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

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*

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College of Public Health
Center for Public Health Systems and Services Research

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
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PHAB Accreditation and Multi-sector Contributions to Population Health Activities

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

UNIVERSITY OF KENTUCKY
Center for Public Health Systems and Services Research

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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)

1. Community Health Assessment
2. Investigate Health Problems/Hazards
3. Inform/Educate Public
4. Community Engagement
5. Policy Development
6. Enforce PH Laws
7. Strategies to Improve Access
8. Maintain Competent Workforce
9. Evaluation/ Continuous QI
10. Contribute to/Apply Evidence Base
11. Admin/Mgmt. Capacity
12. Engage Governing Entity

PHAB Accreditation

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

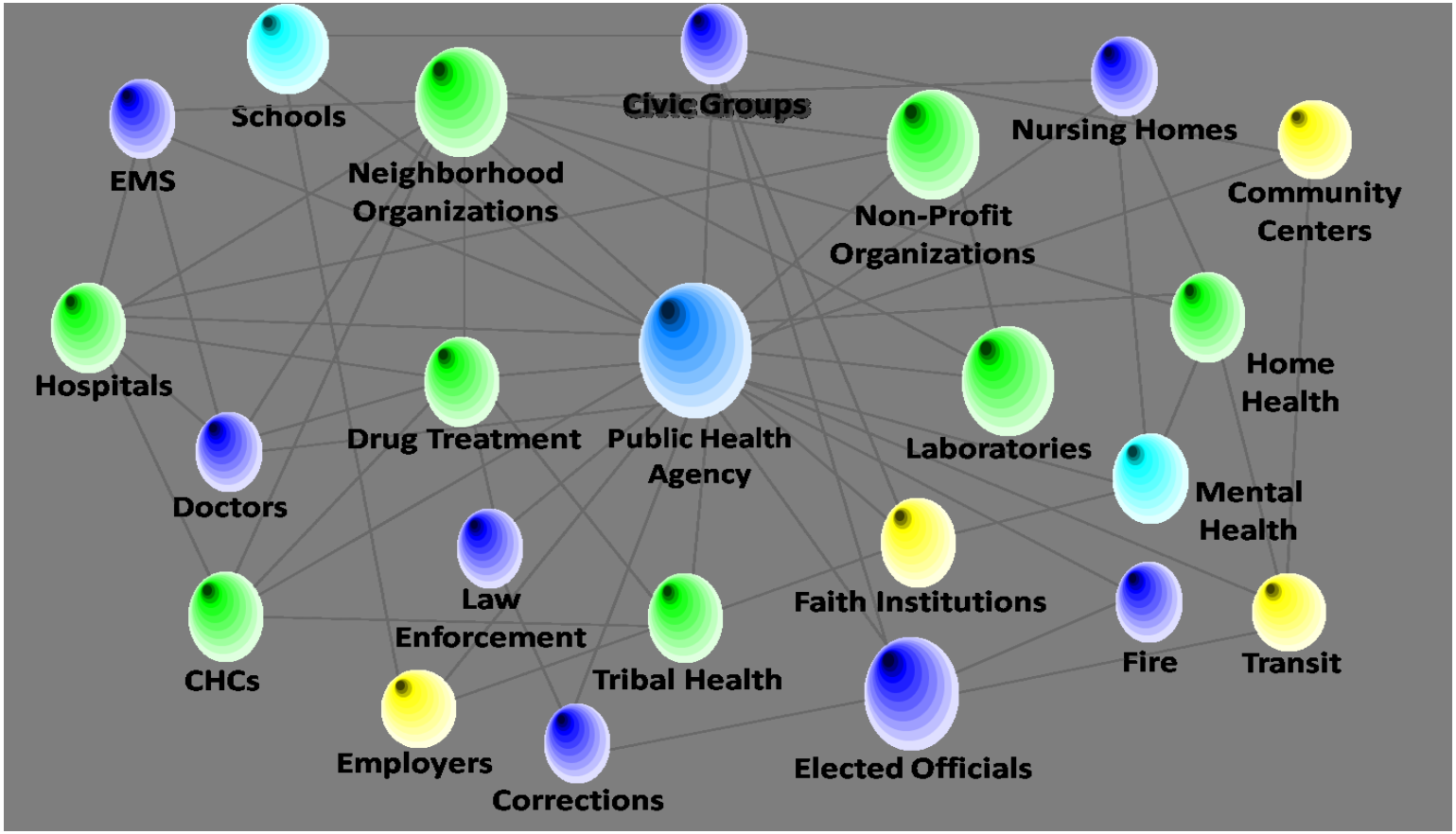
PHAB Accreditation

- 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



Yes?

- 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*

Foundational Capabilities	PHAB Standards and Measures Version 1.5 Domains											
	1	2	3	4	5	6	7	8	9	10	11	12
Assessment, including Surveillance, Epidemiology, Laboratory Capacity, and Vital Records	■	■			■							
All Hazards Preparedness/Response		■			■	■						
Communications		■	■								■	■
Policy Development/Support					■	■						
Community Partnership Development				■	■		■					
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						■						

From: "Aligning Accreditation and The Foundational Public Health Capabilities", PHNCI, Summer 2016

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

*Ingram RC, Scutchfield FD, Mays GP, Bhandari MW.
"The economic, institutional, and political determinants of public health delivery system structures".
Public Health Reports. Mar-Apr 2012;127(2):208-215.

Yes?

- 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

Yes?

- 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
- 1998, 2006, 2012, 2014, 2016
  - ‘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

Mays GP et al. Understanding the organization of public health delivery systems: an empirical typology. *Milbank Q.* 2010;88(1):81–111.

Accreditation and Multi-sectoral Contributions

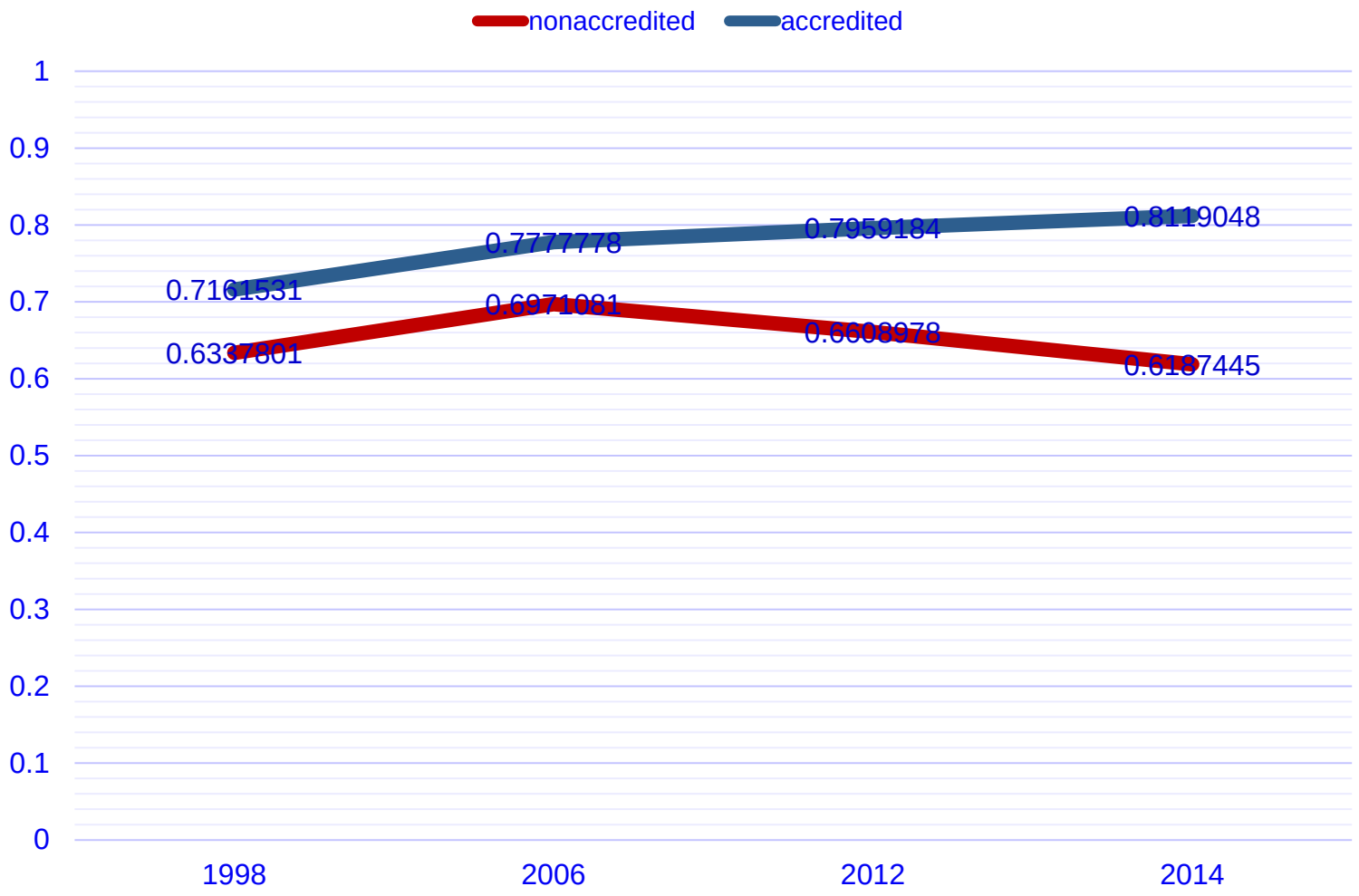
- Retrospective cohort design
  - Pre PHAB (1998, 2006)
  - Post PHAB (2012, 2014)
- Divide NLSPHS sample into 2 cohorts: Systems containing accredited (N=30) LPHAs and those containing unaccredited (N=330) LPHAs*
  - Calculated mean availability of core population health activities for both cohorts
  - 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

		1998	2006	2012	2014
Assess	Nonaccred.	66	74	73	73
	Accred.	80	76	85	85
Policy Dev.	Nonaccred.	59	67	62	66
	Accred.	66	81	77	89
Assure	Nonaccred.	64	68	63	47
	Accred.	68	76	76	69

Percent of Core Population Health Activities Offered



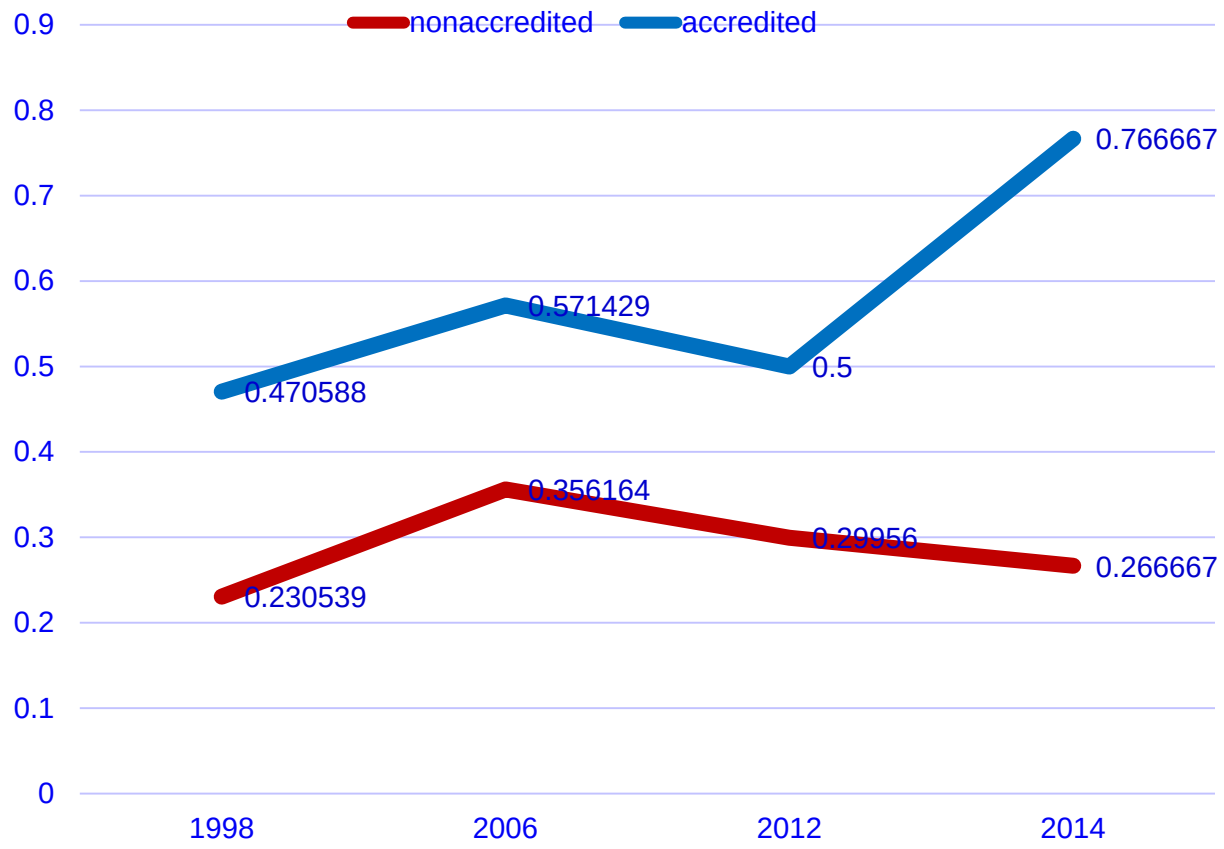
Results

- 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

Proportion of Core Population Health Activities Contributed to by Other Sectors

	1998		2006		2012		2014	
	A	U	A	U	A	U	A	U
Other Local	31	31	67	50	34	26	38	27
SHA	51	46	53	45	40	36	41	30
Other State	24	17	25	16	14	13	15	11
Fed	6	7	23	11	11	9	10	5
Physician	21	20	28	24	25	19	26	18
Hospital	32	37	47	41	54	38	58	41
CHC	12	12	39	28	39	26	33	22
Nonprofit	36	32	40	34	46	31	43	28
Health Insurer	8	8	16	10	23	9	22	7
School	32	30	30	28	33	24	34	22
University	16	16	37	21	30	21	30	16
Other	11	8	4	10	4	6	7	5
FBO	25	24	24	19	21	15	22	14
Employer	28	25	24	16	22	13	25	12

Percent of Comprehensive Public Health Systems



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 form 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

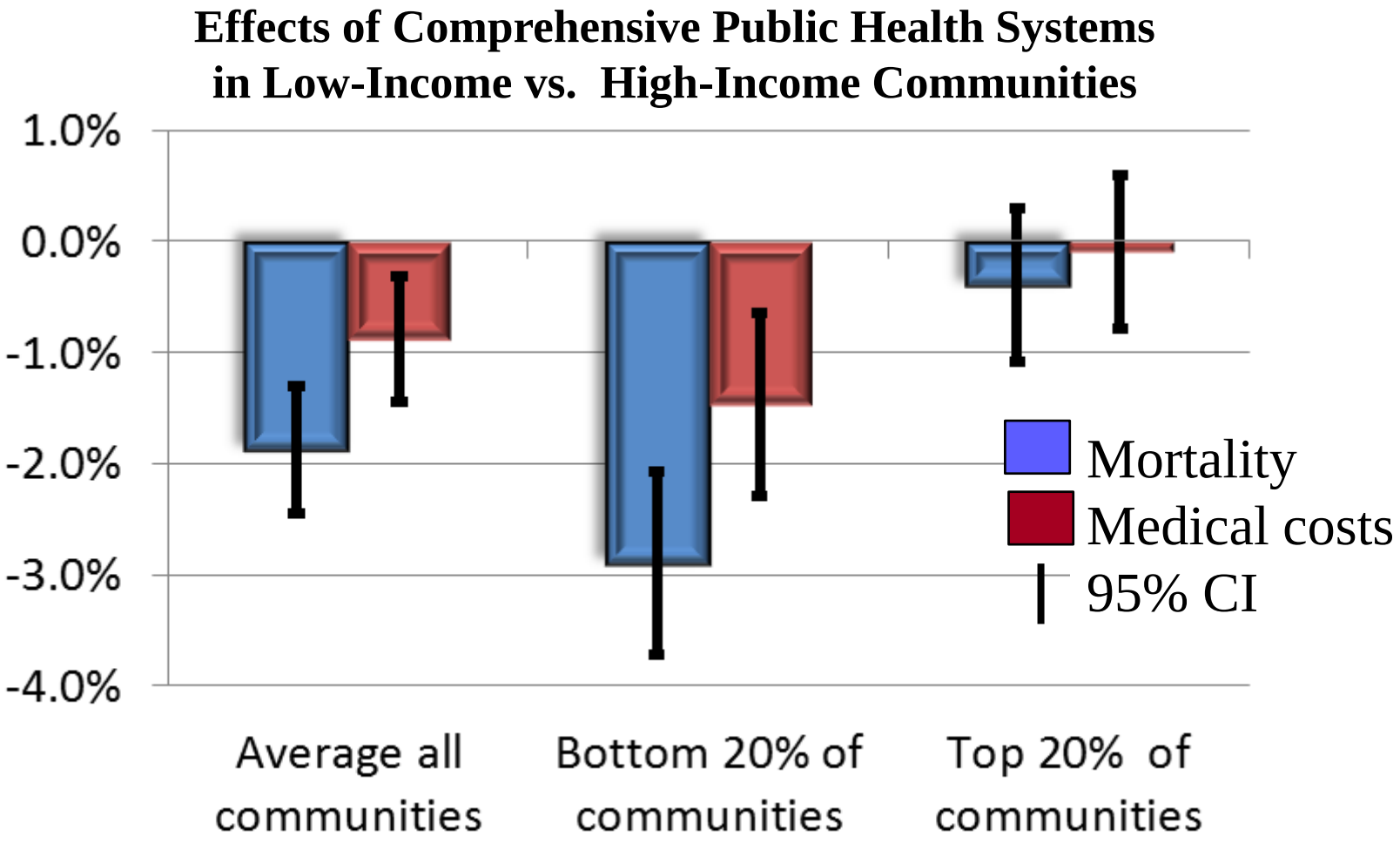
Overall, 47.2 percent of the population is covered by a comprehensive public health system. Individuals are more likely to have access if they are non-White (51.5 percent vs. 45.5 percent White) or live in a metropolitan area (48.7 percent vs. 34.1 percent in nonmetropolitan areas).

47.2%

of population served by a comprehensive public health system

http://www.cultureofhealth.org/en/integrated-systems/access.html

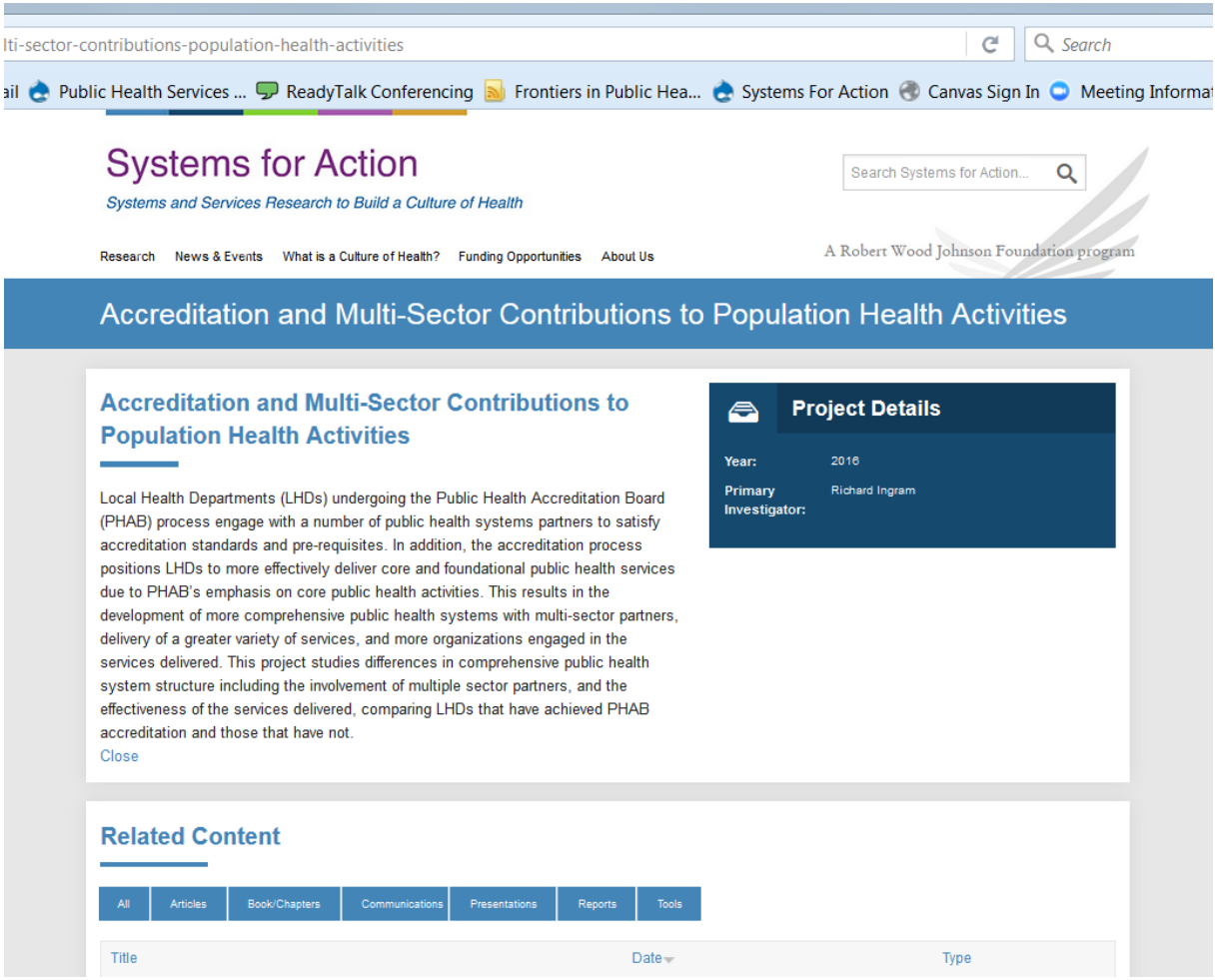
Making the case for equity: larger gains in low-resource communities



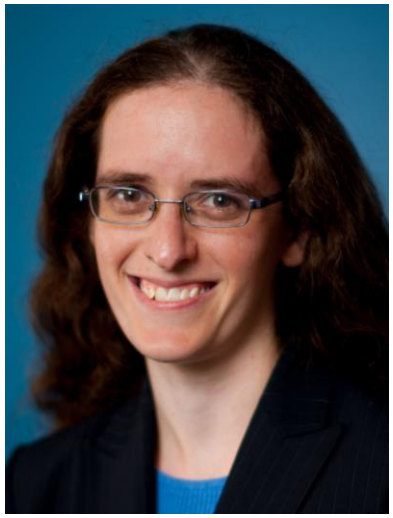
Log IV regression estimates controlling for community-level and state-level characteristics

Project Updates

go to: http://systemsforaction.org/projects/accreditation-and-multi-sector-contributions-population-health-activities



Commentary



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See:
The Public Health National Center for Innovations *www.phaboard.org/phnci/*

Questions and Discussion

Webinar Archives & Upcoming Events

go to: http://systemsforaction.org/research-progress-webinars

Upcoming Webinars

October 26, 2016, 12 pm ET

INCOME AND HEALTH INEQUALITIES AND THEIR RELATIONSHIP TO POPULATION HEALTH DELIVERY SYSTEMS

***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*

November 9, 2016, 12 pm ET

FINANCING AND SERVICE DELIVERY INTEGRATION FOR MENTAL ILLNESS AND SUBSTANCE ABUSE

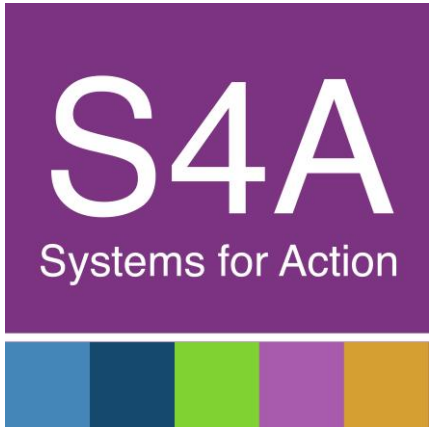
***William J. Riley, PhD**, School for Science of Health Care Delivery, and*
***Michael Shafer, PhD,** School of Criminology and Criminal Justice, Arizona State University*

November 16, 2016, 1 pm ET

THE COMPREHENSIVE CARE, COMMUNITY, AND CULTURE PROGRAM

***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*

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

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Speaker Bios

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.