



Preventive Medicine and Environmental Health Presentations

Preventive Medicine and Environmental Health

January 2011

## Public Health Services and Systems Research: A common meeting ground

F. Douglas Scutchfield MD University of Kentucky, scutch@uky.edu

Click here to let us know how access to this document benefits you.

Follow this and additional works at: https://uknowledge.uky.edu/pmeh\_present Part of the <u>Education Commons</u>, <u>Life Sciences Commons</u>, <u>Medicine and Health Sciences</u> <u>Commons</u>, and the <u>Social and Behavioral Sciences Commons</u>

**Repository Citation** 

Scutchfield, F. Douglas MD, "Public Health Services and Systems Research: A common meeting ground" (2011). *Preventive Medicine and Environmental Health Presentations*. 13. https://uknowledge.uky.edu/pmeh\_present/13

This Presentation is brought to you for free and open access by the Preventive Medicine and Environmental Health at UKnowledge. It has been accepted for inclusion in Preventive Medicine and Environmental Health Presentations by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.

## Public Health Services & Systems Research: A Common Meeting Ground

January 20, 2011

F. Douglas Scutchfield, M.D. Bosomworth Professor University of Kentucky National Coordinating Center for PHSSR



#### What is PHSSR?

- Public Health Services & Systems Research (PHSSR) is a field of study that examines the organization, financing, and delivery of public health services within communities, and the impact of these services on public health.
- PHSSR is a multidisciplinary field of study that recognizes and investigates system-level properties and outcomes that result from the dynamic interactions among various components of the public health system and how those interactions affect organizations, communities, environments, and population health status.
- The public health system includes governmental public health agencies engaged in providing the ten essential public health services, along with other public and private sector entities with missions that affect public health.
- The term "services" broadly includes programs, direct services, policies, laws, and regulations designed to protect and promote the public's health and prevent disease and disability at the population level.

• Scuttchfield, HSR V 44 5p2



#### What is Needed for PHSSR?

- Funding for Research
  - RWJF
  - CDC
- Methods
  - Economics
  - Systems Science, e.g, social network theory
- Data Bases
  - Harmonized Surveys
  - Performance
- Investigators, new and refurbished



 National Coordinating Center for Public Health Services & Systems
 Five Pillars of Activity

- Increased Research Funding-Natural Experiments
- New Investigators
- Improving Practitioners ability to use research
- Increase the funding of PHSSR
- Coordination, Dissemination & Communication of PHSSR
  Work



#### **PHSSR Agendas**

- PubMed search yielded 28 articles
- 9 contained an agenda, with 4 proposed agendas
  - CDC, Lenaway et al
  - PHF
  - System and Infrastructure Resources (150 items)
    - Workforce
    - Finance
  - General System Issues (65 items)

- Van Wave, et al Ann Rev PH V31, April 2010



### Setting the PHSSR Agenda

#### Resources Going In

- Review of RWJF products to date, publications and presentations
- Systematic reviews of four areas
- Yale meeting, small group discussions at AH and APHA
- NNPHI Key Informant Survey
- Areas for Discussion and Decision
  - Workforce
  - Organization/Structure
  - Quality Improvement
  - Methods
  - Finance



#### **Systematic Review on Methodology**

 Make more use of study designs (e.g., longitudinal and ex perimental designs) that allow for the appropriate data co llection and subsequent assessment of causation and chang e over time, especially given the unique opportunity PHSS R has to conduct natural experiments and use creative qu asi---experimental designs (e.g., regression---discontinuity) as public health systems grow and change

over time,

- Examine study power a priori where appropriate,
- Increase the testing of validity and reliability when new P HSSR instruments are developed, along with increasing the use of validated instruments,



Prepared by Dr. Jenine Harris

#### **Systematic Review on Methodology**

- Utilize more advanced analytic strategies including s ystems methods and multilevel models that are ap propriate for modeling the longitudinal, nested (e.g., programs within organizations, organizations within local systems, etc.), and other non-
  - --independent relationships that comprise public he alth systems,
- Include examinations of internal and external validit y, and
- Continue efforts to collect, harmonize, and validate PHSSR---specific large national data sets.



Prepared by Dr. Jenine Harris

### **Systematic Review on QI**

- We identified 12 studies reporting on 15 separate QI interventions.
- Studies fell naturally into 3 functional categories:
  - organization-wide QI,
  - program or service-specific QI, and
  - administrative or management function QI.
- Few of the studies linked their improvements directly to a health outcome or predictor of health outcomes.
- Studies were generally implemented in state-level or large local public health departments.
- Notably, all the QI studies engaged project teams, including agency leadership.



Prepared by Dr. Julia Dilley

#### **Systematic Review on QI**

- QI interventions are intended to be process improvements; thus, QI interventions published in research journals may not be representative of typical, smaller-scale QI activities.
- More research is needed to definitely "connect the dots" between QI efforts, resulting practice improvement and actual (or predictors of) health outcome improvements.
- Future studies should describe these associations in diverse public health systems.
- Collection and distribution of QI results associated with proven, effective public health interventions should be a goal.



### **Implications for PBRN/PRC Collaboration**

- Community Based Participatory Research
- PHAB, Accreditation and QI
- Translation of Categorical to General and Back
- Efficacy and Effectiveness Research, Fidelity
- Comparative Effectiveness
- Translation Research (from the community to the university and back, AHD)
- Natural Experiments
- Multi-Site Studies





#### That's All Folks!



#### For more information contact:



Center for Public Health Systems and Services Research

121 Washington Avenue, Suite 212 Lexington, KY 40517 859-257-5678 www.publichealthsystems.org



# **Questions?**

