Accreditation and Multi-Sector Contributions to Population Health Activities: A Difference-in-Difference Analysis

Research In Progress Webinar
Thursday, October 20, 2016 12:00-1:00pm ET/ 9:00-10:00am PT

Funded by the Robert Wood Johnson Foundation
Agenda

Welcome: Anna Hoover, PhD, Co-Director, RWJF Systems for Action National Coordinating Center, U. Kentucky College of Public Health

Accreditation and Multi-Sector Contributions to Population Health Activities: A Difference-in-Difference Analysis

Presenter: Richard C. Ingram, DrPH, MEd, Assistant Professor, Dep’t. of Health Management and Policy, U. of Kentucky College of Public Health richard.ingram@uky.edu

Commentary: Jessica Kronstadt, MPP, Director, Research and Evaluation, Public Health Accreditation Board jkronstadt@phaboard.org

Questions and Discussion
Presenter

Richard C. Ingram, DrPH, MEd
Assistant Professor
Department of Health Management and Policy
University of Kentucky College of Public Health

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PHAB Accreditation and Multi-sector Contributions to Population Health Activities

Richard Ingram, Dr.P.H.
University of Kentucky
PHAB Accreditation

- Launched in 2011
- Voluntary
- Tribal, State, Local and Territorial PHAs
- Rooted in continuous quality improvement

- 12 domains
  - Reflect current thinking on best practices (closely aligned with 10 EPHS and foundational capabilities)

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<thead>
<tr>
<th>Community Health Assessment</th>
<th>Community Engagement</th>
<th>Strategies to Improve Access</th>
<th>Contribute to/Apply Evidence Base</th>
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<tr>
<td>Investigate Health Problems/Hazards</td>
<td>Policy Development</td>
<td>Maintain Competent Workforce</td>
<td>Admin/Mgmt. Capacity</td>
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<td>Inform/Educate Public</td>
<td>Enforce PH Laws</td>
<td>Evaluation/Continuous QI</td>
<td>Engage Governing Entity</td>
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PHAB Accreditation

- Measures PHA against nationally recognized standards
  - Practice focused
  - Evidence based
PHAB Accreditation

- Associated with substantial costs
  - Initial and annual accreditation fees
    - Tiered based on jurisdiction
    - Initial: $14,000-$56,000
    - Annual: $5,600-$22,400
  - PHA employees engaged in accreditation
    - Accreditation coordinator
    - Also necessitates input from multiple employees in multiple departments/programs
  - Time spent on accreditation activities
    - Document submission and preparation
Does PHAB accreditation make a difference?
Yes?

- PHAB accreditation necessitates engagement of partners from a broad array of sectors in population health delivery system.
PHAB focuses on core population based preventive services
- PHAB does not accept/review documents/programs related to personal health services
- Requires PHA to assess capacity related to population health
- May drive greater emphasis on these activities
## PHAB Accreditation and Foundational Public Health Capabilities*

<table>
<thead>
<tr>
<th>Foundational Capabilities</th>
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<td>Assessment, including Surveillance, Epidemiology, Laboratory Capacity, and Vital Records</td>
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<td>All Hazards Preparedness/Response</td>
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<td>Communications</td>
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<td>Policy Development/Support</td>
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<td>Community Partnership Development</td>
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### Organizational Competencies:

- Leadership and Governance
- Health Equity
- Accountability, Performance Management, and Quality Improvement
- Information Technology Services, including Privacy and Security
- Human Resources Services
- Financial Management, Contract, and Procurement Services, including Facilities and Operations
- Legal Services and Analysis

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<th>PHAB Standards and Measures Version 1.5 Domains</th>
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Yes?

- PHAB accreditation may provide framework for public health system transformation
  - Evidence suggests that support from local governing body key determinant of system change*
  - Evidence suggests that collaborative multi-sectoral partnerships facilitate system change*
  - Accreditation requires involvement of partners from broad array sectors and support of governing body

PHAB accreditation may support the development of Comprehensive Population Health Delivery Systems (CPHS)

- CPHS offer a broad array of core public health services
- CPHS involve partners from a multitude of sectors
Comprehensive systems are associated with favorable health and economic outcomes

- Close alignment with nationally recognized standards
  - Core Functions, 10 EPHS, Foundational Capabilities
- Deliver higher quality services
  - While requiring lower per capita amounts of governmental resources
- Lead to substantial gains in population health
  - Reductions in preventable mortality
- Tend to disproportionately benefit poorer communities
  - Greater reductions in mortality and spending than more wealthy peers
National Longitudinal Survey of Public Health Systems

- Cohort of 360 systems containing 100,000+ residents
  - ‘14 and ‘16 cohorts supplemented with nationally representative sample of systems < 100,000
- Local public health official or designee reports:
  - Availability of 20 core public health activities
  - Perceived effectiveness
  - LPHA contribution to activities
  - Types of organizations contributing to activities
- NLSPHS data used to determine CPHS
Cluster and network analysis to identify “system capital”

Cluster analysis to classify communities into one of 7 categories of public health system capital based on:

Scope of activities contributed by each type of organization

Density of connections among organizations jointly producing public health activities

Degree centrality of the local public health agency

Accreditation and Multi-sectoral Contributions

- Retrospective cohort design
  - Pre PHAB (1998, 2006)
  - Post PHAB (2012, 2014)

- Divide NLSPHS sample into 2 cohorts: Systems containing accredited (N=30) LPHAs and those containing unaccredited (N=330) LPHAs*
  - Calculated mean availability of core population health activities for both cohorts
  - Calculated mean percent of comprehensive systems in both cohorts
  - Calculated 95% CIs for each measure

*Restricted to systems in original sample (no small systems)
## Percent Services Offered by Core Function

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Percent of Core Population Health Activities Offered
Results

- Accredited cohort offers higher percent of core activities 1998-2006
- Decrease in % of core population health activities offered in cohort containing unaccredited LPHAs
- Increase in % of core population health activities offered in cohort containing accredited LPHAs
- CIs for availability overlap for both cohorts in 1998 and 2006, no overlap in 2012 and 2014
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Percent of Comprehensive Public Health Systems

- nonaccredited
- accredited
Results

- Accredited cohort contains higher % CPHS 1998-2014
- Decrease in % of CPHS in cohort containing unaccredited LPHAs
- Sharp increase in % CPHS in cohort containing accredited LPHAs
- CIs for percent CPHS overlap for both cohorts in 1998 and 2006, no overlap in 2012 and 2014
Systems containing accredited LPHAs differ significantly from their unaccredited peers

- Display higher levels of system capital 1998-2006
  - More services
  - More involvement from other sectors
- Marginal benefit of PHAB accreditation could be lower (high performing *before* accreditation)
  - May take more substantial change to make significant difference
  - Significant benefit in spite of this
- Differences manifest after accreditation
  - Suggests accreditation has impact
Future directions

- Public Health National Center for Innovation (PHNCI)
- Funded by RWJF
- Supports innovative efforts to transform the delivery of population health services
  - Focused on foundational services and health equity
  - Promote development of CPHS
- Three state learning community (WA, OR, OH)
Assessing System Change under PHNCI

- Pre/post surveys using NLSPHS instrument
- Pre survey May - Sept 2016
- Post survey June - Oct 2017
- Compare change within systems
- Compare change between systems (participants/non participants)
Qualitative interviews to explore more granular measures of system innovation and change

- Mar-May 2017
- 1 location per PHNCI state
- Five areas of focus
  - Innovations implemented/strategies used
  - Alignment with FPHS/PHAB standards
  - Facilitators to success
  - Barriers
  - Impact on LHDs and communities

Uncover strategies LPHAs can use to move towards more comprehensive makeup
One of RWJF’s 41 Culture of Health National Metrics

Access to public health

47.2% of population served by a comprehensive public health system

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).

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
Project Updates

go to: http://systemsforaction.org/projects/accreditation-and-multi-sector-contributions-population-health-activities
Jessica Kronstadt, MPP
Director
Research and Evaluation
Public Health Accreditation Board
Alexandria, Virginia

jkronstadt@phaboard.org

Questions and Discussion
### Upcoming Webinars

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Topic</th>
<th>Speakers</th>
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<tr>
<td>October 26, 2016</td>
<td>12 pm ET</td>
<td><strong>Income and Health Inequalities and their Relationship to Population Health Delivery Systems</strong></td>
<td>Glen Mays, PhD, MPH, Director, Systems for Action National Coordinating Center, College of Public Health and James P. Ziliak, PhD, MA, Director, Center for Poverty Research, U. of Kentucky</td>
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<td>November 9, 2016</td>
<td>12 pm ET</td>
<td><strong>Financing and Service Delivery Integration for Mental Illness and Substance Abuse</strong></td>
<td>William J. Riley, PhD, School for Science of Health Care Delivery, and Michael Shafer, PhD, School of Criminology and Criminal Justice, Arizona State University</td>
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<td>November 16, 2016</td>
<td>1 pm ET</td>
<td><strong>The Comprehensive Care, Community, and Culture Program</strong></td>
<td>David Meltzer, MD, PhD, Director of the Center for Health and the Social Sciences, and Harold Pollack, PhD, School of Social Service Administration, and Co-Director of The University of Chicago Crime Lab, The University of Chicago</td>
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Thank you for participating in today’s webinar!

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For more information about the webinars, contact:
Ann Kelly, Project Manager  Ann.Kelly@uky.edu  859.218.2317
111 Washington Avenue #201, Lexington, KY 40536
Richard Ingram, DrPH, MEd, is an Assistant Professor who prior to joining the field of public health worked in the areas of fitness and wellness. He received his Doctor of Public Health from the University of Kentucky, and also holds an M.Ed. from the University of Virginia. His research interests focus on public health system performance and structure, including the impact of variations in structure on health outcomes, and practice-based research in public health.

Jessica Kronstadt, MPP, is the Director of Research and Evaluation at the Public Health Accreditation Board (PHAB). In that role, she oversees efforts to evaluate the accreditation program and to promote research to build the evidence base around accreditation. Previously, she worked at NORC at the University of Chicago, conducting research on public health services and systems, among other topics, and at the Public Health Foundation, focusing on workforce issues. She received her Master of Public Policy from Georgetown University.