New Directions in Public Health Systems Research: The U.S. Context

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New Directions in Public Health Systems Research: the U.S. Context

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www.systemsforaction.org
Where we’ve been: 1998-2015

- Measuring variation in the performance of core public health functions
- Exploring causes of variation
  - Spending
  - Staffing
  - Governance and organizational structures
- Exploring consequences of variation
  - Health outcomes
  - Medical expenditures
  - Health disparities

Where we’re headed: 2016 and beyond

Identify strategies to align delivery and financing systems for **public health**, **medical care**, and **social services** in ways that improve population health

- Health and well-being
- Equity
- Efficiency

www.systemsforaction.org
The Culture of Health Action Framework

1. Making Health a Shared Value
2. Fostering Cross-Sector Collaboration to Improve Well-Being
3. Improving Population Health, Well-Being, and Equity
4. Creating Healthier, More Equitable Communities

What **Foundational Capabilities** support collective actions in health?

Public health as **chief health strategist** for the system:

- Articulate population health needs & priorities
- Engage community stakeholders
- Plan with clear roles & responsibilities
- Recruit & leverage resources across sectors
- Develop and enforce policies
- Ensure coordination across sectors
- Promote equity and target disparities
- Support evidence-based practices
- Monitor and feed back results
- Ensure transparency & accountability

Comprehensive Public Health Systems
One of RWJF’s 40 Culture of Health National Metrics

- **Broad scope** of Foundational Capabilities
- **Dense network** of multi-sector relationships
- **Central actors** to coordinate actions

**Access to public health**

Overall, 47.2 percent of the population is covered by a comprehensive public health system. Individuals are more likely to have access if they are non-White (51.5 percent vs. 45.5 percent White) or live in a metropolitan area (48.7 percent vs. 34.1 percent in nonmetropolitan areas).

Comprehensive Public Health Systems
U.S. Average in 2014

Node size = degree centrality
Line size = % activities jointly contributed (tie strength)
What do we know about the benefits of Comprehensive Public Health Systems?

- Greater concordance with national recommendations
  - IOM Core Functions
  - Essential Public Health Services
  - PHAB national accreditation standards
  - Foundational Public Health Services
- Fewer governmental resources per capita: more for less
- Over time, larger gains in population health
Prevalence of Public Health System Configurations 1998-2014

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Comprehensive (High System Capital)

Conventional

Limited
# Changes in system prevalence and coverage

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Variation in public health implementation

National Longitudinal Survey of Public Health Systems

Percent of U.S. communities vs. Percent of activities performed

- Variation in public health implementation
- National Longitudinal Survey of Public Health Systems
- Graph showing distribution of activities performed (% of communities vs. % of activities)
Comprehensive systems do more with less.
Equity in public health implementation
Delivery of recommended public health activities, 2006-14

Quintiles of communities

% of recommended activities performed

2014

Δ 2006-14

Q1          Q2          Q3          Q4          Q5

Quintiles of communities
Health and economic impact of comprehensive systems

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
Making the case for equity: larger gains in low-resource communities

Effects of Comprehensive Public Health Systems in Low-Income vs. High-Income Communities

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

- Mortality
- Medical costs
- 95% CI

Average all communities
Bottom 20% of communities
Top 20% of communities
Opportunities on the horizon

- Deeper exploration of system capabilities for intervening on social & economic determinants
- Advancing implementation science in public health systems: scale and spread successes
- Learning from cross-national comparisons of system structures and performance
For More Information

Systems for Action
National Coordinating Center
Systems and Services Research to Build a Culture of Health

Supported by The Robert Wood Johnson Foundation

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For more information

- Defining Comprehensive Public Health Delivery Systems
  https://works.bepress.com/glen_mays/198/

- CPHS methodology: Milbank Quarterly 2010
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- Health/economic benefits of comprehensive systems: AJPH 2015

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