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From the Selected Works of Anna G. Hoover

Spring 2015

2015 PHSSR Extramural Research Inventory

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Available at: https://works.bepress.com/anna_hoover/16/

CONTENTS

| | |
|---|-----------|
| Introduction | 1 |
| 1. Public Health Workforce Studies (8 studies) | 3 |
| a. Enumeration (1 study)..... | 3 |
| b. Diversity and Disparities (2 studies) | 3 |
| c. Recruitment and Retention (2 studies) | 4 |
| d. Workforce Competencies (3 studies) | 5 |
| 2. Public Health System Structure and Performance Studies (68 studies)..... | 7 |
| a. System Boundaries and Size (2 studies) | 7 |
| b. Public Health Organization and Governance (9 studies)..... | 7 |
| c. Interorganizational Relationships and Partnerships (20 studies) | 10 |
| d. Performance Measurement, Quality Improvement, and Accreditation (29 studies)..... | 18 |
| e. Social Determinants of Health and Health Disparities (8 studies)..... | 28 |
| 3. Financing and Economics Studies (42 studies)..... | 31 |
| a. Fiscal Analysis (4 studies) | 31 |
| b. Financing Mechanisms (10 studies)..... | 32 |
| c. Costs, Performance, and Outcomes (28 studies)..... | 35 |
| 4. Information and Technology (21 studies)..... | 45 |
| a. Capabilities to Assess & Monitor Health Outcomes (4 studies) | 45 |
| b. Translation & Dissemination of Research-Tested Public Health Strategies (2 studies)..... | 46 |
| c. Information and Communications Technologies (15 studies) | 46 |

Public Health Services and Systems Research Inventory

INTRODUCTION

The Robert Wood Johnson Foundation's **National Coordinating Center for Public Health Services and Systems Research** (PHSSR) supports research to improve population health and eliminate health disparities through evidence-based enhancements in the public health system. The Center conducts research, supports other researchers in the field, and disseminates findings to practitioners and policy-makers. Mechanisms include communications, funding opportunities, facilitating data sources for researchers, and sponsoring the annual PHSSR Keeneland Conference, the premier national gathering of public health systems researchers. The Center also coordinates and disseminates the National Research Agenda for PHSSR, which guides the development of new research. The Center's Public Health Practice-Based Research Networks Program supports research on the organization, financing, and delivery of public health services using the infrastructure of practice-based networks (PBRNs). A Public Health PBRN brings multiple public health agencies into collaboration with an academic research partner to design and conduct studies in real-world practice settings. For more information see: www.publichealthsystems.org.

Since 2009, the Robert Wood Johnson Foundation has funded the 139 PHSSR research projects summarized in this report. The Center manages active awards and disseminates results from completed awards, including those previously managed by the National Network of Public Health Institutes:

- Developmental awards including the one-year PHSSR Junior Investigator Awards and Pre and Post-doctoral Scholars in Public Health Delivery Awards, and the two-year Mentored Researcher Development Awards;
- Two-year Investigator Initiated Awards (PHS1, PHS2, PHS3, PHS Natural Experiment, and PHS4 awards); and
- Public Health PBRN funding mechanisms, including:
 - Large-scale Research Implementation Awards (RIAs) conducted by established networks;
 - Quick-Strike Research Fund (QSRF) awards that support short-term, time-sensitive studies on emerging issues;
 - Supplemental Research Acceleration and Capacity Expansion (RACE) awards designed to expand the scope and enhance the tempo of ongoing research within the PBRN;
 - Multi-network Practice and Outcome Variation Examination Studies (MPROVE) using a common research protocol and standardized data collection strategies to examine the causes and consequences of practice variation in public health;
 - Delivery and Cost Studies (DACS) to identify the costs of delivering high value public health services; and
 - Dissemination and Implementation Research to Improve Value Studies (DIRECTIVE) to elucidate the effectiveness and cost of dissemination and implementation processes that occur within and across public health settings.

This report summarizes these studies and indicates those that are “Completed” where funding has ended; those that are “Underway” where projects are currently in process, and the “Recently Awarded” that were awarded in the last six months. To obtain further information on the methods and findings of these studies, please send a request to PHSSRCenter@uky.edu with “Request for PHSSR Study Information” in the subject line.

Revised March 1, 2015

Public Health Services and Systems Research Inventory

1. PUBLIC HEALTH WORKFORCE STUDIES (8 STUDIES)

a. Enumeration (1 study)

1.01 Trends and Characteristics of the State and Local Public Health Workforce

Angela Beck, U. of Michigan
Mentor: Matthew Boulton

Completed

The principal objective of this proposal is to determine how the size and composition of the state and local public health workforce varies over time by state and community types. This study will use workforce data from multiple sources, including the NACCHO National Profile of Local Health Departments (2008-2013), and the ASTHO Profile of State Public Health (2007-2012). These data will be supplemented with data from the Council of State and Territorial Epidemiologists Epidemiology Capacity Assessment (2006-2013), the National Laboratory Capacity Assessment (2011) and the National Public Health Nurse Workforce Survey (2012). The research methodology will be a secondary data analysis that will allow the development of a profile of the workforce by occupational categories. Trends of aggregated workforce characteristics by states, or regions of states, and types of communities, such as rural or urban, will be analyzed using descriptive statistics. In addition, modeling will be used on the longitudinal data to attempt to predict future workforce trends. These results should enable public health officials and policy makers to get a sense of how the distribution of their workforce has changed over time and how it compares to the workforce composition in states with similar characteristics, which could lead to better information about staffing patterns in state and local health departments nationwide.

Funding: 2013 PHSSR Jr. Investigator Award 70384-1

b. Diversity and Disparities (2 studies)

1.02 Effects of Cultural Competency Training on Local Health Departments: A Randomized Trial

Kentucky Public Health PBRN

Completed

This project through the Kentucky PBRN analyzes variation in the cultural and linguistic competence of local health departments within Kentucky, adapts and tests a series of training modules designed to strengthen cultural and linguistic competence among staff, and evaluates the effectiveness of these training models. The study uses existing baseline data from an earlier project that conducted organizational assessments of each department using an instrument designed to measure compliance with the National Standards on Culturally and Linguistically Appropriate Services (CLAS). Competency training models are being adapted from existing modules developed by the Office of Minority Health at the U.S. Department of Health and Human Services and delivered via videoconferences and webinars to random subsample of local health departments. The CLAS survey will be repeated after training completion and used to estimate training program effectiveness using repeated-measures estimation techniques.

Funding: 2011 Public Health PBRN Research Acceleration & Capacity Expansion Supplement 69494

1.03 Local Health Department Workforce Reductions: Implications for Diversity and Health Disparities

Washington Public Health PBRN

Completed

This project seeks to quantify the variation in workforce reductions made by local health departments in Washington state in response to the economic downturn, and to estimate the effects of these reductions on local health department service delivery, workforce diversity, and capacity to address health disparities. The study builds on ongoing research conducted by the Washington PBRN to track changes in funding and service delivery among local health departments across the state, and makes use of a unique data repository constructed for this purpose. A mixed method approach is employed that includes linkage and analysis of existing, secondary data sets and the collection of primary qualitative and quantitative data. The project also allows a new investigator from an under-represented racial background to collaborate with the PBRN in the conduct and translation of the study, which includes mentoring from public health practitioners, knowledge and skill development through courses and active involvement in the PBRN, networking and presenting research findings at national and local meetings focusing on practice-based research, and dissemination of study findings via peer-reviewed publications.

Funding: 2011 Public Health PBRN Research Acceleration & Capacity Expansion Supplement 69498

1. PUBLIC HEALTH WORKFORCE STUDIES (8 STUDIES)

c. Recruitment and Retention (2 studies)

1.04 Recruitment and Retention Challenges and Successes in the Local Health Department Workforce

*Julie Darnell, Josh Franzel,
Center for State and Local
Government Excellence, U. of Illinois
at Chicago*

Completed

This study will analyze the economic, political, and organizational issues affecting recruitment and retention by local health departments (LHDs) and identify effective strategies that help to address these challenges. The research team will answer the following research questions: (1) What gaps exist in the LHD workforce?; (2) What recruitment and retention challenges do LHDs face?; (3) What factors are associated with the staffing levels of LHDs?; and (4) How are LHDs addressing recruitment and retention challenges, and what lessons can be shared from successful approaches to these challenges for the benefit of other communities? The team will analyze existing data from a variety of sources to provide a profile of the current public health workforce and will describe changes over time in LHDs, as well in other agencies of state and local government carrying out public health functions. The team will conduct a web-based survey of approximately 400 LHDs to understand the challenges facing LHDs, the factors associated with these challenges, and what strategies have been successful in addressing workforce gaps. The team will research and develop a series of five to six case studies to highlight LHDs that have been successful recruiting, retaining, and developing workers in order to provide examples for other LHDs. Finally, the team will host a national event in order to highlight the challenges facing the public health workforce and propose strategies and approaches for strengthening the workforce.

Funding: 2011 NNPHI PHS2 Award 69685

1.05 Effect of Variations in State Emergency Preparedness Laws on the Public Health Workforce's Willingness to Respond in Emergencies

*Lainie Rutkow, Daniel Barnett, Johns
Hopkins Bloomberg School of Public
Health*

Completed

This project will assess whether state laws influence the public health workforce's willingness to respond (WTR) in emergencies. The project's aims are: 1) Identify and classify variations in emergency response laws in the 50 U.S. states; 2) Assess the association between specific state emergency preparedness laws and WTR during emergencies among the public health workforce (including health department staff and emergency medical services (EMS) workers); 3) Assess whether public health workers believe that particular future legal protections would enhance their WTR during emergencies. Aim 1 involves a mapping study to identify and classify specific emergency response laws in all 50 states. Aims 2 and 3 employ multi-level regression analyses using data from an existing national EMS worker sample and from an on-going survey of local health departments. Project deliverables include a protocol, codebook, and data set from the legal mapping study; peer-reviewed manuscripts; non-technical, translational materials; and conference presentations. Additional deliverables include a research brief detailing findings, policy/practice implications, and recommendations as well as a written report on the project and its findings for wide dissemination. Findings will be released within 12 months of the project's completion. The project will collaborate with: 1) National Registry of Emergency Medical Technicians; 2) Butler County Health Department in Missouri; and 3) Multnomah County (OR) Health Department.

Funding: 2012 NNPHI PHS Natural Experiment Award 70335

Public Health Services and Systems Research Inventory

1. PUBLIC HEALTH WORKFORCE STUDIES (8 STUDIES)

d. Workforce Competencies (3 studies)

1.06 Analyzing Concordance between Position Descriptions and Practice Standards for Public Health Nurses

Ohio Public Health PBRN

Completed

This study by the Ohio PBRN collects, codes, and analyzes position descriptions for all levels of public health nurses practicing within the state's 125 county health departments in order to determine the extent to which positions are consistent with national competency standards and scope of practice policies. The study will examine geographic variation in the degree of concordance with public health nursing practice standards, and use multivariate analytic techniques to identify organizational, community, and market-level factors that influence concordance. Findings will be used to develop policy and practice recommendations for enhancing nursing workforce competencies.

Funding: 2011 Public Health PBRN Quick Strike Research Award

1.07 The Relationship Between Public Health Workforce Competency, Provision of Services, and Health Outcomes in Tennessee

Robin Pendley, East Tennessee State University

Mentor: Brian Martin

Completed

The principal objective of this project is to determine if the competencies of the local health department public health workforce impact the provision of services and health outcomes in Tennessee (TN). Public health workforce competency data will be obtained from the findings of the 2012 State Department of Health Workforce Assessment Survey that was conducted for the public health workforce needs assessment by the TN Public Health Training Center (LIFEPATH). This survey instrument captured competency and demographic information on TN Department of Health employees statewide. Provision of service will be obtained from the NACCHO 2010 profile survey for TN. Health outcome data will be obtained from the County Health Rankings 2012 rankings. These three data sets will be merged. Descriptive statistics, bivariate analyses, and linear regression (using multilevel modeling if deemed appropriate) will be employed to examine the main research question of the relationship between public health competency, provision of services, and health outcomes. Appropriate variables would be controlled including financing, demographics, and structure. The study will be among the first to examine the utility of using needs assessment data from a public health training center to examine public health workforce competency and its relationship between services and health outcomes. This study may provide preliminary evidence of the value of needs assessment data in decision making for resource allocation, educational training of public health workers, and to improving health of the states.

Funding: 2013 PHSSR Jr. Investigator Award 70384-9

1.08 A National Evaluation of Leadership Styles and Outcomes in Local Health Departments

Laura D Cassidy, Medical College of Wisconsin, Inc.

Underway

This study will evaluate the leadership styles of local health department directors to identify optimal strategies for minimizing the negative impacts of resource reductions on the service provided to their communities.

Funding: 2013 NNPHI PHS3 Award 71267

Public Health Services and Systems Research Inventory

2. PUBLIC HEALTH SYSTEM STRUCTURE AND PERFORMANCE STUDIES (68 STUDIES)

a. System Boundaries and Size (2 studies)

2.01 A Profile of Tribal Public Health Departments

This study will analyze and compare data collected from state, local and tribal health departments. The findings of this study will help gauge what type and level of support are needed to strengthen public health infrastructure, improve quality, decrease disparities and prepare tribal health departments for accreditation.

*Alana Knudson, Aleena Hernandez,
NORC at U. Chicago Center for Rural
Health Analysis*

Funding: 2010 NNPHI PHS1 Award 67619

Completed

2.02 Cross Jurisdictional Sharing Arrangements Between Tribes and Counties for Emergency Preparedness Readiness

This study will examine cross-jurisdictional sharing (CJS) between tribal and county governments in emergency preparedness capacity building and response. Investigators from the California Rural Indian Health Board, Inc., and partners from California Conference of Local Health Officers, Inter-Tribal Long Term Recovery Foundation, California Department of Health Care Services, and Indian Health Program of the California Department of Public Health, seek to gain a better understanding of: 1) the current prevalence and scope of CJS between tribal and county governments focused on strengthening emergency preparedness capacity; 2) the perceived spectrum of “value” in CJS arrangements between tribes and their potential county governmental partners; 3) how CJS value is associated with factors such as perception of the nature of tribal to non-tribal government relationships and formality of CJS agreements, as well as by organizational structure and capacity, quality of collaboration, politico-legal, and historical factors; and 4) the tribal and county government CJS characteristics most associated with achieving benchmark public health emergency preparedness measures. This study aims to identify effective practices for CJS implementation that will protect health and shed light on the nature of tribal and county government relationships from historical, cultural, and legal perspectives. Dissemination tools include a CJS toolkit for tribal and non-tribal governments.

*Amanda Wilbur, Nanette Yandell,
California Rural Indian Health Board*

Funding: 2015 PHSSR PHS4 Award 72458

Recently Awarded

b. Public Health Organization and Governance (9 studies)

2.03 A Comparison of Federal and State Notifiable Disease Listings and Association with Foodborne Disease Outbreak (FBDO) reporting

Incidence and outcomes of foodborne disease outbreaks (FBDO) are routinely collected at the federal level; however the system by which this data is collected from individual states is disjointed. The result is sporadic and inconsistent reporting and thus an overly conservative estimate of the humanistic and financial impact of FBDO at the state and national levels. There has not been an intrastate analysis which investigates the relationship between the contents of the state-level lists to reporting. The consistency between state versus federal notifiable diseases lists and resulting data collected also has not been investigated. The objective of this study is to better characterize the structure and organization of FBDO reporting systems for surveillance at the state level in an effort to identify areas to improve the quality of data collected. The lists of mandatory notifiable diseases will be collected from 50 state health department websites. The dates of last revision will be noted. These lists will then be compared to the most recent version of the CDC list of notifiable diseases to look for consistency and identify gaps in surveillance. Finally, incidence of FBDO as collected by the CDC Foodborne Outbreak Online Database will be analyzed to look for associations in reporting as they relate to the consistency of notifiable disease lists at the state level. Findings from this project will add to the evidence base of public health systems and services research by contributing to the characterization of the system for reporting FBDO and identifying areas for restructuring to improve surveillance and outcomes.

*Fanta Purayidathil, Temple University
Mentor: Jennifer Ibrahim*

Funding: 2013 PHSSR Jr. Investigator Award 70384-7

Completed

2. PUBLIC HEALTH SYSTEM STRUCTURE AND PERFORMANCE STUDIES (68 STUDIES)

b. Public Health Organization and Governance (9 studies)

2.04 Multi-level Organizational and Structural Predictors of Local Health Department Performance in Evidence-Based Public Health

Robert Aronson, Kay Lovelace,
UNC at Greensboro

Completed

This study will identify factors that influence local health departments to use evidence-based public health strategies addressing population health, social determinants of health and the alleviation of health disparities. This project will inform policymakers of effective ways to support LHDs in applying evidence-based public health and help LHDs identify leverage points for moving their organizations toward a focus on population health.

Funding: 2011 NNPHI PHS2 Award 69686

2.05 Alternative Models for the Delivery of Local Public Health Services: Effect on Costs, Administration, and Public Health Outcomes

Maureen Berner, Jill Moore,
UNC at Chapel Hill

Completed

This study compares North Carolina's four different types of local public health delivery systems: single county, multi-county, authority, and consolidated human services. The team will analyze the laws that govern the four models as well as qualitative data related to the development and perceptions of the models and quantitative data tied to selected health status and service delivery outcomes. The project will inform state and local policymakers as they consider significant changes to the state's public health delivery system.

Funding: 2011 NNPHI PHS2 Award 69678

2.06 The Influence of Public Health Structure and Governance on the Adoption of Core Services and Outcomes in Local Public Health Agencies in Colorado

Emily Burns, Lisa VanRaemdonck,
Colorado Assn. of Local Public Health
Officials

Completed

This study examines a natural intervention in the state of Colorado in which core public health services were promulgated into rule in October 2011. The study will use existing baseline and secondary data as pre-implementation parameters for study. Follow-up data collection will take place 21 months after the baseline data was collected to measure change over time. Using longitudinal, pre-post study design we will look at agency level changes in core service provisions among all local public health agencies in Colorado. In addition to agency level changes we will also measure possible changes in health outcomes based on indicators related to core services.

Funding: 2011 NNPHI PHS2 Award 69679

2.07 Current and Planned Shared Service Arrangements Among Wisconsin's Local and Tribal Health Departments

Nancy Young,
WI Public Health PBRN

Completed

The Institute for Wisconsin's Health, Incorporated (IWHI) was awarded a QSRF grant to complete an analysis of current and planned shared service arrangements among local and tribal health departments located in Wisconsin, to gain a more complete understanding of current and future use of shared service arrangements as a management strategy to increase capacity to provide public health essential services.

Funding: 2011 Public Health PBRN Quick Strike Research Award 69619-4

Public Health Services and Systems Research Inventory

2. PUBLIC HEALTH SYSTEM STRUCTURE AND PERFORMANCE STUDIES (68 STUDIES)

b. Public Health Organization and Governance (9 studies)

2.08 Predictors of State/Local Public Health Systems for Disease Reporting, Investigation, and Response Performance

Susan Allan, Janet Baseman, U. of Washington; NWCPHP

Completed

This study compares characteristics of public health systems to identify those associated with effective detection, investigation and control of diseases and outbreaks. This project will build on recent work by key state and local public health organizations and will also incorporate aspects of the recently developed accreditation standards for state, local and tribal health departments.

Funding: 2010 NNPHI PHS1 Award 67616

2.09 Evaluating the Impact of the Nutrition Education and Obesity Prevention Program Reorganization on California's Public Health System

*Helen W. Wu, U. of California-Davis Health System, Institute for Population Health Improvement
Mentor: Kenneth W. Kizer*

Underway

This study will examine the implementation and impact of recent policy changes within California's federally-funded Nutrition Education and Obesity Prevention (NEOP) program that decentralized key funding and administrative mechanisms from the state to the local government level. The changes give local health departments greater decision-making authority and discretion over how program funds are used within local communities, along with an enhanced ability to support obesity prevention activities beyond nutrition education, including policy, environmental and systems change strategies. Through a systematic literature review on decentralized public programs, local health department interviews, and information collected by the state, Dr. Wu will describe local health departments' NEOP program implementation including the resources used, and their selection of policy, environmental and systems change interventions. By assessing the benefits and challenges of centralized vs. decentralized program administration, she will develop recommendations for maximizing the effectiveness of the statewide obesity prevention program.

Funding: 2013 Mentored Researcher Development Award 71598

2.10 Cross-Jurisdictional Shared Service Arrangements in Local Public Health

Susan J. Zahner, Kusuma Madamala, U. of Wisconsin

Underway

This study will examine the performance of cross-jurisdictional sharing arrangements in Wisconsin and document changes from baseline to inform guidance on the use of shared service agreements for improving the efficiency and effectiveness of local public health services.

Funding: 2013 NNPHI PHS3 Award 71268

2. PUBLIC HEALTH SYSTEM STRUCTURE AND PERFORMANCE STUDIES (68 STUDIES)

b. Public Health Organization and Governance (9 studies)

2.11 Interorganizational Relationship and Infrastructure Variation and Public Health System Efforts to Address Prescription Drug Abuse

Lainie Rutkow, Katherine Smith,
Johns Hopkins Bloomberg School of
Public Health

Recently Awarded

To build evidence on ensuring effective public health system responses to prescription drug abuse and diversion in the US, investigators from Johns Hopkins University will examine the roles of interorganizational relationships, information sharing, and legally established infrastructure on prescription drug monitoring program (PDMP) function and impact. The investigators will complete four state case studies to 1) examine how interorganizational relationships among states' public health, substance abuse, and criminal justice agencies affect their PDMPs' structure and operations; 2) assess how the scope and clarity of legal powers specified in authorizing legislation, enforcement authority, and assigned duties of PDMPs affect their ability to function effectively within the public health system; and 3) determine how PDMPs' infrastructure affects their ability to address diversion of prescription drugs and associated morbidity and mortality. Quantitative measures for the state case studies will be based on data collected via interviews with practitioners, policymakers, professional organizations; review of documents and media regarding PDMP activities, the internet and gray literature; and publicly available data on PDMP operations and prescription drug use. Legal measures will be created based on the state statutes and regulations, and qualitative measures related to interorganizational relationships will be derived from the interviews. Findings will identify for state-level policymakers the aspects of PDMPs most associated with efficient and effective functioning within the public health system.

Funding: 2015 PHSSR PHS4 Award 72452

c. Interorganizational Relationships and Partnerships (20 studies)

2.12 Factors that Influence the Timeliness and Quality of Community Health Assessments: A Prospective, Double- Cohort Study

Gianfranco Pezzino, Ruth Wetta-Hall,
Kansas Health Institute

Completed

The purpose of this study is to identify factors that contribute to timeliness and quality of outputs and outcomes of Community Health Assessments (CHAs) and Community Health Improvement Plans (CHIPs). The sampling frame will be all local health departments (LHDs) in Kansas. Starting in 2001, LHDs have joined forces and shared resources through public health regional agreements, which have resulted in the formation of 15 regions across the state. The project will use a prospective double-cohort design. LHDs planning to conduct a CHA-CHIP will be assigned to one of the two cohorts: region-led CHA or county-led CHA. The effect of several factors on the timeliness and quality of the CHA-CHIP process in each cohort will be assessed, two of which are of particular interest: (1) the effect of local partnerships between LHD and hospitals; and (2) the role of a statewide web-based information system in support of CHAs. The quantitative portion of the study will collect characteristics of each jurisdiction using four web-based surveys. The qualitative portion will include a series of focus groups and structured interviews conducted with members of each cohort. The cohort study design will allow a rigorous assessment of cause and effect and change over time. The use of a mix of qualitative and quantitative methods will provide a rich context to understand how a CHA-CHIP process can be completed in a timely manner and with high-quality results.

Funding: 2011 NNPHI PHS2 Award 69682

Public Health Services and Systems Research Inventory

2. PUBLIC HEALTH SYSTEM STRUCTURE AND PERFORMANCE STUDIES (68 STUDIES)

c. Interorganizational Relationships and Partnerships (20 studies)

2.13 Comparative Effectiveness of Public Health Partnerships and Inter-organizational Relationships

Robyn Ione Mobbs, U. Colorado
Mentor: Danielle Varda

Completed

Partnerships are an integral component of the public health infrastructure; an increasingly common method of service delivery; and an essential public health service unto themselves. Public health partnerships can be between two people or an extensive group of individuals representing multiple organizations across all three sectors working towards improving health outcomes. The prevalence and importance of partnerships in public health practice is extensive; however there is little research that measures their performance and investigates how their social structure impacts their effectiveness. Responding to this gap and to the revised PHSSR Research Agenda, this study will explore the comparative effectiveness of public health partnerships and interorganizational relationships, specifically asking how different partnership and network characteristics affect performance. In a mixed method, cross case research design, this study will use PARTNER (Program to Analyze, Record, and Track Networks to Enhance Relationships), a tool funded by Robert Wood Johnson [<http://www.partnertool.net>], to measure the characteristics and attributes of interorganizational relationships within six county-based public health partnerships. The relational and network measures of the six partnerships will be examined through social network analysis (SNA), and analyzed with performance measures based on stakeholder interviews, ratings of perceived effectiveness by collaborative members, and data from the National Survey of Children's Health (NSCH) [<http://childhealthdata.org/learn/NSCH>]. The study findings will provide new empirical evidence about how different partnership and network characteristics affect performance, adding to a much needed knowledge base to guide the use, formation and management of partnerships in the quest for improving health outcomes in America.

Funding: 2012 PHSSR Jr. Investigator Award

2.14 The Influence of Public Health System Partnership on Infant Mortality

Sharla Smith, U. Arkansas Medical Center
Mentor: Glen Mays

Completed

Infant mortality is a complex phenomenon that entwines multiple proximal and distal causal pathways. Promising strategies to reduce infant mortality rates (IMRs) include: building public health system partnerships to encourage healthy behaviors among pregnant women and parents of infants, and developing effective strategies to identify partnerships that will enhance the identification of at-risk infants and high risk pregnancies. The proposed study will test the hypothesis that greater public health system partnership (PHSPs) density and centrality decreases IMR, and addresses two PHSSR research agenda questions: 1) What type of public health partnerships exist?; and 2) How do different partnership characteristics affect performance? This proposed study will utilize a mixed method approach combining longitudinal quantitative analyses of existing secondary data to assess the impact of the PHSPs on IMR and qualitative key informant telephone interviews with 12 local health department (LHDs) directors to gain an in-depth understanding of PHSPs. Secondary data includes three waves of the National Longitudinal Study of Public Health Agencies survey (not publicly available but permission for use obtained) linked with NACCHO National Profile of LHDs and CDC Wonder (wonder.cdc.gov/) data. This study will inform the development of a program theory on how networks affect service delivery and outcomes and the development of public health interventions to build partnerships to impact population health outcomes (which can be tested in subsequent research), thereby holding promise to improve public health system practice.

Funding: 2012 PHSSR Jr. Investigator Award

2. PUBLIC HEALTH SYSTEM STRUCTURE AND PERFORMANCE STUDIES (68 STUDIES)

c. Interorganizational Relationships and Partnerships (20 studies)

2.15 The Use of Best Practices by Community Coalitions to Address Tobacco-related Disparities

Rodney McCurdy, California State University Sacramento
Mentor: Keith Provan

Completed

In California, tobacco control activities are conducted by community coalitions led by local public health departments (LHDs). This proposal will examine the use of tobacco-related disparities (TRD) best practices among community tobacco coalitions in California. Coalitions vary in membership and formalization of procedures and this variation may influence a coalition's ability to implement best practices. RESEARCH AIMS: The proposed research has three aims: 1) Determine the level of TRD best practice use among community tobacco coalitions in California; 2) Determine the context and construct validity of using the CDC-published best practices as a measure of community tobacco coalition performance in addressing TRD; 3) Identify attributes of community tobacco coalitions associated with the use of best practices to address TRD. These aims address the PHSSR's research agenda on comparative effectiveness of public health interorganizational relationships (#14-19). METHOD: We will survey 61 local tobacco control program managers to assess the extent of best practice use among community coalitions. Context and construct validity of best practice items as a measure of coalition performance will be assessed using statistical and qualitative methods. Multivariate regression will test hypotheses concerning associations of coalition diversity and formalization on best practice use. Results will be disseminated to state and local tobacco control officials as well as to the research community via scientific journals and conferences. OUTCOMES: We expect three distinct outcomes from the study findings: 1) Inform policy-makers regarding the level of best practice use for TRD in community coalitions; 2) Assist local coalitions in addressing TRD; and 3) Support future research efforts in assessing performance of community health partnerships.

Funding: 2012 PHSSR Jr. Investigator Award

2.16 The Impact of Marginalization of School Health in Public Health Workforce - Health Department and Local Public School District

Kristina Knight, Case Western Reserve U. & Ohio Public Health PBRN
Mentor: Scott Frank

Completed

The purpose of this project is to assess the extent to which Ohio's local health departments (LHD) are working with local public school districts (LPSD) to support the health and development of youth. Specific Aim1: Examine variation in LHD interaction with LPSD in Ohio, i. What are the current standards of practice and best-practices between LHD and local LPSD?, ii. What might the standards of practice between LHD and LPSD be in the future?, iii. How might changes in the standards of practice between LHD and LPSD be implemented in the future?, iv. How might the modification of standards of practice between LHD and LPSD occur?; Specific Aim 2: Determine the extent to which the relationship between health and learning influences interaction between LHD and LPSD, i. What is the current level of awareness about the relationship between health and learning among LHD and LPSD professionals?, ii. Will knowledge and perceptions of the relationship between health and learning differ among LHD and LPSD professionals?, iii. How will knowledge and perceptions of the relationship between health and learning influence the way in which LHD and LPSD work together?; Specific Aim 3: Identify factors that influence the interaction between LHD and LPSD in Ohio, i. What are the barriers and facilitative factors that influence the relationship between LHD and LPSD?, ii. Will variables associated with the demographic characteristics of LHD and LPSD influence the relationship between groups?, iii. Do differences in knowledge and perception represent a barrier or facilitative factor in the relationship between LHD and LPSD?

Funding: 2012 PHSSR Jr. Investigator Award

Public Health Services and Systems Research Inventory

2. PUBLIC HEALTH SYSTEM STRUCTURE AND PERFORMANCE STUDIES (68 STUDIES)

c. Interorganizational Relationships and Partnerships (20 studies)

2.17 Interorganizational Relationships [IORs] and Collaboration to Improve Health Status Indicators for American Indian/Alaskan Native [AI/AN] Maternal and Child [MCH] Populations

*Dr. Beverly A Mulvihill, Martha Wingate,
U. Alabama at Birmingham SPH*

Completed

This study will measure the association between state Title V maternal and child health (MCH) agency and Indian Health Care System (IHCS) collaboration levels and health status indicators for American Indian and Alaskan Native (AI/AN) mothers and their children. To explore this association, five research questions will be addressed: (1) What factors are related to collaboration levels within interorganizational networks of AI/AN MCH organizations and non AI/AN (Title V) MCH agencies?, (2) What is the association between collaboration levels and the development of higher-level network structures and MCH health status indicators?, (3) What collaboration patterns and network structures within IHCS are related to differences in specific MCH health status indicators?, (4) What collaboration patterns and network structures within the Title V system are related to differences in specific MCH health status indicators for the general MCH population?, and (5) What collaboration strategies between the IHCS and the Title V systems are associated with better MCH health status indicators? The study utilizes a mixed methods multistrand sequential explanatory participant selection model with two phases. The first phase will rate and select states with high cross-sectoral collaboration and measure their association with MCH health status indicators. The second phase will use a case-study design and multiple sources of evidence to describe successful Title V MCH and IHCS agency collaborations. The expected impact will be to identify effective models of collaboration and a set of best practices associated with those models.

Funding: 2010 NNPHI PHS1 Award 67623

2.18 Community Partnerships and Evidence-Based Prevention

Colorado Public Health PBRN

Completed

This study conducted through the Colorado PBRN examines how local public health agencies influence the adoption and use of evidence-based practices in chronic disease prevention through their work with local community coalitions. Survey data are being collected in all 54 county health jurisdictions in the state, and network analysis methods are being used to examine the structure and operation of local community coalitions.

Funding: 2010 Public Health PBRN Research Implementation Award 67323

2.19 Assessing Sustainability of Interventions Implemented by Local Health Department-Hospital Collaborations

*Chris Maylahn, SUNY & New York Public
Health PBRN
Mentor: Ross Brownson*

Completed

The New York State Prevention Agenda will serve as a natural experiment to assess the sustainability of the local health department-hospital collaborations in New York. The results of this practice-based research project may shed light on how well these collaborations may fare under the ACA. The objectives include: 1) producing a literature review about the characteristics of sustainable collaborations; 2) establishing a typology of sustainable collaborations; and 3) identifying factors associated with sustainable collaborations in communities across the state. A likely approach is to use the Program Sustainability Assessment Tool developed by the Center for Mental Health Services Research at Washington University in St. Louis which provides public health programs and their partners with a reliable way to measure their capacity for sustainability. Existing data systems in the PHSSR data base will supplement the survey data, including the National Profile of Local Health Departments, APEXPH, and the Community Tracking Study, as well as publicly-available information about local health departments and non-profits hospitals. While the NYS Statistics and Data are in the database, this information is available to the student in more detail. Multivariate analysis techniques will be employed to identify factors related to sustainability. A peer-reviewed publication of the dissertation research and other lessons learned will be shared with appropriate audiences.

Funding: 2013 PHSSR Jr. Investigator Award 70384-5

2. PUBLIC HEALTH SYSTEM STRUCTURE AND PERFORMANCE STUDIES (68 STUDIES)

c. Interorganizational Relationships and Partnerships (20 studies)

2.20 Integrating Health Systems in Shelby Co., TN

*Erik Carlton, U. Memphis
Mentor: Paul Erwin*

Completed

The principal objective is to study the integration of public health and medical care systems in one urban county, based on principles for integration set forth in the 2012 IOM report on integrating public health and primary care. In so doing, the study seeks to advance both science and practice related to the following question from the National Research Agenda for PHSSR: What conditions and strategies facilitate productive inter-organizational relationships and patterns of interaction among organizations that contribute to public health strategies at local, state, and national levels? To accomplish this, the proposed study will utilize a rigorous mixed method approach, combining quantitative survey methodology with qualitative focus groups and structured interview methodology. The study also seeks to leverage the established Practice-Based Research Network (PBRN) approach to involving community stakeholders in driving a local research agenda related to integration. Project findings will assist in identifying specific conditions and strategies which facilitate inter-organizational relationships that contribute to public health strategies at the local level with the aim of translating findings for state and national use. Further, through the development and advancement of a PBRN focused on health system integration, the study will advance future research as additional questions emerge from community stakeholders and on-going research.

Funding: 2013 PHSSR Jr. Investigator Award 70384-2

2.21 Evaluating the Impact of Organizational Partnerships on Community Resilience

*Malcolm Williams,
Anita Chandra, RAND Corporation*

Completed

The purpose of this project is to measure the effectiveness of partnerships developed among community based organizations (CBOs) and the Los Angeles County Department of Public Health (LAC DPH) to build community resilience to disasters. Local Health Departments (LHDs) are facing extraordinary pressure to meet new CDC public health partnership requirements for disaster resilience; yet, there is little information on how to develop and strengthen those collaborations. This study will use a combination of qualitative interviews and a network analysis tool, PARTNER (Program to Analyze, Record, and Track Networks to Enhance Relationships) to achieve its aims. PARTNER collects data through a brief online survey, analyzes the connections among partners, and visually maps these networks. Data collected by the project will determine the quality of relationships among partners, how they change over time, and examine how they are leveraged to achieve resilience outcomes in eight communities in LA County. This research represents a partnership among several organizations including the RAND Corporation, the LAC DPH, Emergency Network Los Angeles (the County's VOAD), and UCLA. A series of products will be developed including brief summaries of findings shared through newsletter and online website for CBOs and LHDs, academic journal articles, and oral presentations at relevant conferences. Additional deliverables include a written report on the project and its findings for wide dissemination. Findings will be released within 12 months of the project's completion.

Funding: 2012 NNPHI PHS Natural Experiment Award 70337

2.22 Measuring Variation in the Integration of Primary Care and Public Health: A Multi-State PBRN Study of Local Integration and Health Outcomes

*Elizabeth Gyllstrom, Kevin Peterson,
Minnesota Department of Health
Underway*

This study will examine variation in the degree of primary care and public health integration across local jurisdictions, identify factors that may contribute to or impede integration, and assess whether areas of increased integration have better health outcomes.

Funding: 2013 NNPHI PHS3 Award 71270

Public Health Services and Systems Research Inventory

2. PUBLIC HEALTH SYSTEM STRUCTURE AND PERFORMANCE STUDIES (68 STUDIES)

c. Interorganizational Relationships and Partnerships (20 studies)

2.23 Measuring Cross-sector Collaboration between Local Public Health and Health Care in Evidence-informed Obesity Prevention

Eduardo J. Simoes, Katherine A. Stamatakis, U. of Missouri

Underway

This study will characterize public health and health care collaborations across the US with a focus on joint community health assessment (CHA) as an entry point for improving cross-sector collaborations in obesity and chronic disease prevention.

Funding: 2013 NNPHI PHS3 Award 71283

2.24 Implementing the New York State Prevention Agenda at the Local Level

New York Public Health PBRN, Chris Maylahn, New York Department of Health

Completed

The New York PBRN Quick Strike project evaluates mental health and substance abuse (MHSA) interventions using data collected in 2013 from the four-year community health assessments (CHAs) and community health improvement plans (CHIPs) submitted by local health departments (LHDs) in New York state, and the comprehensive three-year community services plans submitted by tax-exempt hospitals. The study will provide empirical findings as they relate to the following questions: (1) what types of MHSA interventions are planned; (2) what fraction of these are population-based interventions rather than one-person-at-a-time; (3) what fraction of these are primary prevention as opposed to screening and treatment; (4) what fraction are delivered in community-based settings vs. clinical settings; (5) what fraction of these are evidence-based; (6) how often is there concordance between the MHSA strategies proposed by LHDs vs. hospitals, and how are the roles/responsibilities divided up?

Funding: 2014 Public Health PBRN Quick Strike Award 71079-2

2.25 Community Health Improvement Planning and Community Health Needs Assessment: Moving toward Collaborative Assessment and Community Health Action in Ohio

Ohio Public Health PBRN, Scott Frank, Case Western Reserve University

Completed

The Ohio PBRN Quick Strike project examines convergence and dissonance between public health agency and hospital Community Health Assessment/Community Health Improvement Planning/Community Health Needs Assessment activities. Based on the growing body of research on this topic, this project incorporates prior research and will add to the knowledge base using the PBRN sites to reach all 125 Ohio counties.

Funding: 2014 Public Health PBRN Quick Strike Award 71079-3

2. PUBLIC HEALTH SYSTEM STRUCTURE AND PERFORMANCE STUDIES (68 STUDIES)

c. Interorganizational Relationships and Partnerships (20 studies)

2.26 Examining Public Health Roles in Mental Health Delivery

Jonathan Purtle, Drexel University

Recently Awarded

Mental health promotion is integral to continued improvements in population health. Although mental health is recognized as a public health priority at federal, state, and local levels, limited public health system research has focused on mental health issues. This project will investigate the ways in which local public health agencies address mental health issues in their communities, focusing on the types of relationships that exist between these agencies and other governmental and community-based service providers. The project aims to identify barriers and facilitators that public health agencies face in addressing mental health needs.

Funding: 2014 Pre and Post-doctoral Scholar in Public Health Delivery Award (PPS-PHD) 71685-3

2.27 Injury Prevention Partnerships to Reduce Infant Mortality among Vulnerable Populations

Sharla Smith, University of Arkansas

Recently Awarded

This project will evaluate the relationships among public health, primary care, and policy intermediaries who work to reduce injury related infant mortality rates in US communities. By identifying the characteristics of partnerships that can more effectively and efficiently mobilize injury prevention strategies, this study will help determine how to maximize resource sharing and promote enhanced learning among partners.

Funding: 2014 Pre and Post-doctoral Scholar in Public Health Delivery Award (PPS-PHD) 71685-4

2.28 Integration of Health Care and Public Health to Improve HIV Early Detection and Control

Deborah Porterfield, Research Triangle Institute

Recently Awarded

Lack of coordination between primary care providers and the public health and community-based organizations conducting HIV prevention and screening contributes to late diagnosis, delayed entry into care, and poor retention in care for significant numbers of persons with HIV/AIDS. This research seeks to understand how the structure and function of care systems for persons with or at risk for HIV are critical to improving outcomes for persons with HIV. Led by investigators from Research Triangle Institute, HIV systems of care will be studied in four regional service areas of Florida to: 1) examine how public health, primary care, and community organizations work as a system to identify, link to care, and provide continuous care for HIV patients; 2) determine the organizational and system characteristics associated with delivery of continuous care for persons with HIV; and 3) develop resources to improve HIV systems of care, based on the study findings. Project data sources will include demographic data, interviews with program managers in each region, organizational relationship data collected via the PARTNER social network survey, organizational outcome data from Ryan White HIV/AIDS Services providers' annual reports, and state department of health surveillance data on HIV/AIDS-related outcomes. The research team includes representatives from three universities, the Florida Department of Health in partnership with the Florida Public Health Practice-Based Research Network (PBRN), and the leadership of four HIV service areas in Florida.

Funding: 2015 PHSSR PHS4 Award 72451

Public Health Services and Systems Research Inventory

2. PUBLIC HEALTH SYSTEM STRUCTURE AND PERFORMANCE STUDIES (68 STUDIES)

c. Interorganizational Relationships and Partnerships (20 studies)

2.29 Improving the Efficiency of Newborn Screening from Collection to Test Results

Beth Tarini, University of Michigan Medical School

Recently Awarded

Newborn screening (NBS) programs require timely interaction of clinical care and public health systems to avoid delays in treatment, serious preventable complications and death. Investigators from the University of Michigan seek to gather evidence to inform policy decisions on state NBS programs to achieve cost effective and efficient NBS specimen collection, transport and processing. Obtaining timely NBS test results requires effective process implementation within and interaction between hospitals, transport systems and public health laboratories. This project will deploy a multidisciplinary team of public health practitioners and newborn screening programmatic staff, as well as researchers in health services, quality improvement and operations management, to help fill the data gaps on timeliness of NBS test results. The study will: 1) use innovative dynamic simulation modeling techniques to systematically identify potential process improvement strategies for reducing time from collection to test results, and 2) assess the trade-off between timeliness and cost for the strategies identified. To develop the database for simulation modeling, the research team will survey hospitals regarding NBS specimen collection, and will partner with the Association of Public Health Laboratories to administer a national survey on state NBS program activities, policies and costs.

Funding: 2015 PHSSR PHS4 Award 72453

2.30 Accountable Community of Health Structures and Cross-Sector Coordination

Nadine Chan, Eli Kern, Public Health – Seattle and King County

Recently Awarded

Washington state's developing Accountable Communities of Health (ACH), regional health collaborations of public health, clinical care delivery and human services with greater focus on prevention, intend to improve health and quality of care and ultimately reduce costs. Public Health - Seattle & King County will lead this study to assess the association of ACH activities, including shared data systems and care coordination strategies, with improved health and criminal justice outcomes for adults with complex medical and social needs. Investigators will examine each county's multidisciplinary care coordination system for adults who have been incarcerated and face challenges for housing, medical care, and treatment for serious mental illness. After one year of care coordination, the study will report outcome measures related to jail time and severity of bookings, emergency department use, and time elapsed between jail release and first appointment with primary care and behavioral health providers. The investigators also will study ACH development processes in two counties to assess factors that facilitate or inhibit the local human and health services departments' (LHSD) ability to build regional shared data measurement and care coordination systems. Among the partners involved in the study are King County, Whatcom Alliance for Health Advancement, the University of Washington, Community Health Plan of Washington, Health Care Authority, Northwest Center for Public Health Practice, and the Washington Public Health Practice-Based Research Network (PBRN).

Funding: 2015 PHSSR PHS4 Award 72456

2. PUBLIC HEALTH SYSTEM STRUCTURE AND PERFORMANCE STUDIES (68 STUDIES)

c. Interorganizational Relationships and Partnerships (20 studies)

2.31 Hospital Investment and Interaction in Public Health Systems

*Danielle Varda, University of Colorado
Lisa VanRaemdonck, Colorado
Association of Local Public Health
Officials*

Recently Awarded

The Affordable Care Act (ACA) creates new requirements for nonprofit hospitals to assess community health needs and develop implementation plans for local public health priorities. University of Colorado Denver investigators seek to inform community strategies to increase hospitals' involvement in public health systems by examining hospital investments and interactions with other public health organizations in their communities. Investigators will study the association between hospital indicators, such as size and strength of relationships with other organizations, with two outcomes: 1) hospital interactions in their communities using the investigator's PARTNER survey data on partnerships between hospitals and public health, and 2) hospital community benefit investments reported on IRS 990 and Schedule H forms. Initially, the study will employ a Delphi technique with practice and research experts to hypothesize hospital indicators, and then obtain data on the identified indicators. The study's translation tool will enable other communities to use an interactive registry of indicator and outcome measures to design their hospital-public health integration strategies. Partners involved in the study are Colorado School of Public Health, Colorado Association of Local Public Health Officials, and Colorado Public Health Practice Based Research Network.

Funding: 2015 PHSSR PHS4 Award 72457

d. Performance Measurement, Quality Improvement, and Accreditation (29 studies)

2.32 Analysis of Local Health Department Factors that Accelerate Population-based Intervention Implementation and Support Success

*Elizabeth Gyllstrom, Bill Reilly,
Minnesota Department of Health*

Completed

The main hypothesis of this project is that increased local public health capacity and performance (as measured by authority level of the top local public health official, maturity of organizational quality improvement, and readiness for accreditation) improves local health department (LHD) performance on intervention strategies (e.g., ability to meet stated goals, depth of implementation, and sustainability of interventions). This research is embedded within a study of evidence-based policy, systems, and environmental change strategies conducted by 100% of local health departments in Minnesota (MN) as part of the implementation of MN health reform legislation. The MN initiative focuses on strategies that have demonstrated success in promoting healthy nutrition, increasing opportunities for physical activity, reducing tobacco use, and promoting healthy behaviors in the workplace. This study is a natural progression from research already underway in MN related to LHD structure, capacity, and financing, as part of the MN Practice-Based Research Network (PBRN). The MN model studied here is similar to that of major new CDC initiatives like the Community Transformation Grants and Communities Putting Prevention to Work program. Thus, identification of LHD factors that are associated with improved performance on community-based interventions could inform other state and local health departments as they work to promote policy, system, and environmental changes.

Funding: 2011 NNPHI PHS2 Award 69683

Public Health Services and Systems Research Inventory

2. PUBLIC HEALTH SYSTEM STRUCTURE AND PERFORMANCE STUDIES (68 STUDIES)

d. Performance Measurement, Quality Improvement, Accreditation (29 studies)

2.33 M-PHAET: Measuring Public Health Across East Tennessee

Tennessee Public Health PBRN; Paul Erwin, Martha Buchanan, Janet Ridley, Margaret Knight

PBRN Multi-Network Practice and Outcome Variation Examination Study – Completed

The East Tennessee Forum (ETF) on Public Health and Preventive Medicine – an Affiliate PBRN – was established in 1995 to facilitate closer working relationships between academia and public health and preventive medicine practitioners. Three leadership groups within the ETF comprise the partners in this current proposal: the University of Tennessee Center for Health Policy and Services Research (UT Center, the secretariat for the ETF); the Knox County Health Department (KCHD); and the East Tennessee Regional Health Office (ETRO, with 15 County Health Departments). Dr. Paul Erwin, Director of the UT Center, will serve as PI for this project. The Directors of the KCHD and ETRO (Dr. Martha Buchanan and Ms. Janet Ridley) and Dr. Margaret Knight, Assistant Professor at UT will serve as co-PIs. All have been involved from the very first dissemination of the Call For Proposals. Frequent exchange of ideas via e-mail, telephone, and in-person meetings took place in the development of this proposal. Doctoral and Masters-level epidemiology staff at KCHD and ETRO provide expertise in measure development in communicable diseases, chronic diseases, and environmental health services. KCHD and the ETRO/15 LHDs share a common information system which has been in place for more than 10 years. This will allow uniform data collection methods to be utilized across the 16 sites. Dr. Paul Erwin has 16 years' experience as a public health practitioner and in the past 5 years has managed research projects that have utilized NACCHO's Profile of LHDs. Dr. Buchanan has been KCHD Director for 3 years and in public health practice for 7 years and is leading efforts in accreditation preparation. Ms. Ridley has 30+ years of experience in public health practice, as a public health nurse in a LHD, Regional Director of Nursing and since 2009, and Regional Director. Dr. Knight is a Registered Health Information Technician and a Certified Coding Specialist.

Funding: 2012 Public Health PBRN Multi-Network Practice Outcome Variation Examination Study (MPROVE) Award 69958

2.34 Washington Practices and Outcomes Variation Study

Washington Public Health PBRN; Barry Kling, Betty Bekemeier

PBRN Multi-Network Practice and Outcome Variation Examination Study – Completed

Public health leaders lack adequate evidence for making decisions about local health department (LHD) services. Public health leaders in Washington (WA) State have taken several steps to address this problem, including the development of an extensive annual Activities and Services Inventory of LHD service output. WA has also been a leader in the development of Public Health Standards and has implemented a set of regularly updated Public Health Indicators. These help shape and articulate the outputs, performance, and outcomes of our public health efforts. WA Public Health Practice-based Research Network (PBRN) leaders, including the Co-PIs and staff person for the proposed project, have been integral to these activities. WA's PBRN has completed five Public Health Services and Systems Research (PHSSR) studies, with three additional projects currently under way. The proposed project would help to further advance our current WA research and measurement efforts, while also bringing WA's public health system measurement experiences and assets to a coordinated, multi-state effort. The proposed project's specific aims are Aim 1: Serve as an effective partner in the development and implementation of the Multi-network Research Project under the National Coordinating Center's (NCC) direction; Aim 2: To the extent possible within the Multi-Network Research Project, improve WA's public health system measurement efforts by a) Refining and expanding Environmental Health (EH), Communicable Disease (CD) Control, and Chronic Disease-related LHD service measurements being collected among WA LHDs, b) Identifying and gathering meaningful measures of "production inputs" and health outcomes that can be reasonably linked with local public health service "output," and c) Identifying links between investments in the selected areas of LHD service delivery and related health outcomes.

Funding: 2012 Public Health PBRN Multi-Network Practice Outcome Variation Examination Study (MPROVE) Award 69953

2.35 Addressing Geographic Variation in Public Health Services and Quality: Advancing PHSSR through a Collaborative Multi-Site Project

Minnesota Public Health PBRN; Kim Gearin, Beth Gyllstrom

PBRN Multi-Network Practice and Outcome Variation Examination Study – Completed

The Minnesota (MN) Department of Health (MDH) convenes monthly MN Practice-Based Research Network (PBRN) steering committee meetings with representatives from the MN Local Public Health Association, State Community Health Services Advisory Committee and University of MN School of Public Health. Steering committee members act as liaisons to engage their organizations in all phases of research, including development of questions, pilot testing instruments, championing participation, interpreting data, disseminating results and translating findings. Participation in three PBRN surveys has ranged from 83-100%. MN PBRN researchers and practitioners have collaboratively produced issue briefs, manuscripts, state and national presentations and a dedicated web page. Members of the research team bring extensive epidemiological and research experience from local, state and academic settings, and manage an online reporting system used annually by all 75 MN LHDs to report financial, staffing and performance data to MDH. Investigators will work in close collaboration with academic and practice-based PBRN partners, as well as MDH chronic disease, communicable disease and environmental health researchers. A strong foundation of collaboration, combined with existing data collection systems, content expertise, and experience in PHSSR, position MDH and the MN PBRN to be successful partners in this multi-site study. As measures and protocols for this study become defined, the MN PBRN is similarly positioned to coordinate in-state data collection, integrate newly collected data with existing data, and conduct additional state-specific analysis, and champion dissemination and translation. This project will advance efforts already underway in MN to improve the measurement of public health capacity, services and outcomes; create a unified performance management system for MN health departments; and improve the quality, utility and efficiency of local public health grant reporting.

Funding: 2012 Public Health PBRN Multi-Network Practice Outcome Variation Examination Study (MPROVE) Award 69956

2.36 Colorado Geographic and Structural Variation in Public Health Services

Colorado Public Health PBRN, Lisa VanRaemdonck, Emily Burns

PBRN Multi-Network Practice and Outcome Variation Examination Study – Completed

Colorado Public Health Practice Based Research Network (CO PUBLIC HEALTH PBRN)'s interest in participating the Multi-PBRN research project is based on interest in developing an understanding of public health production, the practical use of related measures in state and local decision-making, and the foundational aspect for future research and connectedness with a currently funded PHSSR project. The PHSSR project includes measurement of change in service delivery based on legally require core services. Participation in the Multi-PBRN research project provides an opportunity to connect to the PHSSR project, test reliability and validity of measures, compare activity and service delivery in Colorado to other states and compare states that do or do not have core service delivery requirements written into law.

Funding: 2012 Public Health PBRN Multi-Network Practice Outcome Variation Examination Study (MPROVE) Award 69954

Public Health Services and Systems Research Inventory

2. PUBLIC HEALTH SYSTEM STRUCTURE AND PERFORMANCE STUDIES (68 STUDIES)

d. Performance Measurement, Quality Improvement, Accreditation (29 studies)

2.37 Direct Observation Methods in Local Public Health Settings: Foodborne Outbreak Practices in Ohio

Ohio Public Health PBRN

Completed

This methodological supplement builds on an ongoing research project by the Ohio PBRN that uses direct observation methods to assess practice variation in food-borne outbreak (FBO) investigation and response among local health departments in Ohio. Three methodological enhancements are implemented. First, the supplement expands the research focus by adding measures of consumer perceptions of agency actions in prevention, investigation and management of FBO, offering additional perspectives on the validity of direct observation measures. Second, the study links direct observation data with several additional secondary data sources including the Ohio Annual Financial Report (AFR), the Ohio Disease Reporting System (ODRS), census data, restaurant and bar revenues, and County Health Rankings in order to analyze factors that explain variation in observed FBO practices. GIS mapping is used to investigate and illustrate geographic variation in practices, resources and services. Third, the study investigates the project features that benefit or challenge the direct observation research process, using formal interviewing and debriefing methods with student observers and public health practice observees. Findings from this study will suggest approaches for expanding the use of direct observation methods in PBRNs and the larger field of public health research.

Funding: 2011 Public Health PBRN Research Acceleration & Capacity Expansion Supplement 69497

2.38 Prevention, Investigation, and Intervention Related to Foodborne Illness in Ohio

Ohio Public Health PBRN

Completed

The Ohio PBRN's RIA study investigates the structure, process, and outcomes of public health agency roles in foodborne illness prevention, investigation, and control, utilizing a mixed methods approach. The study will develop, test, and validate a novel, direct observation methodology for measurement. Direct-observation measures will then be used in a comparative analysis of local variation in public health practices for foodborne illness.

Funding: 2011 Public Health PBRN Research Implementation Award 68673

2.39 Integrated HIV/AIDS and STD Service Delivery in New York: A Natural Experiment

New York Public Health PBRN

Completed

The New York PBRN aims to identify and test valid and reliable measures of quality associated with delivery of HIV/AIDS and STD services by local public health agencies, and then use these measures as part of a natural experiment to evaluate the impact of a statewide initiative to integrate the delivery of these two service lines. This project will assess the impact of the integration process on staff attitudes and job satisfaction, client awareness and utilization of services, and service quality based on adherence to evidence-based practices. Results of this study will yield validated measures for assessing the quality of HIV and STD service delivery, as well as other efforts to integrate public health service programs.

Funding: 2011 Public Health PBRN Research Implementation Award 68676

2.40 New York's Integrated HIV/STD Field Services Program

Brittany Johnson, New York Public Health PBRN

Completed

Differences in partner services (PS) initiation, interview, and partner elicitation rates and methods across HIV and STD case investigations were evaluated, and factors associated with successful PS outcomes identified. These findings are useful to prioritize public health quality improvement projects, and promote effective use of public health resources to maximize PS program impact.

Funding: 2013 PHSSR Jr. Investigator Award 70384-4

2. PUBLIC HEALTH SYSTEM STRUCTURE AND PERFORMANCE STUDIES (68 STUDIES)

d. Performance Measurement, Quality Improvement, Accreditation (29 studies)

2.41 Measuring the Quality of Community Health Improvement Planning and Implementation

Wisconsin Public Health PBRN

Completed

The Wisconsin PBRN's study develops, tests, and validates an instrument for measuring the quality of community health improvement planning and implementation processes (CHIPP) facilitated by local public health agencies across the state. Moving beyond the mere description of CHIPP components, a valid measurement tool for CHIPP quality will be implemented with local public health agencies across Wisconsin. Measures will be collected and used in a comparative analysis of factors that influence the quality and comprehensiveness of CHIPP practices, and factors that influence the degree of success in moving from assessment to implementation actions.

Funding: 2011 Public Health PBRN Research Implementation Award 68672

2.42 Comparative Effectiveness of State vs. Regional Approaches to QI in Public Health

Georgia Public Health PBRN

Completed

This study from the Georgia affiliate PBRN examines the impact of a quality improvement collaborative model implemented through Georgia's regional public health districts on the implementation and effectiveness of local public health QI activities. Building on the methods and results of an ongoing quick-strike project, this study compares QI activities organized through Georgia's regional public health district structure with QI activities organized through Georgia's state health department structure. Pre-intervention and post-intervention measures of QI practices and outcomes are being collected via surveys of staff from each QI project, supplemented with qualitative data collected through interviews with key informants. Findings will provide practitioners and policy-makers with evidence regarding the organizational structures and implementation processes that are most effective in facilitating successful QI processes in public health.

Funding: 2011 Public Health PBRN Research Acceleration & Capacity Expansion Supplement 69493

2.43 Regional Public Health Structures and Readiness for Accreditation and QI

Nebraska Public Health PBRN

Completed

The Nebraska PBRN makes use of the state's recently developed regional public health structure to assess and compare readiness for accreditation among regional health departments and single-county health departments within the state, and to examine the utility of quality improvement (QI) strategies implemented by health departments in preparing for accreditation. The study analyzes self-assessed performance data collected from all local health departments through the state's Local Health Department Standards and Measures tool. Combining these data with the newly released PHAB accreditation standards, the study examines performance variation across agencies and estimates agency readiness for the PHAB accreditation process, with a specific focus on differences in readiness between regional and single-county agencies. Additionally, the study links performance data with newly collected data from an ongoing study of local health department engagement in QI strategies (a PBRN Quick Strike study) to examine the extent to which agencies are implementing QI activities in areas where gaps in performance exist. Site visit interviews in selected regional health department sites explore the relationship between QI implementation and readiness for accreditation in regional health departments. Findings will provide useful insight into the implementation of QI and accreditation initiatives for public health agencies nationwide.

Funding: 2011 Public Health PBRN Research Acceleration & Capacity Expansion Supplement 69492

Public Health Services and Systems Research Inventory

2. PUBLIC HEALTH SYSTEM STRUCTURE AND PERFORMANCE STUDIES (68 STUDIES)

d. Performance Measurement, Quality Improvement, Accreditation (29 studies)

2.44 Comparative Effectiveness Research Tools for Examining Public Health Services and Outcomes

North Carolina Public Health PBRN

Completed

This project of the North Carolina PBRN applies new methodological approaches from the field of comparative effectiveness research (CER) to an ongoing study of the impact of a state funding reduction policy on local public health delivery of evidence-based maternity outreach and postpartum services to low-income women and their children. The new methodological approaches augment the existing research by: (1) enhancing the current propensity score matched analysis to provide improved control groups for estimating policy impact, and (2) allowing researchers to better estimate differences in policy impact across a range of vulnerable subgroups of women and children. Findings will illustrate how novel CER methods can be applied to strengthen the evidence produced by studies of public health policies, services, and outcomes.

Funding: 2011 Public Health PBRN Research Acceleration & Capacity Expansion Supplement 69499

2.45 Measuring Quality in Local Public Health Emergency Preparedness: the H1N1 Experience

Connecticut Public Health PBRN

Completed

The Connecticut PBRN is developing and testing measures of the quality of local public health emergency response activities using the 2009-10 H1N1 influenza outbreak as a test case. This study's aims are to: (1) develop quality measures specific to the H1N1 context using retrospective data from the 2009-10 outbreak response; (2) test the validity and reliability of these measures; (3) use measures to compare the quality of response across different types of local public health settings across the state; and (4) identify factors that contribute to differential quality of response across local settings.

Funding: 2011 Public Health PBRN Research Implementation Award 68675

2.46 Measuring the QI Continuum and Correlates in Public Health Settings

Minnesota Public Health PBRN

Completed

The Minnesota PBRN study seeks to identify, measure, and compare characteristics of quality improvement (QI) implementation in local public health settings across the state. The study will develop and validate measures the quality of QI implemented in Minnesota public health agencies (state and local) relative to a conceptualization of "full implementation" or "mature QI" as articulated in the professional literature and consistent with professional knowledge. These measures will then be used in a comparative analysis to examine how institutional and community contextual factors influence the quality of QI implementation in local public health agencies.

Funding: 2011 Public Health PBRN Research Implementation Award 68674

2.47 Comparing Public Health Emergency Preparedness Services across States and Local Agencies

*Maria Landron, U. of Kentucky
Mentor: Glen Mays*

Completed

The main objective of this study is to compare differences across the states and local public health agencies related to the delivery of Public health Emergency Preparedness (PHEP) services. Data from the ASTHO survey for the years 2007 and 2010 and data from the NACCHO survey for the years 2008 and 2010 will be used. It will also evaluate the association between the provided services in response to seasonal influenza across the states and local public health agencies and influenza vaccination data from the CDC. PHSSR research agenda questions that will be addressed: How do differences in health department size and structure impact outcomes?; How do environmental context and the structure of health departments interact to create certain outcomes?; To what extent is there variation in practice between health departments?; How can performance and outcome be better assessed?; and What, if any, evidence exists of improvements in health outcomes related to the volume of service delivery, intervention reach among at-risk populations, and/or the fidelity of evidence-based practices? This will be a longitudinal retrospective study because it involves repeated observations of the same variables over time. A cross-sectional study will be conducted to compare the delivery of public health services during seasonal influenza. Results from this project will help public health practitioners better understand their PHEP surge capacity of their agencies and other agencies, better allocate resources, improve decision-making processes, and understand the best approaches when communicating with policy makers.

Funding: 2012 PHSSR Jr. Investigator Award

2.48 Accreditation of Rural Health Departments: Social, Economic, Cultural, and Regional Factors

*Kate Beatty, Saint Louis University &
Missouri Public Health PBRN
Mentor: Kathleen Wojciehowski*

Completed

As the Public Health Accreditation Board (PHAB) begins its voluntary accreditation program, it is important to understand what organizational, structural, and workforce factors relate to the likelihood of local health departments (LHD) seeking accreditation under PHAB. Multiple factors were associated with the accreditation variables including: population served, top executive's highest degree, having specialized public health professionals (e.g. environmental health workers, epidemiologist, and health educators), development of a health improvement plan, development of a strategic plan, and implementation of a formal quality improvement program. Accreditation is an important part of strengthening the public health infrastructure. Future research should employ actual accreditation as the dependent variable. However, the current results may be helpful in targeting and marketing efforts to encourage increased accreditation among local health departments.

Funding: 2012 PHSSR Jr. Investigator Award

2.49 Public Health QI and Evidence-Based Diabetes Prevention

Kentucky Public Health PBRN

Completed

The Kentucky PBRN is testing the ability of local public health agencies to implement quality improvement (QI) strategies as part of a diabetes education and self-management program implemented through regional diabetes centers of excellence across the state. The study is designed to identify factors that influence the adoption and implementation of evidence-based diabetes self-management strategies, and estimate the comparative effectiveness of agency-supported QI strategies in facilitating adoption and implementation.

Funding: 2010 Public Health PBRN Research Implementation Award 67322

Public Health Services and Systems Research Inventory

2. PUBLIC HEALTH SYSTEM STRUCTURE AND PERFORMANCE STUDIES (68 STUDIES)

d. Performance Measurement, Quality Improvement, Accreditation (29 studies)

2.50 Local Variation in Food Safety and Infections Disease Control Practices

Massachusetts Public Health PBRN

Completed

This study by the Massachusetts PBRN examines the extent and nature of variation in the use of evidence-based practices (EBPs) for food safety and infectious disease control as implemented by local public health agencies across the state. This study specifically examines the influence of jurisdiction size, performance standards, and regionalization strategies on adoption and use of EBPs.

Funding: 2010 Public Health PBRN Research Implementation Award 67319

2.51 Quality Improvement Collaborative for Small and Rural Public Health Settings

Georgia Public Health PBRN

Completed

The Georgia Public Health PBRN will take advantage of the time-limited opportunity to test the utility of regional quality improvement (QI) strategies in strengthening accreditation readiness and attainment among small and rural public health jurisdictions. As part of a larger initiative, local public health agencies in a selection of counties are attempting to implement regional public health quality improvement collaborative (QICs) using the state's multi-county public health districts as the primary organizational structures. This study compares measures of QI implementation and impact among local agencies that do and do not participate in regional QICs, with a specific focus on the ability of small and rural health departments to meet the Public Health Accreditation Board's national accreditation standards for QI activities. A secondary aim of the study is to assess the potential of the newly formed Georgia Public Health PBRN to function as a state-level public health QIC.

Funding: 2011 Public Health PBRN Quick Strike Research Award

2.52 Public Health Accreditation and Quality Improvement Philosophy

Missouri Public Health PBRN

Completed

The Missouri Public Health PBRN will take advantage of the time-limited opportunity to learn from the nation's only voluntary, state-based accreditation program for public health agencies, and use these lessons to inform the approaching implementation of the Public Health Accreditation Board's national accreditation program. This study uses both state and national data sources to examine local variation in public health agency efforts to adopt and institutionalize quality improvement (QI) practices within their organizations and communities. Using these data sources, investigators are constructing a composite measure of QI philosophy for each local public health agency in Missouri and then comparing this measure across three groups of agencies: (1) agencies that have undergone accreditation; (2) agencies that intend to apply for accreditation within 2 years; and (3) agencies that do not intend to apply for accreditation. Qualitative data collected from key informant interviews with these three groups of agencies are used to explore how the nature and timing of exposure to the voluntary accreditation program influences agency QI practices.

Funding: 2011 Public Health PBRN Quick Strike Research Award

2.53 Taxonomy of QI Methods, Techniques, and Results in Public Health*Minnesota Public Health PBRN**Completed*

This study by the Minnesota PBRN pursues a time-limited opportunity to collect and analyze data on QI projects while these efforts are still being implemented and evaluated by public health agencies. The study's primary aims are to develop a logic model and taxonomy for QI in public health, employing a mixed-methods design in three phases: (1) creation of a database registry of QI projects implemented in public health settings through the Multi-State Learning Collaborative II and the Public Health Collaborative II initiatives, both which were implemented in Minnesota and funded by the Robert Wood Johnson Foundation; (2) development of a preliminary classification system for QI projects reflecting the QI methodologies used, the operations and processes targeted, the contextual features of the institutional and community settings, and the results achieved; (3) validation of the taxonomy through an expert panel review of the conceptual model and key informant interviews with public health leaders who conducted the QI projects; and (4) application of the taxonomy to document the extent and nature of variation in public health QI projects and to identify key determinants of variation.

Funding: 2011 Public Health PBRN Quick Strike Research Award

2.54 Quality Improvement Strategies and Regional Public Health Structures*Nebraska Public Health PBRN**Completed*

The Nebraska PBRN will take advantage of the unique regional health department structure used in two-thirds of its local public health jurisdictions to mount a comparative study of the implementation and perceived effectiveness of QI activities in regional vs. single-county public health delivery systems. The Nebraska PBRN will partner with Minnesota's PBRN in order to use the QI classification system and taxonomy under development in Minnesota to study QI activities in Nebraska. A coordinated approach to QI classification and data collection will enable cross-state comparisons of data and key findings. This project capitalizes on an opportunity to rapidly produce new information about regional QI models at a time when public health decision-makers across the U.S. are preparing for accreditation and responding to political and economic forces demanding improved accountability, efficiency, and value in public health.

Funding: 2011 Public Health PBRN Quick Strike Research Award

2.55 Evaluation of a Quality Improvement Project to Improve Workforce Diversity*Washington Public Health PBRN**Completed*

This study by the Washington PBRN investigates the effectiveness of a quality improvement (QI) initiative designed to improve racial/ethnic diversity across workforce categories within a large local public health agency. The study examines changes in recruitment and hiring processes and staffing outcomes that occur after implementation of a QI initiative, using retrospective data from human resource records. Findings will be rapidly integrated into staffing practices being implemented in response to the agency's ongoing responses to economy-related fiscal constraints.

Funding: 2011 Public Health PBRN Quick Strike Research Award

Public Health Services and Systems Research Inventory

2. PUBLIC HEALTH SYSTEM STRUCTURE AND PERFORMANCE STUDIES (68 STUDIES)

d. Performance Measurement, Quality Improvement, Accreditation (29 studies)

2.56 Local Public Health Responses to County Health Rankings

Florida Public Health PBRN

Completed

This study investigates local variation in how public health organizations across Florida's 67 counties respond to and use the County Health Rankings (CHR) data for public health practice and health improvement activities. The study seeks to identify organizational and community-level factors that drive variation in the types of responses taken across communities and in the degree of success in implementing these responses. A by-product of this study is the development and testing of indicators of successful CHR responses that can be used as public health quality measures. This project takes advantage of the time-limited opportunity to study responses soon after release of the second annual wave of ranking data in a diverse population of local public health settings.

Funding: 2011 Public Health PBRN Quick Strike Research Award

2.57 Local Variation in H1N1 Response in North Carolina

North Carolina Public Health PBRN

Completed

North Carolina's PBRN conducted a study of local variation in the content and timing of public health activities to contain the H1N1 outbreak during summer and fall of 2009, with a special interest in testing for differences between accredited and non-accredited public health agencies in the state. The study found that accredited agencies performed a broader range of H1N1 response activities, and implemented investigation and incident command activities more rapidly than did non-accredited agencies. Also as part of their quick-strike project, the North Carolina PBRN conducted a population study of local residents' awareness of and intention to receive the H1N1 vaccination, focusing on two communities served by PBRN public health agencies. The study found wide variation in both awareness and intention across subgroups within the population, suggesting opportunities for targeted intervention.

Funding: 2009 Public Health PBRN Quick Strike Research Award

2.58 Learning from Outlier Local Health Departments to Improve Maternal and Child Health Services

Tamar A. Klaiman, U. Sciences in Philadelphia

Mentor: Betty Bekemeier

Underway

This study seeks to identify local health department practices for delivering maternal and child health (MCH) services that generate superior health outcomes. Using the Public Health Activities and Services Tracking (PHAST) database, a multistate resource developed in collaboration with Public Health Practice-Based Research Networks (PBRNs), a "positive deviance" statistical analysis of local data from four states will be conducted to identify local health departments that achieve better-than-expected MCH outcomes. Interviews with local health department staff in each state will be used in combination with PHAST quantitative data to uncover the strategies that high-performing agencies use to achieve superior outcomes.

Funding: 2013 Mentored Researcher Development Award 71595

2.59 Breathe Easy at Home (BEAH) Study

Megan T Sandel, Margaret Reid, Boston Public Health Commission

Underway

This study will examine the effectiveness of a pediatric asthma partnership for both reducing asthma triggers in the home and improving quality of life, as well as identifying barriers to program operation and establishing metrics for program effectiveness using quantitative and qualitative methods.

Funding: 2013 NNPHI PHS3 Award 71275

2. PUBLIC HEALTH SYSTEM STRUCTURE AND PERFORMANCE STUDIES (68 STUDIES)

d. Performance Measurement, Quality Improvement, Accreditation (29 studies)

2.60 Quality Improvement for Cost Effective Sexually Transmitted Infection (STI) Prevention Services

William Livingood, University of Florida

Recently Awarded

The University of Florida Center for Health Equity and Quality Research (CHEQR), in collaboration with the Florida Public Health Practice Based Research Network (FLPBRN), seeks to improve the cost effectiveness and efficiency of sexually transmitted infection (STI) testing, treatment and control services. Previous research on costs of STI services reveals opportunities for improvements which reduce expenses while maintaining value and quality of services. These opportunities stem from varying policy and administrative mechanisms, such as using the most cost-effective technologies, substituting trained technicians for licensed personnel, and charging service costs to the county of client residence. In this study, investigators from CHEQR and FLPBRN seek to refine and encourage implementation of the findings by 1) using practice-based participatory approaches in all Florida counties to clarify evidence-based interventions to increase STI service cost effectiveness; and 2) comparing effects of the resulting quality improvement-based cost interventions among participating and non-participating Florida County Health Departments.

Funding: 2015 PHSSR PHS4 Award 72454

e. Social Determinants of Health and Health Disparities (8 studies)

2.61 Health Care Reform: Colorectal Cancer Screening Expansion and Health Disparities

Michael Preston, U. of Arkansas

Mentor: Glen Mays

Completed

This research assesses the role of Health Care Reform on CRC screening rates and screening disparities. This study will address the following questions in the National Research Agenda for PHSSR: 1) What public health strategies are most effective in addressing health disparities and/or social determinants of health at local, state, and national levels?; and 2) What policy, system, and administrative strategies are most effective in reducing disparities in the effectiveness, efficiency, and outcomes of public health strategies delivered to racial and ethnic minority and low-income populations? The objective is to provide a comprehensive understanding about the impact of health care reform on overall colorectal cancer screening, disparities in screening, and the role of provider recommendation in mediating these efforts. To accomplish this task, it is necessary to exploit the variation in pre-existing state mandates from 1997 to 2010 and use the mandate states as partial counterfactuals for estimating the effects of ACA mandates. Because the law only affects people who have insurance coverage, we will use the uninsured as another counterfactual in our model. This study will conduct three empirical analyses to examine: 1) impact of provider recommendations in mediating screening rates and screening disparities in the United States, 2) impact of health care reform on screening disparities, and 3) to estimate effects of health care reform on overall CRC screening rates. We will conduct a strong quasi-experimental research design using time series statistical methods (difference-in-difference-in-difference model) to examine mandate variations and the effect on CRC screening rates and disparities in screening.

Funding: 2013 PHSSR Jr. Investigator Award 70384-6

2.62 Variation in Local Public Health Actions to Address Health Inequities

Minnesota Public Health PBRN

Completed

This project of the Minnesota PBRN seeks to investigate the extent to which local health departments in Minnesota engage in activities to reduce health inequities, and to identify the characteristics of local public health systems that facilitate and impede these activities. The project begins by analyzing existing administrative data compiled by the state health agency to identify the characteristics of local health departments that currently collect and report data on health disparities, social determinants of health, or health inequities within their jurisdictions. An electronic survey of all 75 local health departments in Minnesota captures information on the range of activities that these agencies undertake to address health inequities. These data are being linked with existing data sources on local health department finances, expenditures, and governance and decision-making structures in order to identify factors that facilitate and impede activities to address inequities. As a final step, key-informant interviews and focus groups are conducted in a sample of local health departments to provide a more detailed examination of inequity-focused activities.

Funding: 2011 Public Health PBRN Research Acceleration & Capacity Expansion Supplement 69495

Public Health Services and Systems Research Inventory

2. PUBLIC HEALTH SYSTEM STRUCTURE AND PERFORMANCE STUDIES (68 STUDIES)

e. Social Determinants of Health and Health Disparities (8 studies)

2.63 Utilization and Effectiveness of a Health Equity Index in Mobilizing Local Public Health Action

Connecticut Public Health PBRN

Completed

The Connecticut PBRN is refining and expanding a methodology developed by the Connecticut Association of Directors of Health (CADH) to construct a health equity index that measures social and economic determinants of health at the neighborhood level, and to investigate the use of this index by local public health officials to mobilize multi-sector disparity reduction activities. Specifically, the project refines the measurement and reporting elements of the health equity index in order to reflect changes over time in health determinants and to allow for subgroup analyses based on racial and demographic characteristics. Additionally, the project tracks usage of the index by local public health officials and analyzes factors that facilitate and inhibit use.

Funding: Public Health PBRN Research Acceleration & Capacity Expansion Supplement 69496

2.64 Assessing the Impact of a Health in All Policies Approach on Latino Health Disparities in California

*Sarah Ramirez, Stanford University and California Public Health PBRN
Mentor: Dawn Jacobson*

Completed

This project will help establish a health equity research agenda, led by the CA PBRN that will build local health department (LHD) capacity to more effectively design and evaluate interventions aimed at improving social and physical environments. This project also expands knowledge of two specific areas within the national PHSSR agenda (1) the capabilities of LHDs to assess and monitor health outcomes and (2) the social determinants of health and health disparities. The goal of this project is to assess the use of tools that can be applied to advance a Health in All Policies approach by LHDs (e.g., health equity indices, health impact assessments, and local land use policy activities) and their effect on health equity and health disparities. A Health in All Policies, or HiAP, approach recognizes that health and prevention are impacted by policies that are managed by non-health government and non-government entities, and that many strategies that improve health will also help to meet the policy objectives of other agencies. The State of CA is a national leader for a HiAP approach to population health improvement and the CA PBRN is well positioned to coordinate and advance this type of research agenda.

Funding: 2012 PHSSR Jr. Investigator Award

2.65 Using Geographic Information Systems to Investigate the Relationship Between Local Health Departments' Workforce Cuts and Vulnerable Populations

*Tracy Hilliard, U. of Washington and Washington Public Health PBRN
Mentor: Betty Bekemeier*

Completed

The nation's financial crisis has forced local, state and federal public health agencies to make dramatic service and system cuts, while simultaneously attempting to respond to significant health disparities. Since 2008, local health departments (LHDs) in the United States (US) have cut 34,400 workers (NACCHO, 2011). Between January 2011 and June 2011, in nineteen states more than half of the LHDs surveyed lost positions (NACCHO, 2011). Nationwide, forty-four percent of all LHDs lost at least one staff to layoffs or attrition over this same six month period, and 69 percent of the US population lives in a jurisdiction impacted by these reductions (NACCHO, 2011). It is unclear, however, how changes in the size of the LHD workforce due to cuts may have impacted the distribution of workers in geographic areas with the most vulnerable populations. Exploring the relationship between LHD workforce cuts and sociodemographic characteristics (e.g. poverty and racial composition) across geographic areas is of particular relevance to Public Health Practice-based Research Network (PBRN) goals and the National Agenda for Public Health Systems and Services Research (PHSSR) regarding LHD workforce, social determinants of health, and health disparities. In the state of Washington (WA), the WA PBRN has made "addressing health inequities among underserved populations" one of its highest priority areas of PBRN-related research (WA PBRN, 2009, unpublished).

Funding: 2012 PHSSR Jr. Investigator Award

2. PUBLIC HEALTH SYSTEM STRUCTURE AND PERFORMANCE STUDIES (68 STUDIES)

e. Social Determinants of Health and Health Disparities (8 studies)

2.66 Local Health Department Influences on the Health of Older Adults: A Statewide Evaluation

Hector Rodriguez, Dawn Jacobson, U. of California Center for Health Policy Research

Completed

This study will examine how local health department (LHD) organizational structure and financing affect chronic disease and injury outcomes of older adults. This project will inform policymakers of more effective ways to support public health infrastructure and help LHDs prioritize the most effective methods for addressing the health outcomes of this vulnerable and growing segment of the population.

Funding: 2010 NNPHI PHS1 Award 67621

2.67 Disparities in Access to Public Water and Sewer Service in North Carolina: Public Health Impacts and Policy Solutions

*Jackie McDonald Gibson, U. of North Carolina Chapel Hill
Mentor: Jamie Bartram*

Completed

This new award provides two years of mentored support for junior PHSSR scientists, with matching salary support and guaranteed protected research time from the sponsoring institution. Jacqueline MacDonald Gibson is Assistant Professor at the University of North Carolina (NC) at Chapel Hill Gillings School of Global Public Health, Environmental Sciences and Engineering. She holds Ph.D. degrees in Engineering and Public Policy and in Civil and Environmental Engineering. Her research focuses on improving quantitative decision analysis tools to evaluate solutions to public health environmental threats. Her current projects include a National Science Foundation grant in Decision, Risk, and Management Sciences to compare the effects of alternative environmental health risk communication formats on community decision-making. Gibson's development plan includes: 1) with her mentor, developing future funding proposals and a graduate course on research methods to assess effectiveness of public water, sanitation, hygiene (WASH) services; and 2) coursework on disease mapping and policy-oriented analysis of population data. Her project will study NC disparities in WASH service access including: 1) roles of race and SES status in WASH access; 2) how lack of WASH access contributes to health disparities and resulting health and economic costs; and 3) policy and institutional barriers that perpetuate WASH disparities and the potential public health service solutions and benefits.

Funding: 2012 Mentored Researcher Development Award 70580

2.68 Investigating Characteristics of Tribal Organization and Performance

Julia Heany, Michigan Public Health Institute

Underway

This study will provide an in-depth examination of a tribal public health system's capacity to deliver the Ten Essential Services.

Funding: 2013 NNPHI PHS3 Award 71269

Public Health Services and Systems Research Inventory

3. FINANCING AND ECONOMICS STUDIES (42 STUDIES)

a. Fiscal Analysis (4 studies)

3.01 Quantifying the Value of Public Health Intervention

Theresa Green, U. of Rochester

Completed

This research will explore common methods for financially quantifying value in public health system, and these methods will be applied to real-world examples, including a quality improvement intervention, an academic-public health partnership and a new model of care delivery for high blood pressure patients. Cost effective analysis, cost utility analysis, and cost benefit analysis, including return on investment, will be applied to outcomes and financial data already collected from existing interventions. This study will address the following National Research Agenda questions for PHSSR: how do investments in public health strategies influence the need for downstream spending on medical care and/or social services; and what measures provide the most valid and reliable indicators of the financial performance (and quality improvement strategies) of public health agencies? Public health practitioners lack specific tools and convenient methods for completing cost-benefit analysis, while researchers often lack real-world examples to demonstrate the usefulness of economic evaluation. This research will result in a useful taxonomy of economic evaluation methods with practical examples. Using economic analysis will contribute to a business argument necessary when seeking public health funding and advocating to policy leaders who struggle with difficult budget constraints.

Funding: 2013 PHSSR Jr. Investigator Award 70384-3

3.02 Medicaid MCH Funding and Local Public Health Practice

North Carolina Public Health PBRN

Completed

This study by the North Carolina PBRN investigates the effects of a recent state policy change that eliminated Medicaid funding for evidence-based maternity case management services provided by local public health agencies. The research estimates the policy's impact on the delivery of MCH services and resulting birth outcomes, the "spill over" effects on public health agency core capacity to provide other services, and the adaptations that agencies are implementing to preserve core capacities.

Funding: 2010 Public Health PBRN Research Implementation Award 67320

3.03 Exploring New Methods and Measures to Assess the Impact of the Economic Recession on Public Health Outcomes

Anna Schenck, Anne-Marie Meyer, U. of North Carolina at Chapel Hill

Completed

The economic recession created a natural experiment which can be used to estimate the effect of public health departments on population health. Using a retrospective cohort design, and creating linkages to population-based datasets, this project will follow all local health departments (LHDs) in North Carolina (NC) from 2003 - 2008. Data from the National Association of County and City Health Officials (NACCHO) health department 2005 and 2008 profiles will be used to measure LHD spending, staffing and services in the time periods prior to, and during, the recession. These LHD metrics will be linked with public and private insurance data to explore variations in county-level morbidity and mortality rates for selected outcomes (infant mortality, heart disease, cancer, diabetes and influenza). Data from time periods (2003-2005, and 2006-2008) will be examined using generalized estimating equations and geo-spatial approaches to adjust for spatial correlation. This project will combine a novel insurance claims data resource with NACCHO data to develop and test new methods and metrics for public health systems research. Deliverables include a research brief detailing findings, policy/practice implications, and recommendations as well as a written report on the project and its findings for wide dissemination.

Funding: 2012 NNPHI PHS Natural Experiment Award 70339

3. FINANCING AND ECONOMICS STUDIES (42 STUDIES)

a. Fiscal Analysis (4 studies)

3.04 Fiscal Constraints and Access to Reproductive Health Services in South Carolina: The Impact of Clinic Retraction on Utilization, Outcomes, and Quality

Nathan Hale, U. of South Carolina

Completed

The purpose of this study is to examine the impact of changes in the scale of operations and scope of public health activities for reproductive health services on utilization, outcomes, and quality among South Carolina women enrolled in Medicaid. A retrospective cohort of women receiving family planning services from 2001-2012 will be developed using Medicaid eligibility/billing files. Longitudinal research methods will be used to examine the impact of these changes on selected outcomes over time. This will be a joint project between the University of South Carolina Center for Health Services and Policy Research (CHSPR) and the South Carolina Department of Health and Environmental Control (SCDHEC). Study findings, research questions, and methodologies are relevant for any personal health service currently provided by public health agencies subject to similar changes under fiscal constraints. Deliverables include a research brief detailing findings, policy/practice implications, and recommendations as well as a written report on the project and its findings for wide dissemination.

Funding: 2012 NNPHI PHS Natural Experiment Award 70336

b. Financing Mechanisms (10 studies)

3.05 Protecting Public Health in Times of Austerity: Measuring Impacts and Setting Priorities

Thomas Burke, Beth Resnick, Johns Hopkins Bloomberg School of Public Health

Completed

This mixed-methods project has three primary aims: (1) characterize the budget-setting and priority-setting processes within state health departments and across specific divisions (Preparedness, Environmental Health Sciences, and Maternal/Child Health) using secondary data analysis; (2) model several federal financial reduction scenarios and consequent public health impacts, using ASTHO 2010 Profile and federal public health funding data; and (3) integrate findings from aims (1) and (2) to identify likely decision-making factors, criteria, pressures, and opportunities practitioners will face under federal austerity measures, with a focus on public health practice and policy implications. With looming federal budget deficits and greater emphasis on funding health care through the Affordable Care Act's Medicaid expansion, it is anticipated that public health federal funds will be reduced, perhaps significantly so, in coming years. As such, it is critical to the future of public health to better understand, manage, and quantify the potential impact of federal austerity measures. As collaboration with ASTHO, this project will develop products in "real time" to assure relevance and contributions to current budget debates. Additionally, practitioners will receive tools to help contend with budget cuts and proactively plan for impending cuts with a focus on assuring adequate public health protections.

Funding: 2011 NNPHI PHS2 Award 69681

3.06 Measuring the Effects of Public/Private Transition of Pediatric Preventive Services on Unmet Need Among Medicaid Eligible Children

Nathan Hale, U. of South Carolina

Completed

The South Carolina Department of Health and Environmental Control (SCDHEC) has recently transitioned from providing direct Early Periodic Screening, Diagnosis, and Treatment Services (EPSDT) for Medicaid eligible children to assuring the provision of these services within existing health delivery systems. This study will examine the historical impact of this transition on unmet need for EPSDT services among Medicaid eligible children. Focus will be placed on examining geographic and racial/ethnic disparities in unmet need and the role of other safety-net providers in absorbing increased demand for these services. South Carolina birth certificates and Medicaid eligibility and billing files will be linked to create a retrospective birth cohort of Medicaid eligible children 0-24 months of age spanning the years 1997-2010. Growth curve models will be used to examine cohort and structural changes in organization of public health services over time, and unmet need for EPSDT services among Medicaid eligible children. Although this study focuses on the provision of EPSDT services in South Carolina, the study findings, research questions, and methodologies could be applied to any personal health care service currently provided by public health agencies with the potential to be appropriately shifted to other sources.

Funding: 2011 NNPHI PHS2 Award 69680

Public Health Services and Systems Research Inventory

3. FINANCING AND ECONOMICS STUDIES (42 STUDIES)

b. Financing Mechanisms (10 studies)

3.07 Public Health Spending and Medicaid Generosity: Short Term Impact on Population Health

*Maggie Paul, New York University.
Mentor: Patrick Bernet*

Completed

Prior research has established that low levels of per capita spending by local health departments (LHD) is detrimental to long term population health; however, there is scant evidence of how spending decisions impact population health in the short term. It is also unclear how Medicaid generosity affects the impact of LHD spending on health. This project proposes a longitudinal analysis of secondary data to address three main questions: How does per-capita LHD spending impact population health outcomes in the short term?, How does state Medicaid generosity modify the relationship between public health spending and population health?, and how does the impact of spending on health vary by the type of public health challenge? For each question, it is assumed that the effects of LHD spending and Medicaid generosity are limited to residents of the jurisdiction in which they are applied. This project is relevant to several points on the most recent PHSSR agenda, specifically those addressed by questions 5 and 10 in section 2A and by question 5 in section 3B. Data for this analysis will come from all available NACCHO LHD profile surveys, from corresponding years of AHRQ data on local hospitalizations and emergency department visits, and from Census Bureau data on Medicaid generosity. A longitudinal mixed effects model stratified by Medicaid generosity and public health challenge will be used to address the main research questions. Results of this study are intended for use by local public health practitioners, policy makers, and fellow researchers interested in the protection and improvement of public health through public policy.

Funding: 2012 PHSSR Jr. Investigator Award

3.08 Economic Shocks and Evidence-Based Decision-Making in Public Health

Washington Public Health PBRN

Completed

This study examines local variation in public health agency budget reductions during the 2009-10 economic downturn in Washington and the impact of these reductions on public health decision-making and use of evidence-based practices. An existing statewide survey is being adapted and used to measure evidence-based practice implementation and service delivery at multiple points in time during the economic downturn.

Funding: 2010 Public Health PBRN Research Implementation Award 67321

3.09 Forecasting the Impact of the Economic Recession on Public Health Financing

Wisconsin Public Health PBRN

Completed

This study uses national and state-specific data sources to develop a fiscal forecasting model that generates predictions of the total revenue available to each Wisconsin local health department over a four year period. The project will develop and validate the model using retrospective data sources, and produce prospective estimates for all local health officials in the state. Findings will be disseminated through a customized report to each agency and an interactive web-based map. The research will assist local officials in anticipating changes in fiscal capacity and adopting strategic responses to maintain core services.

Funding: 2011 Public Health PBRN Quick Strike Research Award

3.10 Financial Constraints, Regionalization Incentives, and Public Health Responses

Connecticut Public Health PBRN

Completed

The State of Connecticut has subsidized local public health services for many years using an annual per capita grant mechanism. Effective July 1, 2009, the subsidies were eliminated for 49 of Connecticut's 80 local health departments. The cuts were targeted to departments serving populations of 50,000 or less, with the expectation of increasing interest in consolidation and regionalization among small agencies. The Connecticut PBRN study investigates the effects of the cuts on local public health decision making concerning agency operations and service delivery. Specifically, the study tests whether the funding cuts motivated departments to explore consolidation, change their mix of programs and services, and pursue other funding sources.

Funding: 2010 Public Health PBRN Quick Strike Research Award

3. FINANCING AND ECONOMICS STUDIES (42 STUDIES)

b. Financing Mechanisms (10 studies)

3.11 Variation in Local Enforcement of State Public Health Policy

Ohio Public Health PBRN

Completed

When Ohio's smoke-free workplace act went into effect in May 2007, enforcement responsibilities were delegated to local public health agencies without additional state funds to support these new roles. In addition, the punitive fines prescribed in the law were graduated and allowed substantial local public health discretion in both the magnitude and frequency of fines. This study examines the causes and consequences of local variation in public health enforcement of the tobacco law, with particular attention to the effects of the recent economic downturn on public health decision-making regarding enforcement. The study sets the stage for a larger investigation of the consequences of local variation in enforcement with regard to policy impact on exposure to environmental tobacco smoke.

Funding: 2010 Public Health PBRN Quick Strike Research Award

3.12 Resource Allocation and Public Health Roles in Safe Routes to Schools

Colorado Public Health PBRN

Completed

This study takes advantage of a one-time infusion of federal funds to support local planning and policy development to facilitate safe and active commuting by school children to and from school. The study examines local variation in how these funds were distributed across the state, the role of local public health authorities in influencing resource allocation and decision-making concerning local use of funds, and the consequences of these decisions in terms of development and implementation of local active commuting plans and policies.

Funding: 2010 Public Health PBRN Quick Strike Research Award

3.13 Evaluating the Impact of Reallocating Georgia's Funding for Local Public Health Infrastructure

Phaedra Corso, University of Georgia

Completed

The General Grant-in-Aid (GGIA) evaluation project has the potential to directly influence future public health services for millions of Georgia residents. Beginning this fiscal year, state-level funding for public health infrastructure at the county level (known as GGIA) will be recalculated for the first time since 1970 based on 2010 population and county poverty rates. This will result in significant changes in the amount of resources provided by the state to counties for public health. The project involves performing a longitudinal regression analysis, supplemented by structured interviews with key local health officers, to examine whether the GGIA funding across time is systematically related to changes in the local public health infrastructure, the scope and scale of key public health services and their consequent impact on health behaviors and outcomes in the state. The proposed research project is a partnership between the University of Georgia's College of Public Health and the Georgia Department of Public Health, thereby allowing for full access to all 18 district health offices and 159 county health officers in the state. The project will inform the consideration of future formula changes by resulting in a full written report for the state health department and policy briefings for the state legislature and the senior public health leadership at the county, district, and state levels.

Funding: 2012 NNPHI PHS Natural Experiment Award 70334

Public Health Services and Systems Research Inventory

3. FINANCING AND ECONOMICS STUDIES (42 STUDIES)

b. Financing Mechanisms (10 studies)

3.14 Deriving Best Practices to Preserve MCAH Services in Local Health Departments: Learning from the Economic Downturn

*L. Michele Issel, Arden Handler,
U. Illinois at Chicago/U. North Carolina
Charlotte*

Completed

This study seeks to: (a) understand the extent, nationally, of cuts to or changes in maternal, child and adolescent health (MCAH) programs/services provided; (b) determine which administrative response strategies are being used by LHDs to balance providing MCAH programs/services with available funds; and (c) ascertain the patterns of program/services provided and of response strategies used that correspond to optimal performance of MCAH based on Essential Public Health Services. The aim is to discover and disseminate best practices (benchmarks) for performance of MCAH by LHDs. A mixed-methods design will be used that integrates existing NACCHO data spanning four years (2008, 2010, 2012 Profile Surveys), survey of a random stratified sample of NACCHO members using an online questionnaire, and two rounds of semi-structured interviews with MCAH practitioners and administrators. Data analysis, after linking datasets, involves conducting multivariate analyses to identify the best practices. The study findings can be directly used by local and state public health administrators to make best practice decision to maintain optimal levels of MCAH Performance in the face of sever fiscal constraints, health reform, and LHD accreditation. Our approach to determining best practices can serve as a template for identifying best practices for performance related to other populations.

Funding: 2011 NNPHI PHS2 Award 69684

c. Costs, Performance, and Outcomes (28 studies)

3.15 Variations in the Costs of Delivering Public Health Services: An Analysis of Local Health Departments in Florida

*Simone Singh, U. of Michigan
Mentor: Patrick Bernet*

Completed

The costs of delivering public health services vary widely across public health agencies, yet little is known currently about the factors that explain these variations and the changes local health departments (LHDs) could implement to improve their productivity and deliver services more efficiently. The research objective of this study is to investigate characteristics of public health delivery systems that influence the productivity and efficiency with which public health strategies are delivered at the local level (PHSSR Agenda, Table 3, Question 11). Financial data for LHDs will be obtained from the Florida Department of Health and supplemented with data on organizational characteristics from NACCHO's Profile Study and data on community characteristics from the Area Resource File. The sample will include all 67 LHDs in Florida. Descriptive statistics will be used to document variations in LHDs' productivity and efficiency of service provision, by service line, and to explore changes over time (2001-2010). In a second step, LHD-level multivariate regression analysis using data for the years 2008 and 2010 will be conducted to analyze the factors that determine LHDs' productivity and efficiency of service provision, by service line. The focus of the analysis will be on factors that LHDs have some control over, including volume, service mix, and staffing decisions. Given limited financial resources for investments in public health, the project findings will add to the PHSSR evidence base by providing public health practitioners and researchers with an improved understanding of the organizational factors that determine the productivity and efficiency of LHDs and thus the costs these organizations incur in providing public health services. The findings will allow public health officials to implement changes in their organizations aimed at improving the allocation of scarce resources and focus on those investments with the largest effects on population health outcomes.

Funding: 2013 PHSSR Jr. Investigator Award 70384-8

3. FINANCING AND ECONOMICS STUDIES (42 STUDIES)

c. Costs, Performance, and Outcomes (28 studies)

3.16 Consolidation in Ohio Public Health: Differences in Expenditures

Matthew Stefanak and Michael Morris, Ohio Public Health PBRN

Completed

The central objectives of this study are to develop evidence regarding the effect of consolidation on expenditures, workforce and services of local health departments (LHD) in Ohio and to deliver actionable and timely findings to inform consolidation policy decisions.

Funding: 2011 Public Health PBRN Quick Strike Research Award 69619-2

3.17 The Cost of Doing Business: Developing a Cost Model for the Minimum Local Public Health Services Package in Ohio

Matthew Stefanak, Ohio Public Health PBRN

Completed

This study will: (1) develop a scalable model of the cost to provide the minimum package of public health services, which includes both core services and foundational capabilities, within OH's local public health jurisdictions, (2) to examine current funding for those same services against this model, and (3) as a result to deliver actionable and timely findings to inform cross jurisdictional sharing and other policy decisions regarding public health funding.

Funding: 2011 Public Health PBRN Quick Strike Research Award 69619-3

3.18 Public Health Return on Investment in a Time of Economic Crisis: Lessons Learned from State Tobacco Control Programs

Michael C Fiore, Paula Keller; U. of Wisconsin; UW Center for Tobacco Research

Completed

This study will investigate how reducing tobacco control funding affects the public's health. The findings will help policymakers better understand the impact of investment in tobacco control on tobacco-related diseases and other health outcomes.

Funding: 2010 NNPHI PHS1 Award 67622

3.19 Return on Investment for Public Health Expenditures: A Societal Perspective with Local Applications

Timothy T. Brown, U of California Berkeley

Completed

This study will determine the return on investment (ROI) from public health activities within California and for the Alameda County Department of Public Health, taking into account variations among racial/ethnic groups. Findings from this project will enable local health departments to accurately judge which types of programs most benefit their local populations.

Funding: 2010 NNPHI PHS1 Award 67617

Public Health Services and Systems Research Inventory

3. FINANCING AND ECONOMICS STUDIES (42 STUDIES)

c. Costs, Performance, and Outcomes (28 studies)

3.20 Cost Effectiveness of Partner Notification and Optimal Intensity of Partner Notification for STD Control and Prevention in Louisiana

*Mahmud Khan, Mohammad Rahman,
Tulane University*

Completed

This study will examine whether the implementation of partner notification is a cost-effective option as part of sexually transmitted disease (STD) control activities and if so, determine the optimal way that the Louisiana STD Control Program should conduct partner notification. The findings of this project will help improve financing of STD control programs as well as resource allocation in STD control activities.

Funding: 2010 NNPHI PHS1 Award 67618

3.21 Evidence-based Allocation of Public Health Resources: Using Economic Analysis to Identify Value and Priority in Domestic Public Tuberculosis Control

*Thaddeus Miller,
U. North Texas Health Sciences Center
Mentor: José Pagán*

Completed

This new award provides two years of mentored support for junior PHSSR scientists, with matching salary support and guaranteed protected research time from the sponsoring institution. Thaddeus Miller is Assistant Professor at the University of North Texas Health Sciences Center, in the Department of Health Policy and Management and the Department of Medicine. He has participated in economic analysis of tuberculosis (TB) control for the past 10 years. His research emphases include international and national health system policy and evaluations, he has served as PI for multi-site projects funded by CDC, and he has been involved in numerous evaluations, research, training and site reviews in cities in the U.S. and internationally. Miller's development plan includes: 1) coursework in social research quantitative methods; 2) becoming proficient in economic analysis software; and 3) developing connections and leadership in the public health community through his research and practice mentors. Miller's project will expand existing economic and comparative effectiveness research including: 1) domestic TB control costs of public health investments as well as health and other individual losses; and 2) new tools for public protection and expected progress toward TB elimination by local, state and regional TB control authorities and public health systems.

Funding: 2012 Mentored Researcher Development Award 70578

3.22 Priorities in Rural Health: Cost-effectiveness Analysis of Fungal Meningitis Outbreak in New River Health District

*Kaja Abbas, Virginia Polytechnic
Institute and State University
Mentor: Kerry Redican*

Completed

The principal objective of this project is to determine the incremental cost-effectiveness ratio of fungal meningitis outbreak investigation in New River Health District, and determine the impact of this outbreak investigation using WHO-CHOICE (choosing interventions that are cost-effective) criteria. This project addresses the following research question from the national research agenda for PHSSR under "Public health financing and economics" for "Costs, performance and outcomes": Which investments in public health strategies have the largest effects on health outcomes (e.g., healthy life expectancy, and quality of life), and what are the costs of delivering these strategies at local, state, and national levels? The dataset collected during the fungal meningitis outbreak in the New River Health District will be used in this project. Data access is facilitated by Dr. Molly O'Dell, Director of New River Health District.

Funding: 2013 PHSSR Jr. Investigator Award 70384-10

3. FINANCING AND ECONOMICS STUDIES (42 STUDIES)

c. Costs, Performance, and Outcomes (28 studies)

3.23 Budget Cuts and Health Outcomes: Examining a Natural Experiment

Betty Bekemeier, U. Washington

Completed

Our study will use longitudinal local health department (LHD) expenditure data for categories of service expenditures (i.e. Maternal/Child Health, Environmental Health, Communicable Disease Control) in 305 LHDs from four states over six years (2005-2010). The current unfortunate economic crisis provides a unique “natural experiment” to examine relationships between changes in LHD expenditures for specific LHD services and changes in population health behaviors and proximal health outcomes on the county level. Unique and critical partnerships with Public Health Practice-based Research Networks (PBRNs) and the University of Washington’s Center for Studies in Demography and Ecology (CSDE) will underlie the promising and innovative geospatial and statistical approach we will use to examine a poorly understood area of Public Health Systems and Services Research (PHSSR). Understanding these relationships is vital to developing an evidence base for public health planning and decision-making.

Funding: 2011 NNPHI PHS2 Award 69688

3.24 Public Health Delivery and Cost Studies in the San Joaquin Valley of California

California Public Health PBRN, Public Health Institute

PBRN Delivery and Cost Study - Completed

The implementation of the Affordable Care Act (ACA) necessitates better information on the costs of service delivery. The California Public Health Practice-Based Research Network, led by the Public Health Institute, is addressing this need through research to identify and compare the costs of delivering three target sets of public health services in four rural Local Health Departments (LHDs) located in the San Joaquin Valley. Investigators are comparing the methods and costs of tuberculosis surveillance and investigation, child immunizations, and community needs assessments across these rural areas to enhance LHD workforce capacity for integrating cost analyses into their operations. Using a resource-based costing approach, the research team is estimating the cost of resources associated with delivering each of the three services, developing a model to explore the robustness of the results, and, where appropriate, identifying the cost-effectiveness of the existing services. Findings will aid LHDs in planning for ACA implementation by providing information on both the cost of delivering services and the resulting outcomes, as well as by increasing capacity within LHDs to sustain this type of analysis.

Funding: 2013 Public Health PBRN Delivery and Cost Studies (DACS) Award 71128

3.25 Determining the Cost of Select Core Services Across Colorado Public Health Agencies

Colorado Public Health PBRN, Colorado Association of Local Public Health Officials

PBRN Delivery and Cost Study - Completed

The Colorado Public Health Practice-Based Research Network, led by the Colorado Association of Local Public Health Officials, is working both to estimate the cost of delivering selected core public health services in Colorado and to identify services and delivery characteristics with economies of scale and scope. Using a micro-costing approach to estimate the variable and fixed costs associated with the selected core services, this study is examining the degree to which local public health agency (LPHA) structural differences modify costs. Further, investigators are looking at cost variation across delivery systems and examining the generalizability of the resulting Colorado model outside of the state. These goals are being accomplished through a four-stage process: 1) selecting specific public health services for evaluation; 2) conducting key informant interviews and a focus group to identify variable and fixed costs; 3) conducting a survey using time logs to estimate variable costs; and 4) performing analyses of cost data to determine the effect of delivery system characteristics on the cost of delivering services. This project is engaging partners using the Colorado PBRN’s communications plan template, which includes cyclical phases of Building Awareness, Recruitment, and Dissemination to ensure targeted communication throughout the project. Study results will help inform decisions by local public health agencies, the state health department, and system level partners, while also making the case for core public health services funding.

Funding: 2013 Public Health PBRN Delivery and Cost Studies (DACS) Award 71153

Public Health Services and Systems Research Inventory

3. FINANCING AND ECONOMICS STUDIES (42 STUDIES)

c. Costs, Performance, and Outcomes (28 studies)

3.26 Cost Effectiveness, Efficiency and Equity of Inspection Services throughout Connecticut's Local Public Health System

Connecticut Public Health PBRN, Connecticut Association of Directors of Health

PBRN Delivery and Cost Study - Underway

With leadership from the Connecticut Association of Directors of Health, the Connecticut Public Health Practice-Based Research Network is evaluating whether state-mandated environmental services (SMES) are most effectively, efficiently, and equitably delivered by local or regional public health entities, as well as the impact of local health department LHD) jurisdiction size and population density on SMES delivery. Specifically, the study addresses: 1) the relative cost of providing SMES for LHD serving small vs. larger populations, departments vs. districts, and unionized vs. non-union jurisdictions; 2) the impact of LHD size, organizational structure and receipt of state subsidies on capacity to provide SMES; 3) potential correlations between LHD jurisdiction population size and effectiveness of food service programs that result in differences in per capita cost for these services; 4) the impact of LHD size and organizational structure on the fee structure for food service inspections whether the fee structure presents an equity issue for local food service establishments; 5) the impact of routine local food inspections on establishments and their food service workers; and 6) correlations between inspections, changes in food handling practices, and the retention of these changes. Findings will support evidence-based decision-making related to environmental services provision.

Funding: 2013 Public Health PBRN Delivery and Cost Studies (DACS) Award 71133

3.27 Comparative Cost Study of STD Services in Florida

Florida Public Health PBRN, University of Florida

PBRN Delivery and Cost Study - Underway

Through a study focusing on the prevention and control of sexually transmitted infections (STI), the Florida Public Health Practice-Based Research Network, led by the University of Florida, is evaluating unit costs of public health service delivery and examining the effects of delivery system variations on such costs as: 1) the standardization and centralization of programs, 2) the centralization of information technology and human resources systems, 3) economies of scale related to population size of health department jurisdiction, 4) local tax and other revenue support for CHD services, and 5) responsiveness to local community governance. Using standard conceptual and analytical approaches employed in cost analysis, the study will focus on comparisons of variations within Florida. Evidence generated through the study will facilitate informed decision-making, ultimately enhancing both delivery systems for public health services and support efforts toward achieving optimal, equitable health outcomes.

Funding: 2013 Public Health PBRN Delivery and Cost Studies (DACS) Award 71129

3.28 Measuring the Costs of Implementing QI Initiatives and Examining the Variation in Costs of QI Implementation among LHDs in Nebraska

Nebraska Public Health PBRN, University of Nebraska Medical Center

PBRN Delivery and Cost Study - Completed

The growth in quality improvement (QI) initiatives in local health departments (LHDs) brings with it a need for better understanding the implementation costs associated with QI activities. Led by the University of Nebraska Medical Center, the Nebraska Public Health Practice-Based Research Network is attempting to meet that need through a project that is measuring and estimating these implementation costs while also examining cost variation across LHD settings. Using both key informant interviews and surveys, investigators are collecting cost information on four specific LHD QI projects, following the procedures of economic evaluation to conduct the cost estimation and analysis. The resulting cost estimates and related tools will be valuable for LHDs that are considering similar QI activities, ultimately supporting better allocation of limited resources toward suitable initiatives. This study also will provide insights into the examination of scale economies for QI implementation, which will benefit LHDs nationwide.

Funding: 2013 Public Health PBRN Delivery and Cost Studies (DACS) Award 71154

3.29 Understanding Governmental and Non-Governmental Funding and Network Structures in Different Models of Public Health Infrastructure

*New Hampshire Public Health PBRN,
University of New Hampshire*

***PBRN Delivery and Cost Study -
Completed***

The New Hampshire Public Health Practice-Based Research Network, led by the University of New Hampshire, is exploring how funding and allocation for tobacco prevention and cessation services relate to connectivity among partner members of local public health systems, as measured using the PARTNER network analytic tool. The study examines four communities with diverse local public health system infrastructures located in geographically and demographically distinct areas, exploring how these infrastructural differences relate to various financial inputs. The research team is identifying variation in funding sources and allocation for tobacco services to make inferences about how financial characteristics might impact connectivity across partners delivering public health services. An improved understanding of the variety of funding sources can help sites better understand their own infrastructures, along with related impacts on collaboration. This work will assist other states in understanding how public health funding affects the way local public health systems with multiple diverse partners function.

Funding: 2013 Public Health PBRN Delivery and Cost Studies (DACS) Award 71155

3.30 Determining the Public Health Costs of Tobacco Prevention and Control: A Comparison of 5 New Jersey Local Health Departments

*New Jersey Public Health PBRN,
Foundation for Healthcare
Advancement*

***PBRN Delivery and Cost Study -
Completed***

To better understand the true cost of public health services, the New Jersey Public Health Practice-Based Research Network, with leadership from the Foundation for Healthcare Advancement, is comparing tobacco prevention and control costs across five diverse local health departments (LHDs). Using a costing work plan, investigators are determining all relevant activities and their capital versus recurrent costs, both fixed and variable, for tobacco prevention and control, looking specifically at the costs of common activities and overall costs in FY 2013. Thirteen New Jersey LHDs, along with an economic/budget analysis consultant and the research team, constitute the project's advisory group, which is selecting the subject LHDs based on diversity of geography, population, and administrative structure. Study results will add to public health knowledge of the mechanisms through which costs, information, and labor produce health promotion and protection services, programs, and policies, ultimately helping improve quality and efficiency of public health activities and the population health outcomes associated with them.

Funding: 2013 Public Health PBRN Delivery and Cost Studies (DACS) Award 71156

3.31 Optimizing the Use of HIV/STD Partner Services Strategies in New York State

New York Public Health PBRN

***PBRN Delivery and Cost Study -
Underway***

With CDC policy initiatives emphasizing high-impact HIV/STD prevention activities, public health decision-makers need to understand both the costs of such activities and their relationship to outcomes to ensure optimal allocation of labor and resources. To this end, the New York Public Health Practice-Based Research Network, led by Health Research Inc., is conducting an economic assessment of HIV/STD partner services (PS) delivery by state and local public health agencies. Investigators are measuring variation across two PS strategies: 1) integrated HIV and STD services currently delivered by the state health department's regional offices, and 2) a new strategy that focuses on high-impact HIV prevention delivered by large local health departments. This comparison will reveal how reallocating staff resources to the new, high-impact strategy affects the costs and outcomes of prevention programs at the county and state levels. The project builds on recent research that has identified quality and outcome measures related to HIV/STD PS delivery, continuing the engagement of both academic and practice partners in research designed enhance the relevance, quality, and dissemination of study results. Findings could contribute to better prioritization of staffing resources, increased efficiency in PS program delivery, and a return on investment that includes reduced transmission of HIV/STDs.

Funding: 2013 Public Health PBRN Delivery and Cost Studies (DACS) Award 71130

Public Health Services and Systems Research Inventory

3. FINANCING AND ECONOMICS STUDIES (42 STUDIES)

c. Costs, Performance, and Outcomes (28 studies)

3.32 The Influence of Organizational and Community Characteristics on the Cost of Providing Mandated Public Health Services in North Carolina

North Carolina Public Health PBRN, East Carolina University

PBRN Delivery and Cost Study - Completed

Recent legislation in North Carolina (NC), enacted largely on the basis of presumed cost savings, expands the ability of local health departments (LHDs) to reorganize governance. Practitioners are concerned that these and other changes to public health law increasingly require service provision without reliable cost estimates. Led by East Carolina University, the NC Public Health Practice-Based Research Network (PBRN) is attempting to address this concern via a three-pronged study that will: 1) estimate and validate the cost per unit of public health service for selected services mandated by North Carolina statute; 2) construct a validated service cost-estimation methodology that can be readily implemented by LHD finance staff; and 3) examine the influence of different delivery system structures on the costs of delivering mandated public health services. Investigators are employing multiple methods to compare cost estimates and enhance the validity and reliability of the findings. The study will generate an actionable and validated methodology for estimating cost of services, thus supporting practitioners in the prioritization of public health activities while building the evidence base to inform future policies.

Funding: 2013 Public Health PBRN Delivery and Cost Studies (DACs) Award 71131

3.33 The Cost of Public Health Practice: Using PBRNs to Identify Delivery, Quality and Cost of Core Public Health Services in Ohio

Ohio Public Health PBRN, Case Western Reserve University

PBRN Delivery and Cost Study - Underway

The Ohio Public Health Futures Report, one of several efforts in the state related to the delivery and cost of public health services, establishes a framework for understanding local health departments' core services and foundational capabilities; however, report recommendations are limited by the lack of available evidence for understanding how financial and human resources are transformed into programs, services, and policies to protect and promote health. With leadership from Case Western Reserve University, the Ohio Public Health PBRN is addressing this gap by developing and implementing standard methods to support data-driven, rational decision making about the variation, value, and equity of the delivery and cost of core public health services and foundational capabilities among Ohio Local Health Departments (LHDs). This work seeks to: 1) estimate and validate the cost per unit of service for Core Public Health Services for Ohio LHDs; 2) investigate the influence of organizational and community factors on the cost of public health service delivery in Ohio LHDs; and 3) ascertain how variation in the cost of Core Public Health Services among Ohio LHDs relates to equity in resource allocation and public health outcomes. Findings will provide evidence for LHD budget development, as well as measurement and analysis tools for both practitioners and researchers.

Funding: 2013 Public Health PBRN Delivery and Cost Studies (DACs) Award 71157

3.34 Costs and Cost-drivers of Providing Foundational Public Health Services in Washington State and Relationships with Structural and Community Factors

Washington Public Health PBRN, University of Washington

PBRN Delivery and Cost Study - Completed

To support the transformation toward a more efficient and effective public health system, Washington's statewide Foundational Public Health Services Workgroup was tasked with developing a strategy to determine "predictable and appropriate levels of financing." With leadership from the University of Washington, the Washington Public Health PBRN is using this opportunity to leverage the current activities of the state's practice leaders toward identifying and examining factors that promote and inhibit the provision of this foundational set of public health services and capabilities. This study's aims are three-fold: to estimate and validate the cost per unit of service for selected Foundational Public Health Services for Washington's local health jurisdictions; to determine how organizational and community factors influence the cost of public health system service delivery in the state; and to determine how variation in the cost of Washington's Foundational Public Health Services relates to equity of resource allocation. Among the approaches to determine costs, cost drivers, and other factors associated with programs and capabilities are: 1) cross-sectional resource-based cost estimation, 2) an activity log-based method, and 3) longitudinal modeling to examine factors that influence cost and production. Results will support public health leaders in developing a more efficient and equitable system of public health resource allocation.

Funding: 2013 Public Health PBRN Delivery and Cost Studies (DACs) Award 71132

3. FINANCING AND ECONOMICS STUDIES (42 STUDIES)

c. Costs, Performance, and Outcomes (28 studies)

3.35 Cost Case Study: The Coastal Health District of Georgia

Georgia Public Health PBRN, Gulzar Shah, Georgia Southern University

Completed

The Georgia PBRN Quick Strike project examines the cost and service delivery variation of STD/STI programs in Georgia. The relationship between service delivery costs and outcomes is evaluated with the degree of IT & HR system centralization, county health department jurisdiction size, and responsiveness of local community governance. The study results will be compared with that of the RWJF funded Florida Delivery and Cost Studies on STIs, as they relate to centralization versus decentralization of service provision and information systems, as well as policy and practice implications.

Funding: 2013-2014 Public Health PBRN Quick Strike Award 71079-1

3.36 Budget Cuts and Violence and Injury Prevention in WA's Local Health Departments

Washington Public Health PBRN, Laura Hitchcock, Public Health – Seattle and King County

Completed

The Washington PBRN Quick Strike project examines local and longitudinal variation in funding for injury/violence prevention. Using WA state data, which is the only identified state that captures longitudinal data on local and state investments, this study will examine the value of injury/violence investments and correlate spending with measures of activity and proximal outcome measures over time.

Funding: 2013-2014 Public Health PBRN Quick Strike Award 71079-4

3.37 Optimizing Expenditures Across the HIV Continuum of Care: Bridging Public Health and Health Care Systems

Greg Gonzalves, Yale University

Underway

This study will examine how patients enter, fall out of care, or succeed in managing their HIV disease in the US. Using mathematical modeling, ways of optimizing total expenditures will be identified across different stages of identification, testing, diagnosis, and treatment of people with HIV, while maximizing numbers of those affected in treatment, to prevent further transmission of the disease.

Funding: 2014 Pre and Post-doctoral Scholar in Public Health Delivery Award (PPS-PHD) 71685-2

3.38 The Affordable Care Act and Childhood Immunization Delivery in Rural Communities

Van Do-Reynoso, University of California, Merced

Underway

This study will examine how the delivery of childhood immunization services changes in small, rural California communities as the Affordable Care Act and related health system reforms are implemented. After examining how current and potential collaborations among local health departments (LHDs), primary care providers, medical facilities, and other community based providers are implemented for medically underserved populations, the project will estimate the costs of various options for delivering immunization services and the possible effects of these options on the health status of vulnerable populations.

Funding: 2014 Pre and Post-doctoral Scholar in Public Health Delivery Award (PPS-PHD) 71685-1

Public Health Services and Systems Research Inventory

3. FINANCING AND ECONOMICS STUDIES (42 STUDIES)

c. Costs, Performance, and Outcomes (28 studies)

3.39 Improving the Reach and Effectiveness of STD Prevention, Screening, and Treatment Services in Local Public Health Systems

California/Alabama Public Health PBRN Consortium

PBRN Dissemination and Implementation Research to Improve Value Study -- Underway

Understanding how organizational structure impacts reach and effectiveness is essential for local health departments that are redefining their STD service delivery roles as a result of extended health care coverage driven by the Affordable Care Act. This project supports a consortium of the California and Alabama Public Health Practice-Based Research Networks (PBRNs), who are examining variation in: 1) the differentiation, integration, and concentration of STD prevention, screening and treatment services in local public health systems; 2) the extent to which these differences are associated with the quality of STD services and outcomes, including incidence and racial disparities; 3) facilitators and barriers to implementing evidence-based local STD services; and 4) costs associated with STD treatment efforts. The study will use *Multi-Network Practice Outcome Variation Examination (MPROVE)* indicators for STDs and the experience of the Delivery and Cost study (DACS) underway in California by UC Merced. Led by the California Public Health Institute, the project team will generate customized reports on the structure, process, and outcomes of STD services in each local health department.

Funding: 2014 Dissemination and Implementation Research to Improve Value (DIRECTIVE) Award 72052

3.40 A Comparison of State Dissemination and Implementation Strategies on Local Health Department Accreditation Readiness and Quality Improvement Maturity

Colorado/Nebraska/Kansas Public Health PBRN Consortium

PBRN Dissemination and Implementation Research to Improve Value Study -- Underway

Establishing the costs and value of such local health department (LHD) initiatives as Accreditation Readiness (AR) and Quality Improvement (QI) is important for determining the activities that can best contribute to more efficient and effective public health delivery. This project supports the Colorado, Nebraska, and Kansas Public Health Practice-Based Research Networks (PBRNs) in examining and comparing the interactions and differences in AR and QI measures based on system-level dissemination and implementation (D&I) initiatives and the resulting state and local social networks. Led by the Colorado Association of Local Public Health Officials (CALPHO), this consortium of contiguous states will examine differences in financial investment in system-level D&I initiatives and the cost of discrete LHD QI projects using methods developed through Public Health PBRN Delivery and Cost Studies portfolio. The project also will examine connections of LHD QI projects, QI maturity, and AR with service measures and health outcomes from the Multi-Network Practice Outcome Variation Examination (MPROVE). Interpretation and translation of these complex findings, immediately applicable to the evolving QI and AR contexts at state and local levels, is critical.

Funding: 2014 Dissemination and Implementation Research to Improve Value (DIRECTIVE) Award 72053

3. FINANCING AND ECONOMICS STUDIES (42 STUDIES)

c. Costs, Performance, and Outcomes (28 studies)

3.41 The Effects of Cross-jurisdictional Resource Sharing on the Implementation, Scope and Quality of Public Health Services

Connecticut/Massachusetts Public Health PBRN Consortium

PBRN Dissemination and Implementation Research to Improve Value Study -- Underway

As public health entities increasingly explore cross-jurisdictional sharing (CJS) models to maximize reach, effectiveness, and efficiency in public health service delivery, it is important to develop the evidence base around what strategies work best. This project supports a consortium of the Connecticut and Massachusetts PBRNs in using a mixed methods approach to study the effects of cross-jurisdictional resource sharing on implementation of public health services with the intent to: 1) characterize effectiveness, volume, capacity and costs of implementing public health services in the areas of food inspection, enteric infection and obesity prevention; 2) assess the extent to which cross-jurisdictional service sharing arrangements affect implementation of local public health services; and 3) investigate how political priorities affect implementation of public health services. Co-led by the Massachusetts Institute of Community Health and the Connecticut Association of Directors of Health, Inc., investigators will compare independent municipal health departments of similar population size and region who receive public health services under a comprehensive shared service delivery model. A bundle of services from each of the Multi-Network Practice and Outcome Variation Examination (MPROVE) domains (i.e., environmental health, communicable disease, and chronic disease, respectively) will be examined to assess volume, capacity, and quality across delivery models. Methods developed from Connecticut's Delivery and Cost Studies (DACS) project will be used to calculate the costs of services.

Funding: 2014 Dissemination and Implementation Research to Improve Value (DIRECTIVE) Award 72054

3.42 Inter-Organizational Collaboration in Local Public Health Systems: Implications for Costs, Impact, and Management Capacity

Washington/Wisconsin/New York/Oregon Public Health PBRN Consortium

PBRN Dissemination and Implementation Research to Improve Value Study -- Underway

Evidence regarding the ways in which cross-jurisdictional sharing (CJS) by local health districts (LHDs) affects volume, intensity and unit cost of services is important for informing real-world decisions. This project supports a consortium of the Washington, Wisconsin, and New York PBRNs, along with investigators from the emerging Oregon PBRN, in focusing on CJS in the domain of communicable disease. Led by the University of Washington, this four state consortium is collecting existing measures from the Multi-Network Practice and Outcome Variation Examination (MPROVE) and administering a survey to LHDs to determine the extent and structure of CJS. Survey results will be combined with results of a similar survey of Wisconsin LHDs, and MPROVE-CJS data will be combined with LHD-level financial information (as available) to allow the observation of the relationship over time between LHD-level CJS and the costs, volume, and quality of service delivery.

Funding: 2014 Dissemination and Implementation Research to Improve Value (DIRECTIVE) Award 72055

Public Health Services and Systems Research Inventory

4. INFORMATION AND TECHNOLOGY (21 STUDIES)

a. Capabilities to Assess & Monitor Health Outcomes (4 studies)

4.01 Developing a Tool for Defining Local Public Health Practice in Obesity Prevention

Ross Brownson, Katherine Stamatakis, Washington U. in St. Louis

Completed

This project will develop an instrument to assess obesity prevention practice through the inventory of programs and activities in local health departments, which will then be used to construct a typology with respect to patterns of practice. An Advisory Board comprised of local health practitioners and stakeholders will contribute to all phases of the study, including instrument development, data interpretation and dissemination. Findings may be used to identify model practices and to guide future implementation strategies aimed at improving public health performance in obesity prevention by targeting strategies appropriately by setting.

Funding: 2011 NNPHI PHS2 Award 69687

4.02 Modeling Supply Chain System Structure to Trace Sources of Food Contamination

Stan N Finkelstein, Richard C. Larson, Massachusetts Institute of Technology

Underway

This study will develop a tool to better enable public health and emergency preparedness officials to identify the source of large-scale, multi-state outbreaks of foodborne illness and to project plausible future outbreaks.

Funding: 2013 NNPHI PHS3 Award 71273

4.03 Leveraging Integrated Electronic Data Sources to Improve Population Health Assessment at Local Levels

Brian Dixon, Indiana University

Underway

This study will use integrated electronic health record and community information system data to generate Healthcare Effectiveness Data and Information Set (HEDIS)-like population health indicators at various smaller-than-county geographic levels to provide insights for improving community assessment.

Funding: 2013 NNPHI PHS3 Award 71271

4.04 Implementation and Diffusion of the New York City Macroscopic Electronic Health Record Surveillance System

Katherine McVeigh, Remle Newton-Dame, New York Department of Health

Recently Awarded

This study seeks to accelerate the diffusion of standardized Electronic Health Record (EHR) - based surveillance capabilities so that useful, timely and geographically pertinent EHR data can be used to: 1) monitor trends in health outcomes over time; 2) facilitate heightened engagement and performance by health and public health system stakeholders; and 3) inform decisions regarding different population-based policies and interventions to improve health outcomes. Led by the NYC Department of Health and Mental Hygiene in partnership with the City University of New York School of Public Health and the New York University School of Medicine, this study is nested in larger studies of EHR population health measures included in the NYC Macroscopic. Indicators will be evaluated for: prevalence, treatment and control of hypertension, high cholesterol and diabetes; prevalence of obesity, smoking and depression; and receipt of influenza vaccination. Reliability will be assessed by comparing EHR data with abstracts of 400 new chart reviews; EHR health status classifications will be compared to classifications based on data collected for the NYC HANES 2013 will be used to assess validity. Dissemination products will include 10 indicator fact sheets designed for practitioners working to build health status monitoring systems based on EHR derived data.

Funding: 2015 PHSSR PHS4 Award 72450

4. INFORMATION AND TECHNOLOGY (21 STUDIES)

b. Translation & Dissemination of Research-Tested Public Health Strategies (2 studies)

4.05 Adolescent AFIX: A multi-state RCT to increase adolescent immunization by facilitating vaccine providers' adoption of best practices

This study will evaluate the effectiveness of an academic detailing model to facilitate health care providers' adoption of best practices related to adolescent immunization.

Funding: 2013 NNPHI PHS3 Award 71272

Noel T Brewer, Melissa B Gilkey, U. of North Carolina Chapel Hill

Underway

4.06 Using Clinical-Community Partnerships and 2-1-1 Technology to Improve Early Childhood Developmental Screening and Care

Promoting positive early childhood development is recommended by the DHHS National Prevention Strategy, and developmental screening for every young child is a recommended preventive health service for emotional and behavioral disorders. This study seeks to determine if a cross-sector collaboration, between a pediatric clinic and an established community-based child development screening and care management program, is associated with more screening and treatment for developmental delays in children from Latino low-income families. Using a randomized control trial, investigators will contact families scheduled for well child clinic visits and ask them to also contact the telephone-based early childhood development screening and care coordination program available through 2-1-1 Los Angeles County (211LA). The collaborative model will expand access to early screening for developmental and behavioral problems for very young children, and coordinate care between medical and community-based providers; goals are to screen and link more families to evidence-based services and ultimately reduce health disparities. If successful, the study will demonstrate the efficacy and effectiveness of the collaborative model, and establish a framework for its scale and spread to other communities with 2-1-1 services and child health care centers.

Funding: 2015 PHSSR PHS4 Award 72455

Paul Chung, Bergen Nelson, University of California, Los Angeles School of Medicine

Recently Awarded

c. Information and Communications Technologies (15 studies)

4.07 Addressing Geographic Variation in Public Health

The Florida Public Health PBRN has two major assets; the well-developed state coordinated electronic information system for county health department (CHD) administrative data and health outcome performance measures (Health Management System & DOH Financial Information Reporting System) and the responsiveness and support of the CHD leadership in conducting practice based research. Florida DOH has been a leader in developing statewide electronic public health information systems. Data from these sources are compiled into reporting systems for monitoring public health services, programs and outcomes.

Funding: 2012 Public Health PBRN Multi-Network Practice Outcome Variation Examination Study (MPROVE) Award 69955

Florida Public Health PBRN

PBRN Multi-Network Practice and Outcome Variation Examination Study – Completed

Public Health Services and Systems Research Inventory

4. INFORMATION AND TECHNOLOGY (21 STUDIES)

c. Information and Communications Technologies (15 studies)

4.08 Addressing Geographic Variation in Public Health Production

New Jersey Public Health PBRN

PBRN Multi-Network Practice and Outcome Variation Examination Study – Completed

NJ is exploring which measures will work in NJ, to maximize the sustainability of our resources, identify outcomes that can be measured and linked to resources, and develop a web-based reporting system that will be useful for NJ's local health departments (LHDs). Objective: NJ PBRN will partner with NJDHSS to work with national PBRN colleagues to identify and test multi-state measures that can be used to examine resources and outcomes for optimal public health practice. Methods: We will use existing resources and an additional research associate funded through this RFP to work with the national PBRN group to develop and test tools to measure: 1) availability/scope of resources; 2) volume/intensity of application; 3) staffing capacity; 4) reach; and 5) quality: the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge. Expected outcome: NJ is proud of its work to date to revise LHD reporting measures, and recognizes that measures that can compare and contrast efforts across state lines will be of great value.

Funding: 2012 Public Health PBRN Multi-Network Practice Outcome Variation Examination Study (MPROVE) Award 69957

4.09 Assessing Georgia's Health Information Exchange Systems and Healthcare Providers' Meaningful-use Readiness and Their Plans to Use Health Information Exchange

*Gulzar Shah, Georgia Public Health PBRN
Completed*

A formal study of current public health systems in Georgia to assess readiness for meaningful use related to both primary care and public health services, and to identify healthcare providers that can take advantage of those systems.

Funding: 2011 Public Health PBRN Quick Strike Research Award 69619-1

4.10 Effective Public Health Data Sharing for Local Decision Making

*Joshua Vest, Georgia Southern University
Mentor: Michele Issel*

Completed

The principle objective of this proposal is to provide a scientific basis from which to address information system & technology related gaps in public health data sharing between state agencies and local health departments. This study addresses the priority area of Technology, Data and Methods by specifically answering the agenda question, How can we improve the capacity to collect data and implement HITs? Using NACCHO's 2008 Profile Survey and ASTHO's 2007 Profile of State Public Health, the study will document the extent of data sharing gaps in key public health activities reported by local health departments and then identify the organizational, structural, and contextual factors associated with increasing data gaps using regression models. Interviews will be conducted with a sample of local health departments in order to describe the impact of information gaps on decision making capabilities and identify locally developed solutions to mitigate or manage any detrimental effects from data sharing gaps. This project will add to the PHSSR evidence base by: 1) providing a description of the gaps in public health data sharing; 2) identifying the factors associated with those gaps and explanations of how those factors influence the gaps; 3) providing direction and guidance on how to improve public health data sharing from an overall system and local perspective.

Funding: 2012 PHSSR Jr. Investigator Award

4. INFORMATION AND TECHNOLOGY (21 STUDIES)

c. Information and Communications Technologies (15 studies)

4.11 Electronic Information System to Monitor Services and Expenditures of Local Health Departments in New York State

New York Public Health PBRN

Completed

A new web-based submission, review, and archive system for the Municipal Public Health Services Plan was developed to collect information on what services are provided by each LHD. This new system improved the completion and submission of LHD service activity and provides a central library for view by all stakeholders at the state level. The data submitted in this new system allows for analysis and linkages to the fiscal tracking system employed by Article 6 of the New York State Public Health Law, which provides partial reimbursements for expenses incurred by LHDs for the five basic public health areas defined by law. This system would allow for the summarization of LHD functions and finances and provide state and national public health researchers with a detailed data set on service delivery.

Funding: 2011 Public Health PBRN Quick Strike Research Award

4.12 Local Information Systems for Studying Public Health Practice and Outcomes

Wisconsin Public Health PBRN

Completed

Wisconsin's PBRN uses longitudinal data from an automated, electronic information system to analyze changes in the delivery of community health nursing programs and activities since 1986, and to evaluate prospects for developing similar information systems to track the outputs and outcomes of other public health programs. The study demonstrates how local public health information system can be used to examine associations between the intensity of programmatic activity and resulting behavioral and health outcomes. Findings suggest ways of using automated, electronic information systems in public health settings to strengthen capacity for public health systems and services research.

Funding: 2010 Public Health PBRN Quick Strike Research Award

4.13 Local Variation in H1N1 Communication and Response in Kentucky

Kentucky Public Health PBRN

Completed

The Kentucky PBRN replicated the study of local variation in H1N1 response developed for North Carolina, and added a new component focusing specifically on communication patterns among local health departments, primary care providers, and community pharmacists. The study uncovered wide variation and large gaps in communication among these three groups of responders, suggesting many opportunities for improved response.

Funding: 2009 Public Health PBRN Quick Strike Research Award

4.14 Developing the Evidence-Base for Social Media Use in Public Health

Jenine Harris, Washington U. St. Louis
Mentor: Ross Brownson

Completed

This research examines local health department (LHD) use of social media, and the social media communication network among LHDs, their constituents, and other public health system stakeholders. Descriptive, inferential, and statistical network modeling approaches will be used.

Funding: 2012 Mentored Researcher Development Award 70577

Public Health Services and Systems Research Inventory

4. INFORMATION AND TECHNOLOGY (21 STUDIES)

c. Information and Communications Technologies (15 studies)

4.15 Collaborative Governance to Support Exchange of Public Health-Relevant Data

Holly Jarman, U. Michigan
Mentor: Peter Jacobson

Completed

This research will study implementation of policies supporting Health Information Exchange (HIE) as they relate to the exchange of lab data and immunization records via statewide collaborative networks. Using existing survey data and new interview data, she will construct a simulation model to uncover interventions and incentives to promote incorporation of public health data into HIE.

Funding: 2012 Mentored Researcher Development Award 70579

4.16 Impact of Health Information Technology Investments and Meaningful Use Requirements on the Development of Public Health Record Data

Dawn Jacobson, Marta Induni, Public Health Institute (California)

Completed

The purpose of this project is to assess the impact of federal investments in health information technologies and the adoption of meaningful use criteria on the capabilities of state and local public health departments (PHDs) to collect, share, and report data related to communicable and chronic disease surveillance. This project will influence public health policy and decision-making by delineating key factors related to partnerships and processes from the public health perspective that may lead to greater success for local, regional, and statewide sharing of public health data. Project deliverables include a set of measures that can be shared with state and local PHDs to assess and track PHD data system development as well policy briefs and white papers to share with policymakers, practitioners, and researchers. Additional deliverables include a written report on the project and its findings for wide dissemination. Findings will be released within 12 months of the project's completion. This project brings together a collaborative research team from the Public Health Institute (Oakland, CA) and Research Triangle International. In addition, partnerships with practitioners through an Advisory Committee that informs the research team throughout the project period will be established.

Funding: 2012 NNPHI PHS Natural Experiment Award 70340

4.17 Improving Vaccine-Preventable Disease Reporting and Surveillance through Health Information Exchange

Brian E. Dixon, U. of Indiana, Regenstrief Institute
Mentor: Shaun Grannis

Underway

This study will implement and evaluate a new electronic tool designed to improve clinical provider reporting rates for vaccine-preventable disease outbreaks in Indiana, and to support more efficient provider reporting to public health agencies. The tool takes advantage of Indiana's statewide health information exchange (HIE) that enables data-sharing between clinical and public health organizations, and replaces existing inefficient reporting procedures.

Funding: 2013 Mentored Researcher Development Award 71596

4. INFORMATION AND TECHNOLOGY (21 STUDIES)

c. Information and Communications Technologies (15 studies)

4.18 Leveraging a Health Information Exchange Innovation to Improve the Efficiency of Public Health Disease Investigation

Janet Baseman, University of Washington School of Public Health

Completed

The primary objective of this project is to investigate the impact of a technical decision-support innovation in a HIE that will streamline provider-based notifiable condition reporting on Public Health case follow-up activities, reporting timelines, report completion burden on disease investigators due to timeliness of completion of reports, and timeliness of assessments of disease burden in the community.

Funding: 2012 NNPHI PHS Natural Experiment Award 70338

4.19 Building a Sustainable Open Data Ecosystem for Public Health Services and Systems Research

*Erika Martin, U. at Albany SUNY, Nelson A. Rockefeller Institute for Government
Mentor: Guthrie Birkhead*

Underway

This study will examine the utility of making existing, publicly-available health data more accessible to state and local public health professionals for use in targeting and tailoring their programs and policies. The study will evaluate 200 federal, state, and local health datasets, interview New York State (NYS) health department and other state agency staff, and complete a NYS pilot study using measures of child obesity and built environment from publicly-available datasets.

Funding: 2013 Mentored Researcher Development Award 71597

4.20 Building Access and Understanding of Law in Public Health Practice in Nebraska

Jennifer K. Ibrahim, Temple University

Underway

This study will create and evaluate an online database of public health laws in Nebraska to help practitioners systematically advance the use of law in service delivery.

Funding: 2013 NNPHI PHS3 Award 71266

4.21 Public Health and Primary Care Integration through Enhanced Public Health Information Technology (PHIT) Maturity: A Case for Behavioral Health

Ritu Agarwal, Robert Gold, U. of Maryland

Underway

This study will develop and validate an evidence-based public health information technology (PHIT) maturity index to guide improvements in the usefulness, efficiency and outcomes of technology-mediated strategies for public health and clinical care program integration.

Funding: 2013 NNPHI PHS3 Award 71274