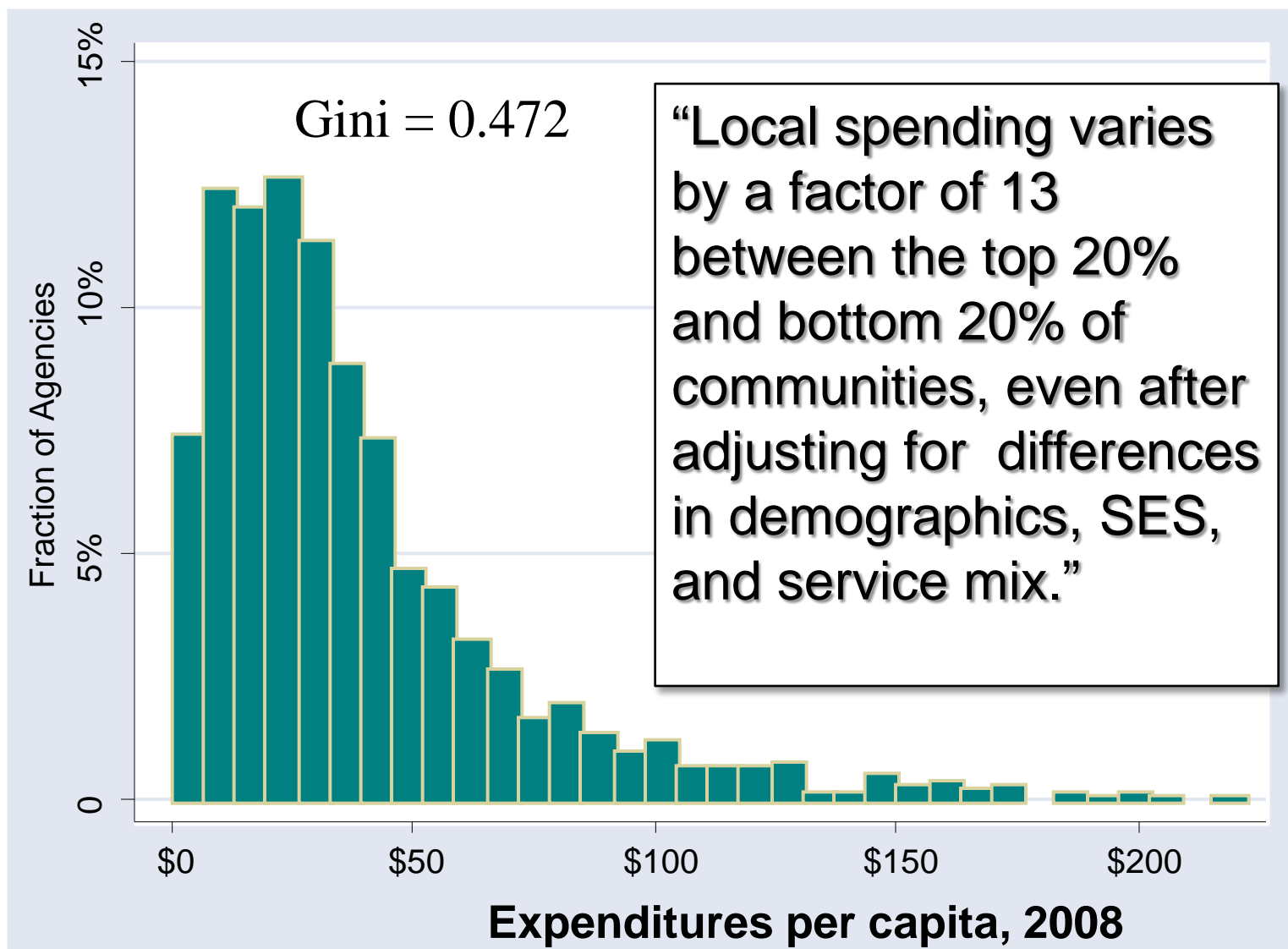
AcademyHealth National Health Policy Conference
Washington, DC • 13 February 2012

Public health's share of national spending

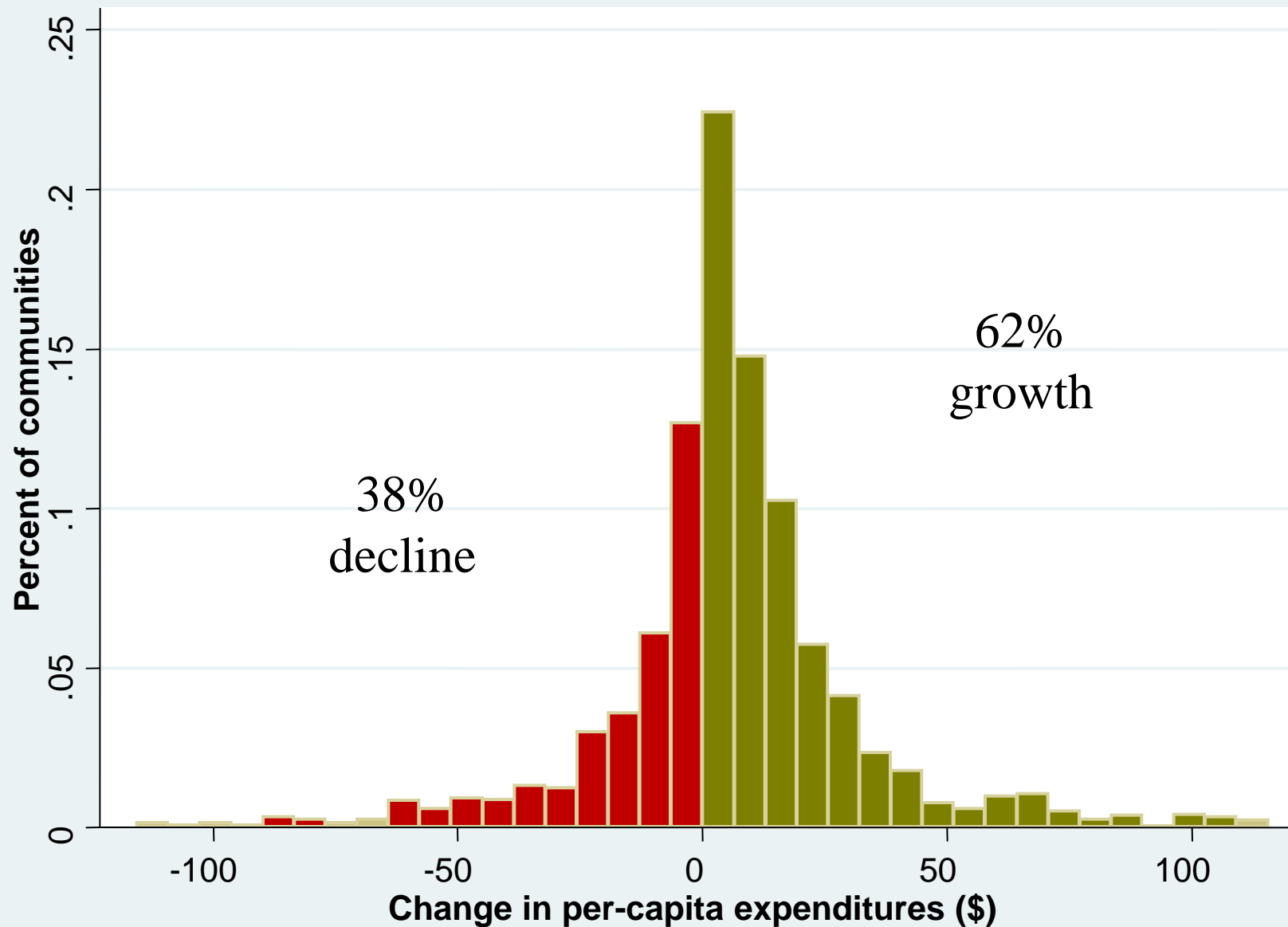


Batelle 1993,
CMS 2005,
NASBO 2005

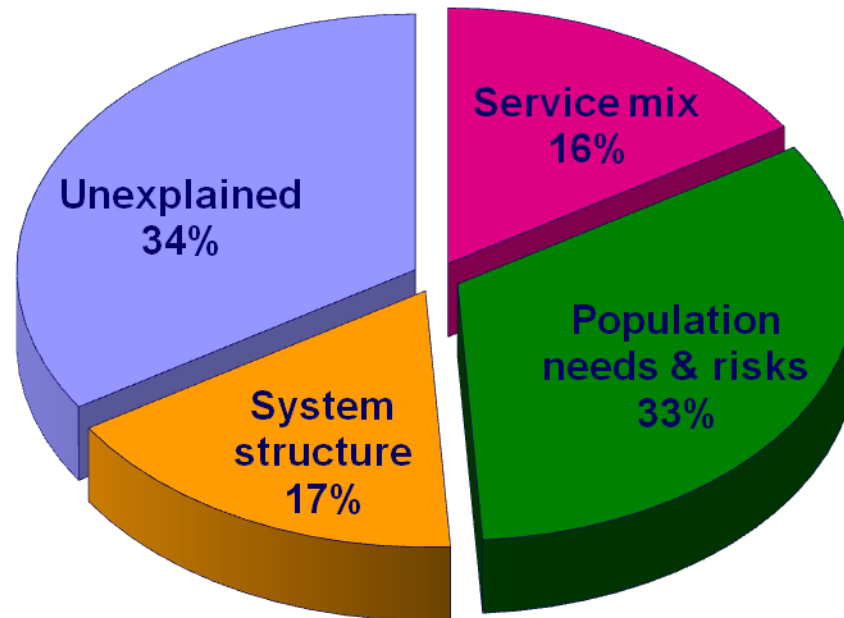
Variation in Local Public Health Spending



Changes in Local Public Health Spending 1993-2008

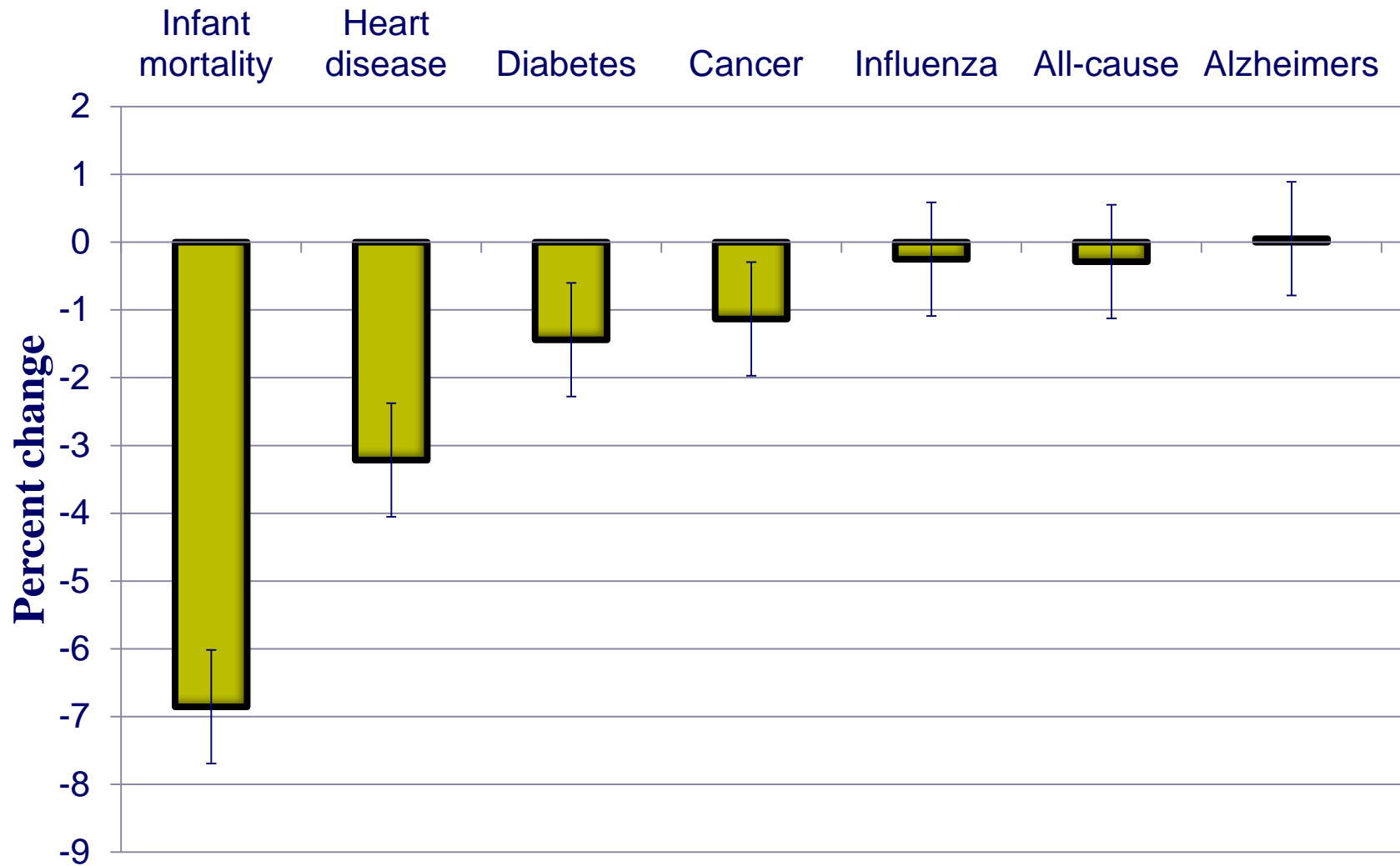


Drivers of geographic variation in public health spending



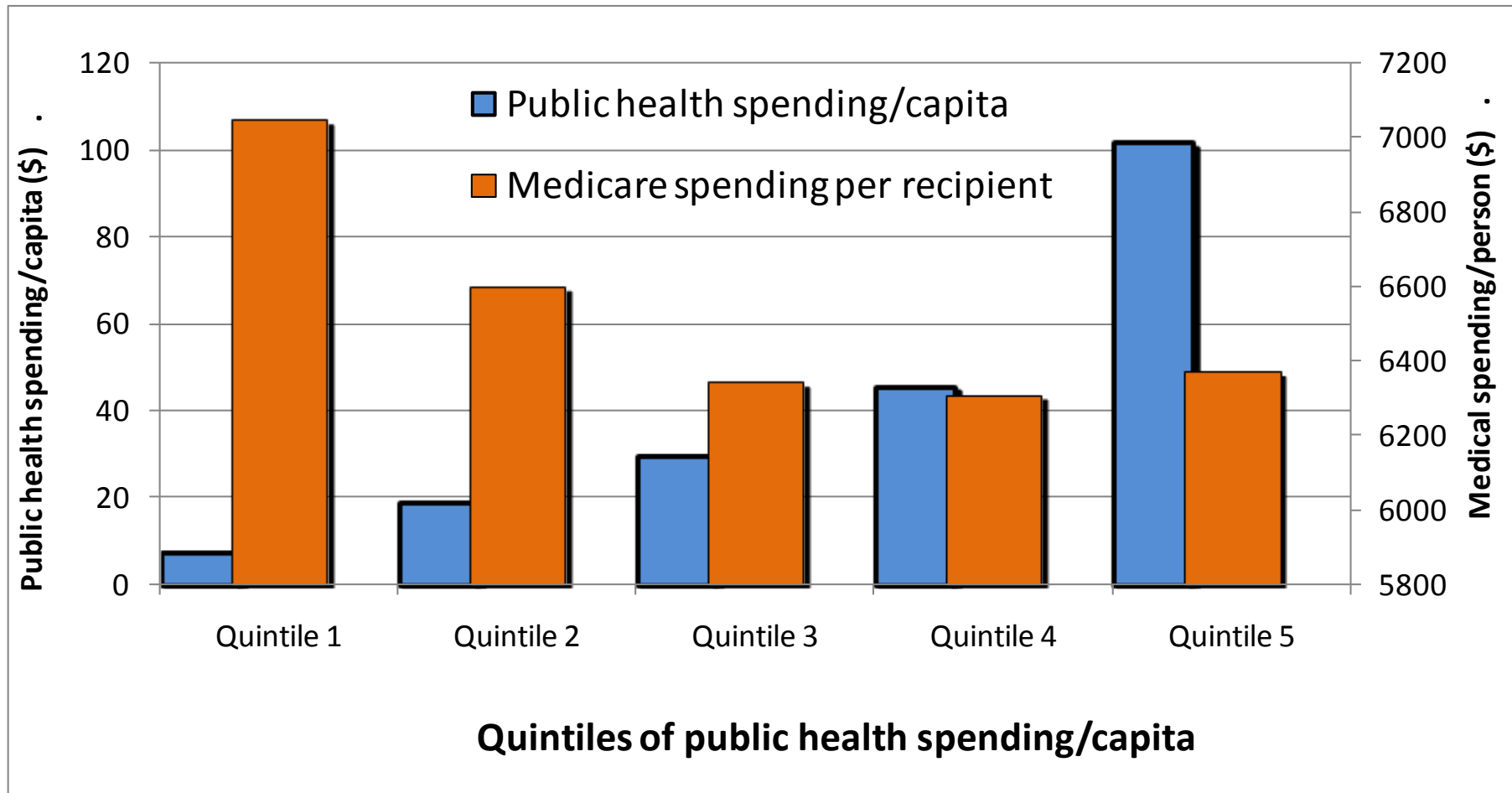
- Delivery system size & structure
- Service mix
- Population needs and risks
- Efficiency & uncertainty

Mortality reductions associated with changes in public health spending



Hierarchical regression estimates with instrumental variables to correct for selection and unmeasured confounding

Cross-sectional association between PH spending and medical spending



Effects of public health spending on medical care spending 1993-2008

**Change in Medical Care Spending Per Capita Attributable to
10% Increase in Public Health Spending Per Capita**

<u>Model</u>	<u>Elasticity</u>	<u>Std. Error</u>
Fixed effects	-0.10	0.02 **
Instrumental variables	-0.88	0.13 **

Semi-log regression estimates controlling for community-level and state-level characteristics

*p<0.10 **p<0.05 ***p<0.01

Projected effects of ACA public health spending

- ◆ \$15B in new public health spending over 10 years:

Deaths averted: 255,000 – 437,000

Medical cost offset: \$2.2B – \$6.9B

Cost/life-year gained \$9,800 – \$22,400

PBRN Research: Economic Shocks & Decisions



- **Washington:** Variation in LHD budget reductions during the 2008-11 economic downturn, and impact of reductions on service delivery and use of evidence-based practices
- **North Carolina:** LHD responses to Medicaid maternity case management funding cut, and impact on service delivery
- **Connecticut:** Responses to elimination of state subsidies to small LHDs
- **Ohio:** LHD enforcement of smoke-free workplace act (magnitude & frequency) in response to economic downturn
- **Wisconsin & Florida:** Changes in LHD spending, funding sources and resource allocation during economic recession

