

Public Health Practice-Based Research Networks



Minnesota Academy of Family Physicians
Research Forum, March 8, 2014

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Public Health PBRNs

- The Public Health Practice-Based Research Networks (PBRN) Program is a national program of the Robert Wood Johnson Foundation.
- Supports development of research networks for studying the comparative effectiveness, efficiency and equity of public health strategies in real-world practice settings.
- While PBRNs have been used successfully in medical settings, this program, launched in 2008, is the first national initiative in the U.S. to develop PBRNs for research in public health practice settings.

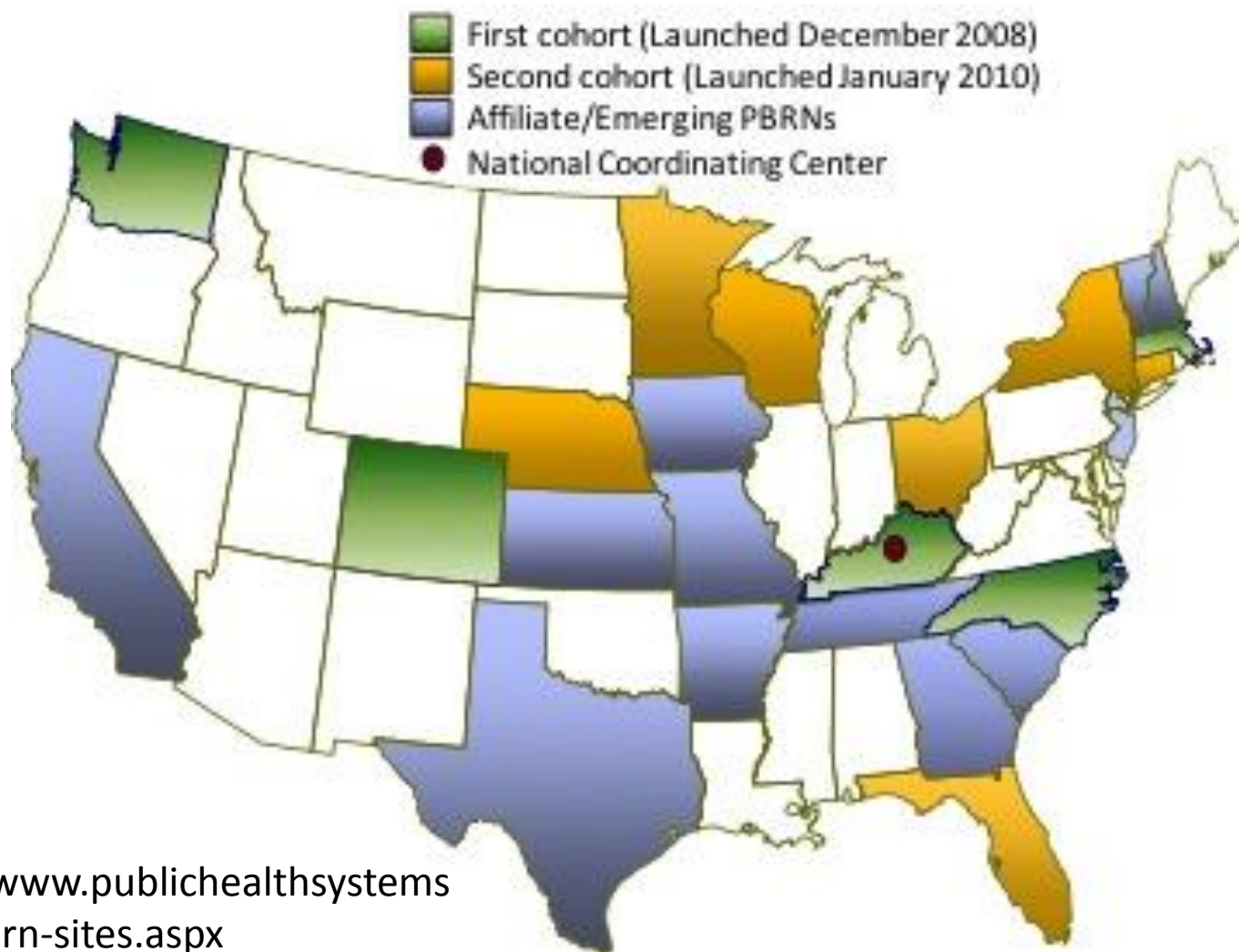


Minnesota
Public Health
Research to
Action Network

Public Health PBRN Focus

- Comparative studies of the organization, financing and delivery of public health services in a variety of settings
- Multi-site observational studies
- Intervention studies and community trials testing effectiveness of new programs and quality improvement initiatives
- Evaluations to monitor effects of changes in laws, policies, regulations, staffing, funding and organizational structures

Public Health PBRN Sites



<http://www.publichealthsystems.org/pbrn-sites.aspx>

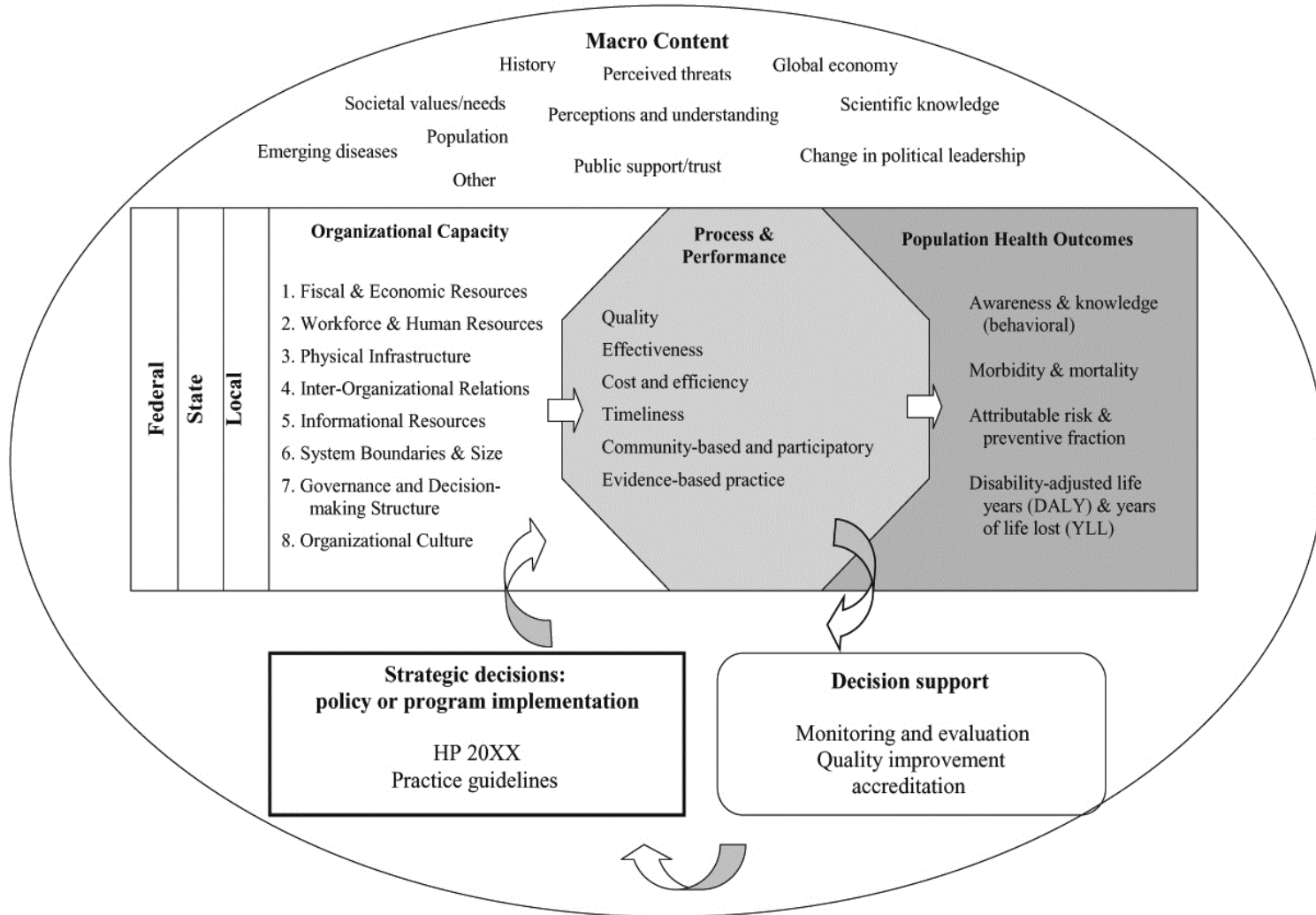
Public Health Services & Systems Research

- Addresses the need for solid information to guide decision-making around the infrastructure of public health—organization, staffing, financing and management.
- PHSSR tackles research questions, with the aim of identifying evidence-based answers and provide information about effective and efficient strategies to those trying to balance limited resources with an ever-growing demand for public health.
- National Coordinating Center for PHSSR is also funded by RWJF and co-located with the NCC for PBRNs.

Goals of PHSSR National Coordinating Center (NCC)

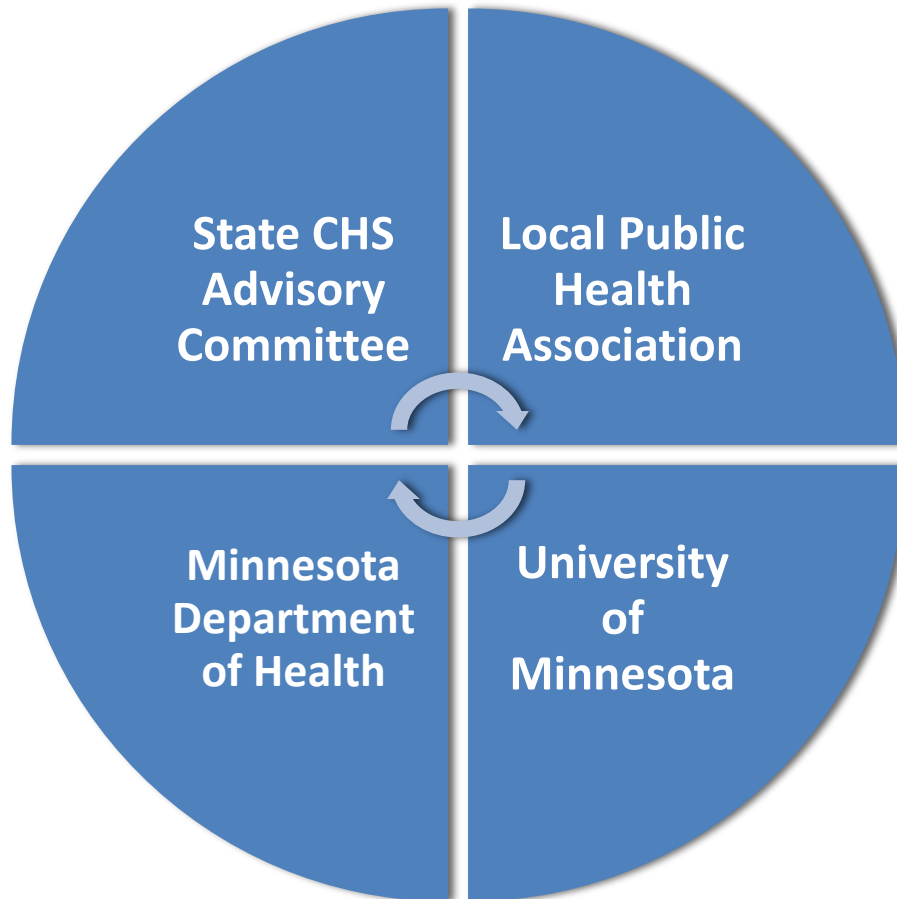
- Build the evidence of what works
- Encourage the translation of research into practice
- Expand resources available for PHSSR





Meyer, A. M., Davis, M., et al. (2012). "Defining organizational capacity for public health services and systems research." *Journal of Public Health Management and Practice* 18(6): 535-44. <http://www.ncbi.nlm.nih.gov/pubmed/23023278>

Minnesota Public Health Research to Action Network



MN Local Public Health System



MN Research to Action Network

The screenshot shows the website for the Minnesota Public Health Research to Action Network. The header includes the Minnesota Department of Health (MDH) logo and navigation links for HOME, TOPICS, and ABOUT US. A search bar is also present. The main content area features a sidebar with navigation links, a central section for 'Featured Research' with several publication links, and a right sidebar with 'Share This', 'How are we doing?', 'Contact OPI', and 'Frequently Requested Links'.

Minnesota Department of Health
MINNESOTA MDH DEPARTMENT OF HEALTH

HOME TOPICS ABOUT US

Research to Action Network
www.health.state.mn.us/ran
Home
Research Agenda
Publications
Contact Us
PBRN National Coordinating Center

Office of Performance Improvement
Home
About OPI
Assessment, Planning & Measurement
Capacity Development
PHN Consultants
Quality Improvement
Governance & Administration
Resources & Communications
Contact Us

Minnesota Public Health Research to Action Network

The Minnesota Public Health Research to Action Network launched in 2009 to stimulate public health systems and services research across Minnesota. The network was created to produce important new insights and relevant findings that can be used by practitioners and elected officials to improve public health services, organizations, and systems, and ultimately improve the health of Minnesotans.

Featured Research

- Minnesota MPROVE Study: Overall Findings and State-Specific Analysis** (356KB / 13 pages) - October 2013
- A Snapshot of Findings for 2012 Developmental Measures** (214KB / 2 pages) - October 2013
- Evaluation Plan Template** (136KB / 6 pages) - July 2013
- Qualitative Interview Tool: Discussing Public Health Organizational Capacity, Process, and Performance in the Context of Meyer, Davis, Mays PHSSR Conceptual Model** (96KB / 5 pages) - May 2013

[More Research to Action Network Publications](#)

About Public Health Practice-Based Research Networks

The Minnesota Public Health Research to Action Network is a partnership of:

- State Community Health Services Advisory Committee
- Minnesota Local Public Health Association
- University of Minnesota School of Public Health

Share This
How are we doing?
Please provide feedback
Contact OPI
health.ophp@state.mn.us
Phone: 651-201-3880
Frequently Requested Links
Find a Community Health Board or Local Health Department
CHS Mailbag and Calendar
Training & Webinars
Assessment & Planning
PPMRS
SCHSAC
Community Health Conference
MN SSLC: Shared Services Learning Grant
Local Public Health Act
Systems & Services Research
OPI Publications Database



Research to Action Network: State CHS Advisory Committee

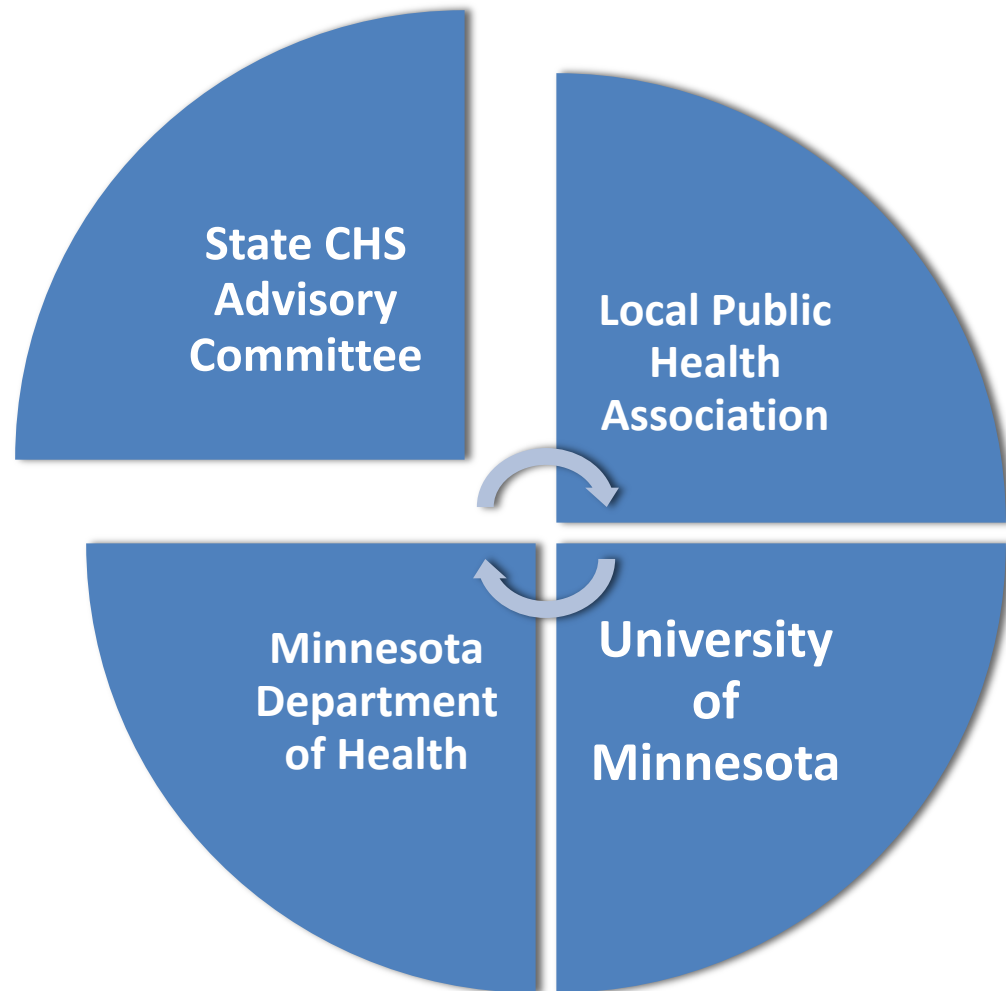
County commissioners and health officials of all 50 community health boards

Convened quarterly by Commissioner of Health

Sets the course for system

State/local workgroups and recommendations

Meeting presentations, written reports & displays



Research to Action Network: Local Public Health Association



Top public health
leaders of all 70
LHDs

Statewide and
regional meetings

Research to Action Network: University of Minnesota



School of Public
Health

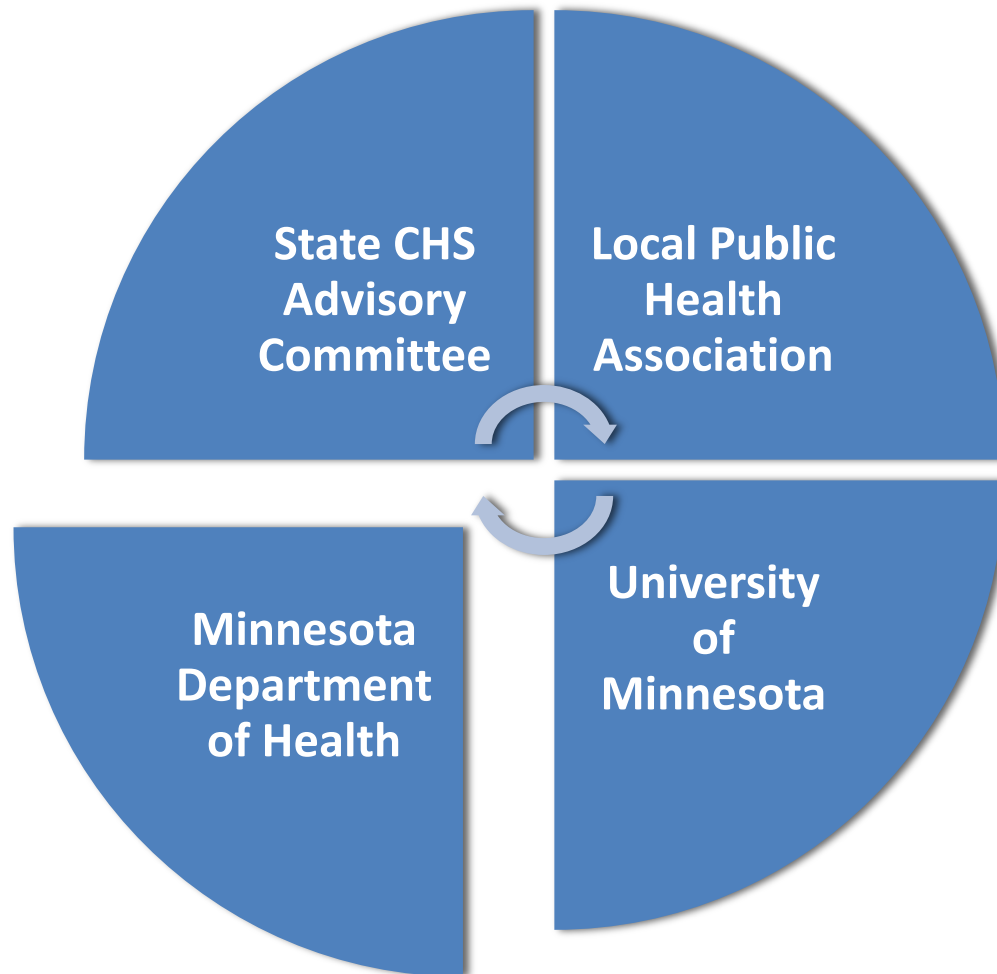
Research design and
analysis, manuscript
preparation and
presentation

Research to Action Network

Minnesota Department of Health

PBRN housed in
the Office of
Performance
Improvement

State public
health system
infrastructure



Selected Past RAN Research Projects

- Measuring the variation in the authorities of top public health officials
- Development of an organizational quality improvement (QI) maturity score
- Local tax levy and public health financing
- Study of factors that contributed to the success of the Statewide Health Improvement Program (SHIP), a policy, systems and environmental change strategies intervention.
- Health equity work performed by local public health jurisdictions
- Multi-network studies



Selected Examples of Translation: QI Maturity

- PBRN worked to create an organizational QI maturity score based on 10 questions taken from a larger, validated and tested survey.
- Those 10 questions have been incorporated into the annual reporting system used by local public health in MN. A QI maturity score is calculated each year and is used to assess system progress.
- Some local health departments are using the QI maturity score internally and as part of their individual QI Plans.
- Questions also incorporated into an annual employee survey at MDH. These questions and the QI maturity score are part of the QI plan and are helping target areas that need improvement.

MN LPH System QI Maturity

Figure 14. Organizational QI maturity in the Minnesota local public health system.

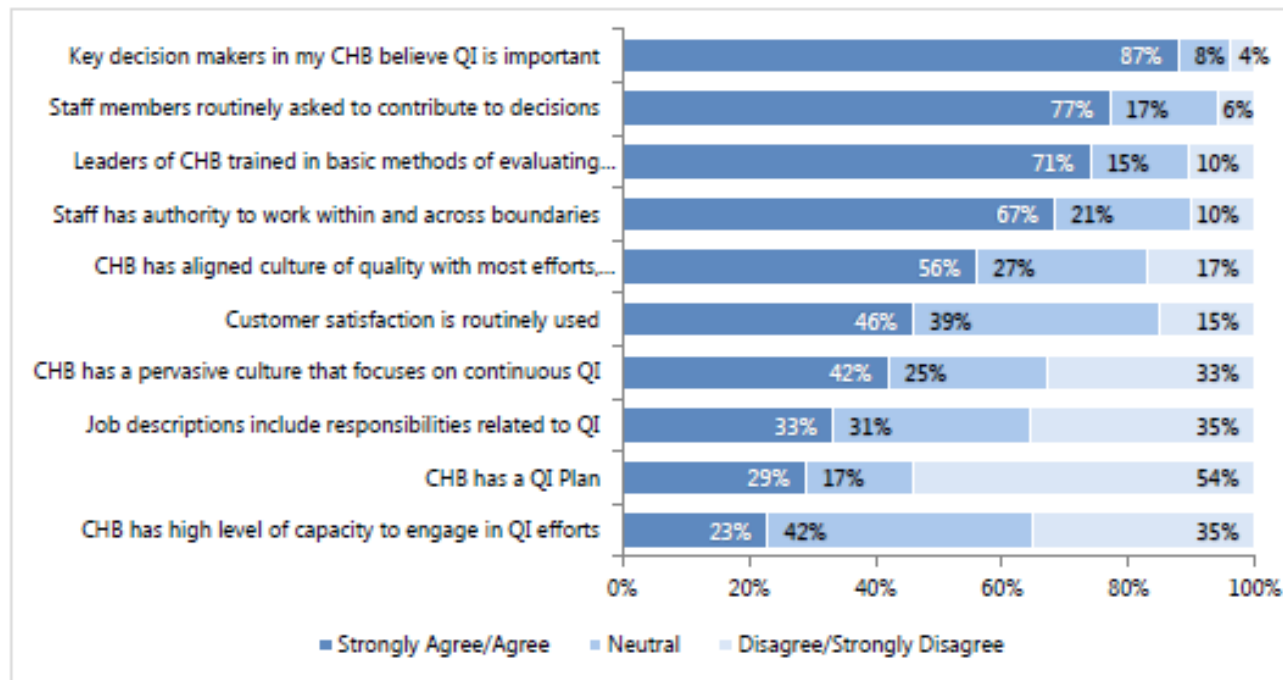
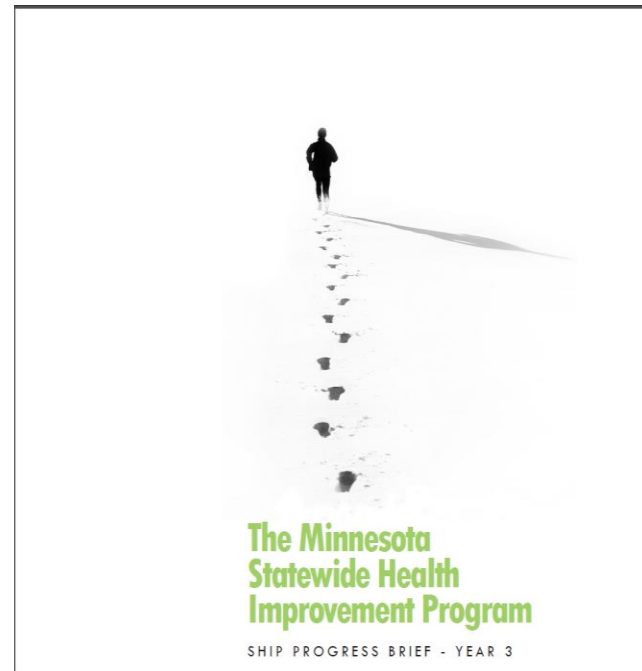


Table 3. QI Maturity	2011	2012
System QI Maturity Score (median)	3.2	3.5
System QI Maturity Score Distribution		
2.0 – 2.9	28.3%	17.3%
3.0 – 3.9	60.4%	63.5%
4.0 and greater	11.3%	19.2%

Selected Examples of Translation: SHIP

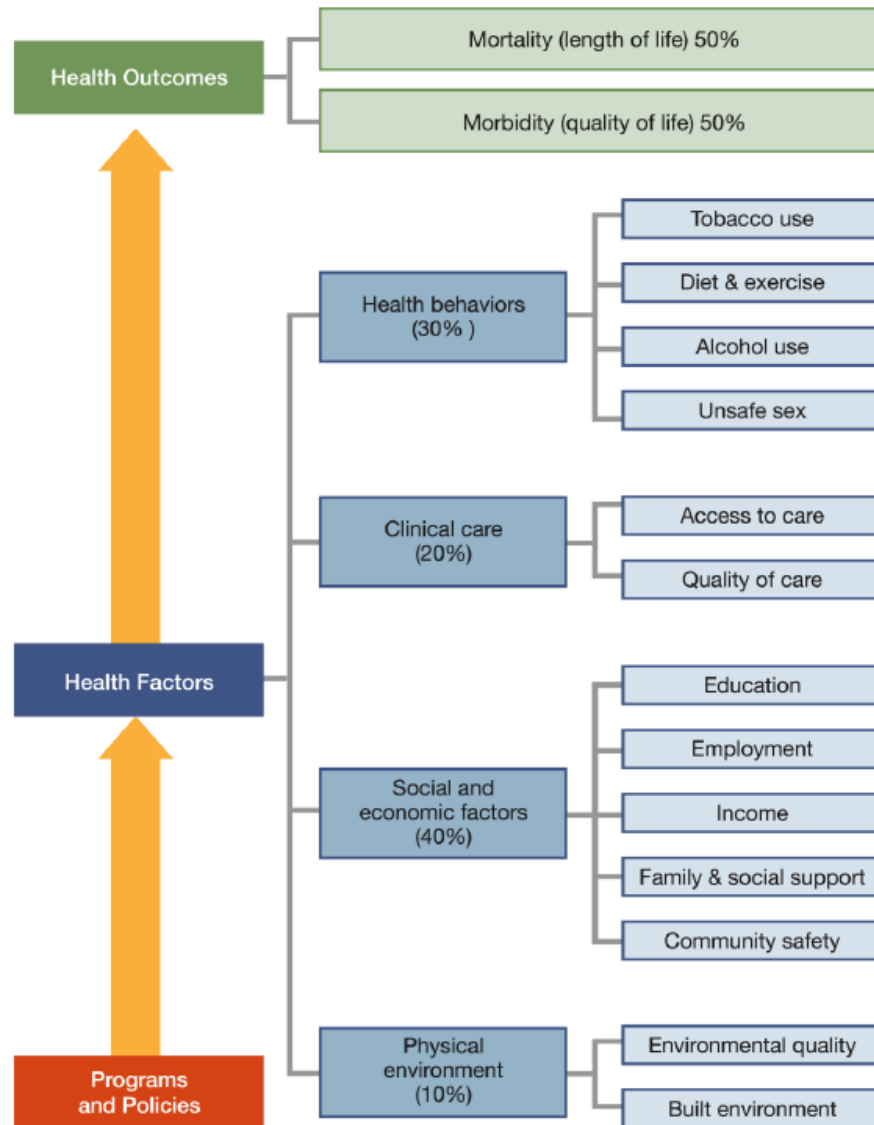
- Study determined that there were local factors that appeared to contribute to enhanced performance by local health departments.
- Study findings were included in a 2013 SHIP Legislative Report.
- Study findings were discussed and shared with SHIP staff, as well as local public health SHIP staff.
- The current iteration of the program (SHIP 3) incorporated key study findings into the recent request for proposals (RFP).



Health Care and Public Health

- U.S. has the most expensive health care system, yet health care is estimated to contribute to about 20% of the nation's health.
- Growing awareness that we need to focus on social determinants of health and the physical environment to collectively have an impact on health.
- The unsustainable increases in health care costs are leaving fewer dollars for education, job development, and these other social determinants of health.

WI County Health Rankings Model



County Health Rankings model ©2010 UWPHI

Addressing the Triple Aim

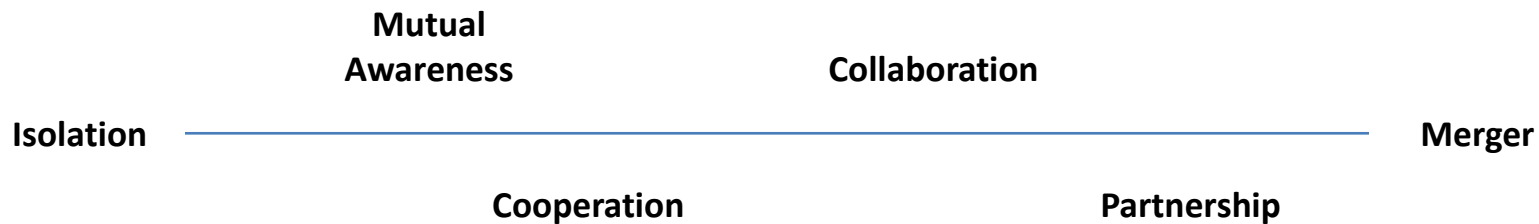
The term “Triple Aim” comes from a paper published by Berwick, et al. in Health Affairs. They propose that three things need to be achieved at the same time to improve the U.S. health care system:

- Improve the health of the population
- Improve the patient experience, including quality
- Improve the affordability of care, by decreasing per capita costs

May 2008, Vol. 27, No. 3, 759-769

Primary Care and Public Health

The Institute of Medicine (IOM) makes a compelling case that increased collaboration between primary care and public health is crucial to population health, and the Affordable Care Act provides new incentives and expectations for such partnerships.



Primary Care and Public Health: Exploring Integration to Improve Population Health.
IOM (Institute of Medicine). 2012.



Uniting primary care and public health
practice-based research networks in
multi-state study

PRIMARY CARE AND PUBLIC HEALTH STUDY



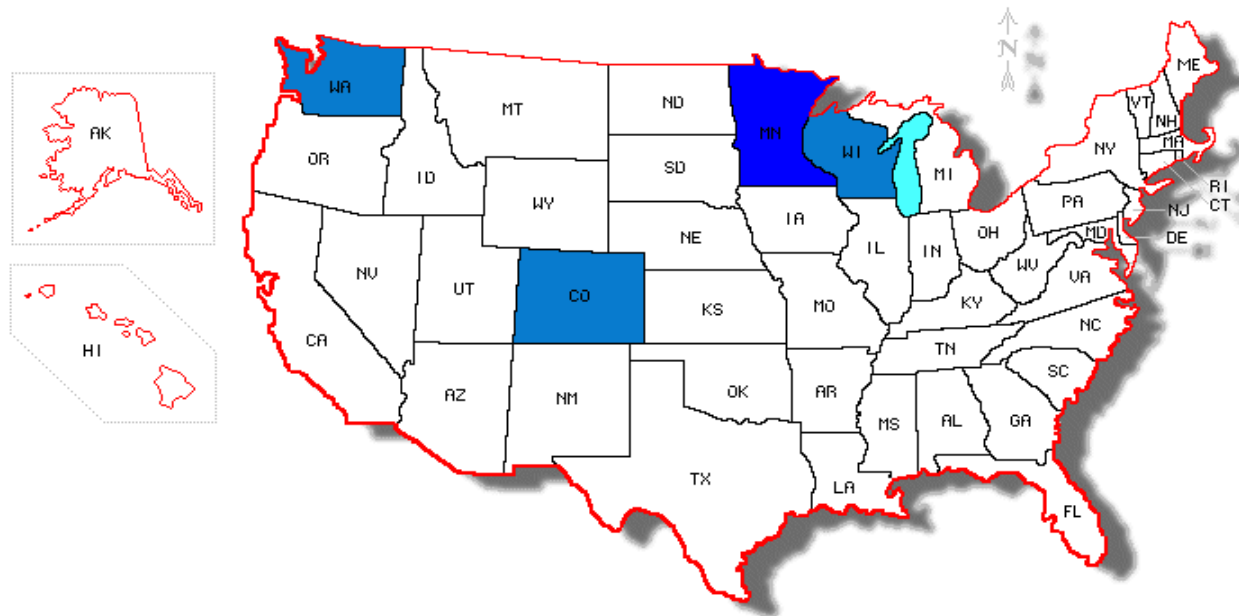
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Primary Care-Public Health Study



Robert Wood Johnson Foundation

Participating States



Minnesota
Public Health
Research to
Action Network

Key Contacts in Partner States

Colorado:

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Lisa Van Raemdonck (Public Health PBRN)



Washington:

Laura-Mae Baldwin (Primary Care PBRN)

Betty Bekemeier (Public Health PBRN)



Wisconsin:

David Hahn (Primary Care PBRN)

Susan Zahner (Public Health PBRN)



Primary Care-Public Health Joint Study

Purpose

- Develop measures and use them to identify differences in integration.
- Identify factors that facilitate or inhibit integration.
- Examine the relationship between extent of integration, and services and outcomes in select areas (immunizations, tobacco use, and physical activity).



Primary Care and Public Health

Research Questions

- How does the degree of integration between PC and PH vary across local jurisdictions?
- What factors facilitate or inhibit integration, and how can PC and PH leverage those factors to increase integration?
- Does the degree of integration differ based on health topic?
- Do areas of greater integration have better health outcomes?

Study Design & Timeline

The study combines existing health data with new data collected through telephone interviews, an on-line survey, and focus groups.

- **February-March 2014:** Conduct key informant interviews
- April-June 2014: Qualitative analysis, present early findings
- June-December 2014: Online survey development & testing
- Early 2015: Field online survey
- 2015: Quantitative analysis, mixed methods analysis
- 2016: Translation and dissemination activities, including convening focus groups

Qualitative Component

- In early 2014, each state will conduct at least 5 pairs of key informant interviews that engage a public health director and primary care clinic director from the same jurisdiction.
- Participants selected to represent a variety of primary care and public health organizational structures and geographic variation across the four states.
- In 2016, the primary care and public health practitioners who served as key informants will be invited to participate in focus groups to review, refine and validate findings.

Qualitative Analysis Plan

- Investigators will use the social constructivist approach to identify themes and sub-themes in the data.
- The themes identified by the investigators will then be used, along with the theoretical model and literature, to help identify factors potentially related to degree of integration and to develop the survey instrument.
- In addition, this information will be used to identify factors that facilitate or inhibit integration

Quantitative Component

- In 2015, public health and primary care clinic directors will be recruited to participate in an on-line survey that will examine the degree of integration between a specific local health department and a specific primary care clinic in its jurisdiction.
- Additional data relating to the structure, organization, financing and staffing of the participating entities will also be obtained.
- Selected health measures will be incorporated for analysis.

Quantitative Analysis Plan

- There are a possible 227 PC-PH dyads across the four participating states.
- Descriptive statistics to describe variation in degree of integration by organizational and geographic variables.
- Topic-specific degree of integration will be explored for immunizations and activities around tobacco and physical activity.
- Descriptive statistics will be generated to describe variation of degree of integration compared to the health outcomes of interest.
- A case study analysis approach will allow for consideration of the quantitative data in relation to the qualitative data.

Limitations

- While the sample size is increased through the inclusion of four states and their local jurisdictions, much of this work is exploratory in nature. Thus these results may suggest association, but will not support causality.
- While study investigators believe that variation in the degree of integration will be observed, it is unknown how that variation will be distributed and how that variation could influence the precision of regression models.
- In addition, population health outcomes may not yet reflect recent changes in the level of integration between primary care and public health.

Potential Benefits

- The study gives voice to what is needed at the local level to advance a collaborative working relationship.
- Findings will be used to identify and promote infrastructure and capacity needed to increase collaboration.
- The study will develop and test measures that could be used to monitor changes those relationships over time.
- The study contributes to stronger relationships, which paves the way for future collaborations.

Related Work Nationally

- Institute for Clinical Systems Improvement (ICSI) has an 18-month RWJF award focused on communications related to primary care-public health collaborations.
- American Hospital Association (AHA)/University of Kentucky: Profiling examples of best practices in hospital-public health partnerships and collaborations.
- Practical Playbook (de Beaumont Foundation/CDC/Duke University): Launching in March 2014, an interactive, web-based tool designed to help primary care and public health find productive ways to work together.

Value Added from MN Study

- Believe this to be one of the first to characterize degree of integration at the local jurisdictional level and how it may vary across our four states, as well as by certain local characteristics.
- Other work is largely focused on highlighting examples of success; recognition by study staff that there may be instances where integration doesn't work as well.
- Engaging the practice-based research networks at each phase of the study, from design to analysis to interpretation, increases the relevance of findings for practitioners.

Questions?



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