Making the Case for Public Health

Featuring Glen Mays, PhD, MPH and Renee Frauendienst, RN, PHN, BSN, CPI

June 26, 2014
Learning Objectives

- Learn about emerging national research
- Explore implications for Minnesota
- Identify next steps

Kim Gearin
Minnesota Dept. of Health
Research to Action Network
Key Research Questions

- Do investments in local public health activities and services contribute to changes in population health and/or health care cost savings?
- Are returns greater in some communities?
- Could Medicaid expansion have unintended consequences for public health?
Research to Action Network

- A partnership of LPHA, MDH, SCHSAC, and UMN
- Housed in the MDH Office of Performance Improvement
- Local steering committee members
  - ReneeFrauendienst
  - Allie Freidrichs
  - Deb Jacobs
  - Lowell Johnson
  - Karen Jorgensen-Royce
  - Katherine Mackedanz
  - Rosemary Schultz
Practice-Based Research Networks

Public Health

Public Health Services & Systems Research
Practice-Based Research Networks

United States

- Public Health PBRN Sites
- National Coordinating Center
Welcome!

Renee S. Frauendienst, RN, PHN, BSN, CPI

Public Health Division Director and CHS Administrator, Stearns County Human Services

Founding member, Research to Action Network Steering Committee
Welcome!

Glen P. Mays, MPH, PhD

Scutchfield Endowed Professor in Health Services and Systems Research

Director, National Coordinating Center for Public Health Services and Systems Research

Department of Health Management and Policy, College of Public Health, University of Kentucky
Research Question

- Do investments in local public health activities and services contribute to improvements in population health?
Prior Research: Mortality Reductions Attributable to Local Public Health Spending, 1993-2008

Research Question

- How long does it take?
- Do the benefits of LPH spending differ, depending on local characteristics?
  - Community health needs and vulnerabilities?
  - The scope of local public health activities?
How Long Does it Take? Cumulative Effects of Public Health Spending

Changes in Mortality and Medical Care Spending Attributable to 10% Increase in Public Health Spending /Capita

Community-Specific Estimates of Public Health Spending on Heart Disease Mortality

Community-Specific Estimates of Public Health Spending on Heart Disease Mortality

Conclusions

- Sizable health and economic gains are attributable to LPH expenditures
- Gains are 21-44% larger in low income communities
- Gains are 17-38% larger for communities that invest in a broad range of LPH activities
- Cumulative effects over 10 years are nearly twice as large as short term effects
- No evidence of over-spending

Questions, Comments?
Research Questions

- Do states respond to increases in Medicaid spending by changing (reducing) spending on other public health activities?
- If so, what are the likely health and economic benefits?
Methods and Data

- Retrospective analysis of all U.S. states during 1993-2011
- Annual state government spending data linked to LPH spending data from NACCHO Profile
- Annual demographic, socioeconomic, and public program enrollment data used as control
- Econometric models estimate how state and local public health spending change in response to growth in Medicaid spending

Medicaid and Public Health Spending as a Share of Total State Spending

Estimated Effect of 10% Medicaid Spending Growth on Public Health Spending

10-Year Projected Effects of Crowd-Out on Preventable Mortality Rates

Conclusions

- Medicaid spending growth results in substantial “crowd-out” in public health spending
- Magnitude of crowd-out is sufficient to produce sizeable health effects over time
- Crowd-out may be larger for lower-resource states and communities

Questions, Comments?
Minnesota Context

Local Public Health Expenditures by Source of Funding, Minnesota, 2012

- Infrastructure
- Healthy Communities
- Infectious Disease
- Environmental Health
- Disaster Preparedness
- Health Services

Funding Sources:
- Local
- Federal
- State
Inflation-Adjusted, Per Capita Expenditures of Minnesota Community Health Boards, 1979-2012

- **Total LPH expenditures**
  - $12.30 (1979)
  - $33.03 (1989)
  - $53.07 (1994)
  - $71.69 (1998)
  - $55.98 (2003)
  - $26.50 (2007)
  - $26.50 (2010)
  - $7.25 (2012)

- **Total local LPH expenditures (local taxes and fees)**
  - $53.07 (1994)
  - $33.03 (1989)
  - $26.50 (2007)
  - $26.50 (2010)
  - $18.29 (2012)

- **Local tax levy**
  - $12.30 (1979)
  - $7.25 (1984)
  - $5.74 (1994)
  - $5.74 (1998)
  - $18.29 (2012)

- **State LPH Act grant**
  - $7.25 (1984)
  - $5.74 (1994)
  - $5.74 (1998)
  - $3.92 (2012)
What Does this Mean for Minnesota?

- Initiatives underway or on the horizon
- Policy at the local and/or state level
- Health system reform
- Future research direction
Strategic Next Steps

- How can we strategically use this information in Minnesota?
- Where do we go from here?
Acknowledgements

- Funded by the Robert Wood Johnson Foundation through the National Coordinating Center for Public health Services & Systems Research
- Supported by the NIH National Center for Advancing Translational Science through the Kentucky Center for Clinical and Translational Science
- Data provided by the University of Kentucky Center for Poverty Research, supported by USDHHS/ASPE
- Additional data provided by the National Association of County and City Health Officials, National Profile of Local Health Departments
Acknowledgements

- The Minnesota Department of Health is a grantee of two national programs of the Robert Wood Johnson Foundation
  - Public Health Services and Systems Research
  - Practice Based Research Network in Public Health
For More Information

- **Renee Frauendienst**
  renee.frauendienst@co.stearns.mn.us
  320-656-6284

- **Kim Gearin**
  kim.gearin@state.mn.us
  651-201-3884

- **Minnesota Public Health Research to Action Network**
  www.health.state.mn.us/ran

- **Dr. Mays’ Research**
  Online: www.publichealthsystems.org
  Journal: www.FrontiersinPHSSR.org
  Archive: works.bepress.com/glen_mays
  Blog: publichealtheconomics.org
Evaluation

- When you leave the webinar, an evaluation survey will appear in your browser.
- Please look for this and take a minute to complete the survey. It is only nine questions.