Driving QI with Research: Findings from Public Health PBRNs

Glen P. Mays
University of Kentucky, glen.mays@cuanschutz.edu

Follow this and additional works at: https://uknowledge.uky.edu/hsm_present
Part of the Econometrics Commons, Health and Medical Administration Commons, Health Economics Commons, Health Policy Commons, Health Services Administration Commons, and the Health Services Research Commons
Right click to open a feedback form in a new tab to let us know how this document benefits you.

Repository Citation
https://uknowledge.uky.edu/hsm_present/51

This Presentation is brought to you for free and open access by the Health Management and Policy at UKnowledge. It has been accepted for inclusion in Health Management and Policy Presentations by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.
Driving QI with Research: Findings from Public Health PBRNs

Glen P. Mays, PhD, MPH
University of Kentucky

Multi-State Learning Collaborative Open Forum on Quality Improvement in Public Health
Washington, DC • 12 December 2011
Missed opportunities in public health practice

Less than 50% of the population at risk is reached by:

- Smoking cessation
- Aspirin use
- Influenza vaccination
- Hypertension control
- Nutrition and physical activity programming
- HIV prevention
- Family planning
- Substance abuse prevention
- Interpersonal violence prevention
- Home visitation for high-risk mothers and infants
The disconnect between discovery research and delivery research

For every $100 in federal health research spending, <$1 is devoted to delivery system research.

Woolf and Johnson 2005.
Critical research issues in QI

- Did “it” work?
- Are you sure that it worked?
- For whom did it work (and for whom not)?
- How did it work (or why did it not)?
- What were the active ingredients?
- Were there unintended effects?
- Were the effects worth the costs?
- How long can the effects be sustained?
- Can it be replicated in other settings?
- Comparison to other QI methods (CER)?
Research challenges in QI

Design and attribution: are changes due to QI?
- Hawthorne effects
- Other temporal changes
- Regression to the mean
- The counterfactual?

Measurement
- Are we measuring the right things?
- Sensitivity & specificity
- Is there enough time to observe changes?

The QI Intervention
- Fidelity
- Implementation cost
- Comparative effectiveness of alternative QI strategies
- Dose-response
- Context-specific effects (treatment heterogeneity)
How can PBRNs help?

- Practice partners to help design, tailor, and implement QI
- Multiple practice settings for analysis and comparison
- Research partners to help design studies that balance rigor, relevance, feasibility
- Collaborative interpretation of results in context
- Translating results to timely practice and policy actions
What are Public Health PBRNs?

A collection of *public health agencies* and their *partner organizations* engaged in an ongoing collaboration with an *academic research center* to conduct rigorous, applied studies of strategies for organizing, financing, and/or delivering public health services in *real-world community settings*. 
The PBRN Model

Identify Common questions of interest

Engaged practice settings

Research partner

Translation & application

Apply Rigorous research methods

Analysis & interpretation

Data exchange

Common questions of interest

Rigorous research methods

Data exchange

Analysis & interpretation

Translation & application

Engaged practice settings

Research partner
The Robert Wood Johnson Foundation’s Public Health PBRN Program

First cohort (December 2008 start-up)
Second cohort (January 2010 start-up)
Affiliate/Emerging PBRNs

National Coordinating Center
Types of PBRN studies

- **Comparative case studies**: document processes, identify scope and scale of problems, examine innovations

- **Large-scale observational studies**: document practice variation across public health settings; identify causes & consequences of variation

- **Adoption/diffusion studies**: identify the pace and patterns through which evidence-based practices are adopted, and factors that facilitate and inhibit adoption

- **Quality improvement studies**: evaluate strategies for improving program operations & outcomes

- **Policy evaluations and natural experiments**: monitor effects of key policy and administrative changes
QI Quick Strike Research Projects

- Local QI Responses to the County Health Rankings (Florida)
- Implementation of QI Collaboratives for Small and Rural Public Health Settings (Georgia)**
- Effects of Public Health Accreditation on QI Philosophy (Missouri)
- Taxonomy of QI Methods, Techniques and Results in Public Health (Minnesota)**
- QI Strategies and Regional Public Health Structures (Nebraska)**
- Evaluation of a QI Initiative to Improve Workforce Diversity (Washington)

**Featured on today’s panel
Cross-Cutting Themes

- Variation in public health delivery results in inequities in prevention and risk protection
- QI provides mechanisms for understanding and reducing unwarranted variation in PH practice
- Practice-based research in public health can:
  - Expand evidence on QI
  - Accelerate translation of QI to practice
  - Inform policy regarding value of QI
For More Information

Glen P. Mays, Ph.D., M.P.H.
Program Director
glen.mays@uky.edu

Supported by The Robert Wood Johnson Foundation

publichealthPBRN@uky.edu
www.publichealthsystems.org/pbrn

University of Kentucky College of Public Health
Lexington, KY