

2014 Request for Proposals

Proposal Deadline: April 23, 2014



Robert Wood Johnson Foundation

DISSEMINATION AND IMPLEMENTATION RESEARCH IN PUBLIC HEALTH SETTINGS: LEVERAGING PRACTICE-BASED RESEARCH NETWORKS TO UNDERSTAND THE VALUE OF PUBLIC HEALTH DELIVERY

PURPOSE

Public Health Practice-Based Research Networks (PBRNs) is a national program of the Robert Wood Johnson Foundation (RWJF) that supports researcher-practitioner networks dedicated to discovering ways to improve the delivery of public health services. A public health PBRN brings multiple public health agencies together with research partners to design and implement comparative studies in real-world practice settings.¹

The **Dissemination and Implementation Research to Improve Value (DIRECTIVE)** Award will support selected PBRNs in conducting comparative studies designed to identify public health system characteristics and strategies that facilitate the effective and efficient implementation of evidence-based programs and services for health protection, promotion and disease prevention. Up to four (4) awards of \$350,000 each will support consortia of two or more PBRNs in conducting projects of up to twenty-four (24) months in duration that are designed to compare the effectiveness and costs of dissemination and implementation (D&I) processes within public health systems, while also expanding the number and variety of practice settings engaged in applied research studies through PBRNs.

The Public Health PBRN National Coordinating Center at the University of Kentucky College of Public Health will coordinate these studies and facilitate the use of standardized approaches to enable data from the individual projects to be pooled for comparative analysis across large numbers of practice settings.

BACKGROUND

Implementation of programs and policies that promote health and prevent disease and injury vary widely across states and communities. Some of this variation in public health implementation is desirable, reflecting the ability to tailor and adapt prevention strategies to the specific needs, risks, values, and preferences of the populations served. Other components of this variation represent failures in dissemination and implementation (D&I) processes that result in missed opportunities for prevention. D&I failures may stem from myriad problems related to information flow, resource availability, administrative and technical infrastructure, political and legal support, professional and social norms, and inter-organizational coordination. Further, a lack of pragmatic approaches that incorporate stakeholder perspectives and context-based adaptation also contributes to the uncertain translation of research into science.² Research in dissemination and implementation science focuses on identifying and overcoming these problems that create significant time lags between the discovery of new knowledge through research

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and the widespread adoption of this knowledge into routine policy, practice and behavior.^{3,4,5} Reducing this lag has become an important area of focus for numerous health research funders, including the National Institutes of Health, the Agency for Healthcare Research and Quality, the Patient-Centered Outcomes Research Institute, and the Robert Wood Johnson Foundation.

The D&I processes that shape the implementation of public health programs at state and local levels are still not well understood, due in part to the wide heterogeneity in public health settings and to the relative paucity of existing measures and data sources for studying the implementation of public health programs and services. A need exists for empirical evidence concerning variation in the adoption or adaptation of research-derived, evidence-based public health practice across numerous and diverse settings. Such evidence is essential for improving systems to ensure that the most recent and compelling evidence informs practice and policy in ways that help to improve the public's health. For example, at times public health decision-makers lack access to the latest evidence for practice; when access to research findings is available, capacity to translate findings for and/or to implement them in new organizational settings may be absent. Even in instances in which the decision to adopt is made, practitioners still must address potential implementation challenges in key areas of *fit*⁶, including needs fits, objectives fits, structural fits, technical fits, and political fits.⁷

Multi-level, transdisciplinary partnerships among academic and community partners are needed to identify specific barriers across settings, to measure variation in adoption of evidence-based practice, and to test methods for improving implementation.⁸ Practice-based research networks (PBRNs) provide an existing multi-level, transdisciplinary framework within which this work can be accomplished.⁹ The national Public Health PBRN Program in particular recently has funded measurement development projects to assess variation in both public health service delivery and costs related to delivery. Through the Multi-Network Practice and Outcome Variation Examination, PBRNs already have selected and analyzed measures that address reach, volume, intensity, and quality of public health service delivery in the domains of chronic disease prevention, communicable disease control, and environmental health protection.¹⁰ The recently-launched Public Health Delivery and Cost Studies (DACs) award supports studies designed to determine the costs of delivering high-value public health services and to examine the delivery system characteristics that influence the effectiveness, efficiency, and equity of these services.

The DIRECTIVE awards described in this solicitation are intended build upon the efforts of MPROVE and DACs by applying measures of public health delivery and costs to study D&I processes in public health settings and to identify mechanisms for improving the value of public health services through improved D&I.

THE PROGRAM

The DIRECTIVE program will provide public health PBRNs with research funding to implement comparative studies that identify public health system characteristics and strategies that facilitate the effective and efficient implementation of evidence-based programs and services. Up to four (4) projects may be selected to receive funding. Each project must include a consortium of two (2) or more Practice-Based Research Networks. Each project may receive funding of up to \$350,000 to support projects of up

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to twenty-four (24) months in duration. In addition to implementing a comparative research study, participating networks must also undertake activities to expand the number and diversity of practice settings that participate in the design and conduct of research.

Studies funded by this program are expected to build upon prior PBRN studies conducted under the MPROVE and DACS programs to elucidate the effectiveness and costs of dissemination and implementation (D&I) processes that occur within and across public health settings. Specifically, studies should seek to use (1) measures of public health delivery developed through the MPROVE program, in combination with (2) methods of measuring and analyzing public health delivery costs as developed through the DACS program, in order to (3) evaluate D&I processes in public health settings and their influence on the overall value of public health services. In developing a proposed approach for evaluating D&I processes within public health systems, applicants should incorporate both of the following key elements:

- one or more sets of public health delivery measures identified through the MPROVE program (e.g. availability, volume, intensity, reach, and quality) for one or more of the three domains of activity (communicable disease control, chronic disease prevention, and environmental health protection);
- one or more approaches for measuring and estimating the costs of delivering public health services, as developed and tested through the DACS program, including methods for analyzing variation in delivery costs across different public health settings and system structures.

Successful applicants to this program will propose studies that build upon and go beyond the findings and lessons learned from previous MPROVE and DACS studies, specifically by examining D&I processes within public health systems and their influence on the delivery and costs of public health services. Importantly, this targeted solicitation is not restricted to PBRNs that previously received MPROVE and/or DACS awards. ***All PBRN networks that propose to use MPROVE and DACS measures, methods, and/or data in novel ways to study public health D&I processes are invited to apply for this opportunity.***

Research Focus Area: D&I Processes and Public Health Systems

Studies funded under this solicitation should focus on public health system characteristics and strategies that facilitate and/or impede the dissemination and implementation (D&I) of evidence-based public health services. Public health services include programs, policies, activities, and administrative practices that are implemented for the primary purpose of promoting health and/or preventing disease and injury on a population-wide basis.¹¹ Studies funded under this solicitation must focus on one or more public health services included in the MPROVE program, which include communicable disease control, chronic disease prevention, and environmental health protection services.¹² Applicants may choose to examine additional public health services alongside the MPROVE services, as long as MPROVE services receive primary focus in this study.

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Furthermore, DIRECTIVE studies must investigate specific D&I processes that have high potential to influence the delivery and costs of public health services. Because a broad array of organizational, economic, epidemiologic, policy, and social characteristics may influence D&I processes within public health systems, applicants must carefully prioritize the specific D&I mechanisms that will receive attention in the proposed investigation—including precipitating, mediating, and moderating factors. Applicants are strongly encouraged to focus their studies on one or more of the following ***administrative and policy mechanisms*** that have high potential for shaping D&I processes and also high salience for public health decision-makers due to widespread experimentation at state and local levels:

1. Approaches for sharing resources and services across public health agencies and jurisdictions, including regionalization, consolidation, and multi-governmental district models that help agencies realize economies of scope and scale in public health delivery¹³. Novel financing, resource allocation, and cost-sharing approaches for public health services are also relevant to these mechanisms.
2. Quality improvement (QI) processes, practice guidelines, and related performance measurement activities applied within and across public health settings¹⁴. Public reporting activities such as the County Health Rankings and Roadmaps Initiative are also relevant to these mechanisms.
3. Accreditation standards, measures, and incentives for public health agencies such as those developed by the national Public Health Accreditation Board.^{15,16} Examples include PHAB prerequisite requirements for conducting community health assessments and community health improvement planning processes, as well as specific PHAB accreditation standards related to evidence-based practice adoption and workforce development and training.

Recent developments in all three of these areas have the potential to influence the degree to which public health agencies and their partners adopt and implement evidence-based public health services. Examples of the types of research questions to be addressed by studies funded under this program include, but are not limited to:

- How does participation in cross-jurisdictional service-sharing arrangements influence the volume, intensity, reach, and quality of services delivered by public health agencies and their partners? To what extent does participation in these arrangements influence the unit costs of implementing these services? Which types of service-sharing arrangements appear to have the largest effects on implementation reach, quality and costs, and for which types of services?
- Do agencies that adopt QI processes achieve larger improvements in the implementation of evidence-based services, and larger cost reductions, compared to non-adopting agencies? How does participation in QI processes influence the implementation of services that are not the target of improvement efforts? Which types of QI approaches appear to have the largest effects on implementation reach, quality and costs, and for which types of services?
- How does participation in community health assessment and planning processes, as required by PHAB accreditation prerequisites, influence the reach, quality, and costs of services delivered by public health agencies and their partners? Do agencies that conform to the PHAB accreditation

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standards for evidence-based practice (EBP) exhibit higher levels of EBP implementation, and lower costs, compared to non-conforming agencies? Do agencies that conform to the PHAB standards for administrative practices such as communication, community engagement, workforce development, and financial management exhibit higher levels of EBP implementation and lower costs?

- How does the adoption of evidence-based public health services vary with the application of information and communication technologies in public health, such as access to podcasts, online journals, social networks, and other media?
- What factors are most influential in contributing to differences in adoption of evidence-based public health between rural and urban public health jurisdictions? Between low- and high-resourced jurisdictions?

The services studied through this solicitation should have broad applicability to public health practice across the United States and should be consistent with the Institute of Medicine's recommendation for defining a "minimum package of public health services" to be identified for priority funding.¹⁷ Studies should avoid a narrow focus on personal health services that are primarily the responsibility of the clinical health care delivery system and that involve public health agencies primarily as safety-net providers of services. Applicants should provide a coherent rationale for their selection of public health services and D&I mechanisms to study based on the expected impact of these services on preventable disease burden and on resources used within the public health system.

Partner PBRNs within each applicant consortium are expected to work collaboratively with their network participants to ensure that the research focus area is rigorous, feasible, and responsive to the information needs and interests of practice partners. Applicants are encouraged to incorporate design features that enhance the project's relevance and utility for practice partners, such as customized and comparative feedback reports, collaborative analysis and interpretation sessions, and interim briefings on study findings.

PBRN Consortia and Expansion of Practice Settings

Studies funded through this solicitation should establish cross-network partnerships and expand the number of practice settings engaged by each network. Applications must include consortia of two or more public health practice-based research networks registered with the Public Health PBRN National Coordinating Center by the application deadline for this solicitation. Applicants must propose a research project that effectively engages of a minimum of 100 practice settings across the participating networks and must engage these settings directly in the development, refinement, implementation and translation of the research project. Co-principal investigator arrangements in which leadership of the research project is shared between practice-based and research-based PIs are strongly encouraged.

Coordinated Measurement and Analysis

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The Public Health PBRN National Coordinating Center at the University of Kentucky College of Public Health will coordinate the studies and facilitate the use of standardized approaches to dissemination and implementation measurement development, selection and analysis where possible, allowing data from individual studies to be pooled for comparative analysis across large numbers of practice settings. Studies funded under this solicitation will be required to collaborate with the Coordinating Center to ensure the use of consistent methods and data collection, where possible.

ELIGIBILITY CRITERIA

Applicants must meet the following criteria in order to be eligible for grants under this solicitation:

- Applications must include consortia of two or more public health practice-based research networks registered with the Public Health PBRN National Coordinating Center by the application deadline for this solicitation. All applicants must be governmental public health agencies or nonprofit organizations that work in concert with such agencies and are tax-exempt under Section 501(c)(3) of the Internal Revenue Code. Applicant organizations must be based in the United States or its territories at the time of application.
- Applicants may apply for only one award under this solicitation. While all registered networks will receive invitations to apply, only one organization may submit an application on behalf of each consortium. Applicant consortia therefore must determine which organization will serve as the official applicant and provide this information, along with a list of other member organizations, to the Coordinating Center prior to proposal submission through the RWJF online application system. This information may be emailed to PublicHealthPBRN@uky.edu with the subject line “DIRECTIVE Applicant Organization for [PBRN 1] and [PBRN 2] Proposal”. Multiple applications from a single network or a single consortium will *not* be considered for funding.
- Applicants must propose a research project that makes effective use of practice settings participating in their Public Health PBRN and must engage these settings directly in the development, refinement, implementation and translation of the research project. Co-principal investigator arrangements in which leadership of the research project is shared between a practice-based PI and a research-based PI are strongly encouraged.

SELECTION CRITERIA

All proposals will be reviewed by members of the RWJF staff, Coordinating Center staff, and the National Advisory Committee for the Public Health PBRN program. The following criteria will be used to assess proposals:

- **Significance.** The extent to which successful completion of the proposed project: 1) will address one or more existing research priorities in the field of public health services and systems research (PHSSR); 2) will fill important gaps in the evidence base for public health practice and identify strategies with strong potential to produce improvements and/or reduce disparities in the way public health services are delivered; 3) will improve upon the concepts, methods, innovation adoption, and

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service provision that drive PHSSR; and 4) ultimately will benefit or improve public health practice in the participating network(s) and beyond.

- **Investigators.** Are the academic and practice principal investigators, along with other key personnel, well-suited to the project? If the project is being led by new or early stage investigators/practitioners, do they have appropriate experience and training? If established, have they demonstrated an ongoing record of accomplishments in their respective field(s)? Do the academic and practice partners have complementary and integrated expertise? (Note: Co-PI arrangements that include both a practice-based PI and a research-based PI are strongly encouraged.)
- **Innovation.** Does the proposed study challenge and/or seek to shift current public health services and systems research paradigms by utilizing novel theoretical concepts, methodologies, or interventions? Are the concepts, methodologies, or interventions novel specifically to PHSSR or novel in a broader sense? Is a refinement, improvement, or new application of theoretical concepts, approaches or methodologies, or interventions proposed?
- **Approach.** Are the overall strategy, methodology, and analyses well-reasoned and appropriate? Are potential problems, alternative strategies, benchmarks for success, and timelines presented? Is the proposed project feasible? Are practice partners sufficiently engaged in the development, implementation, and application of the research? Are effective strategies included for disseminating results to research and practice audiences within the PBRN networks and to external audiences, including submission of research briefs to the *Frontiers in PHSSR* journal, presentations at the Keeneland Conference in PHSSR, and other venues?
- **Environment.** Will existing partnerships within the practice-based research network environment contribute to the probability of success? Will new inter- and or intra-network partnerships be developed in relation to the study? Are the resources available to the investigators adequate for the project proposed? Will the project benefit from unique features of the environment, target populations, or collaborative arrangements? Are the academic-practice relationships equitable and mutually beneficial?

EVALUATION AND MONITORING

Grantees are expected to meet RWJF requirements for the submission of narrative and financial reports, as well as periodic information needed for overall project performance monitoring and management. We may ask PIs to participate in periodic meetings and give progress reports on their grants. Grantees are also expected to provide mid-course updates on their work to the Coordinating Center, using the monthly PBRN research-in-progress webinars and other channels, so that this progress can be featured in the communication and outreach activities of the Center and RWJF. At the close of each grant, the grantee is expected to provide a written report on the project and its findings. Coordinating Center staff and RWJF staff will work with investigators to communicate the results of the funded projects to scientific audiences, media, policymakers, public health professionals and other audiences, as appropriate.

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APPLICANT SURVEY PROCESS

To help us measure the effectiveness of RWJF grantmaking and improve the grant application experience, we will survey the Principal Investigator (PI) listed in proposal submitted under this request for proposals. Shortly after the proposal deadline, the PI will be contacted by Princeton Survey Research Associates International (PSRAI), an independent research firm, and asked to complete a brief, online survey about the application process and applicant characteristics. This voluntary questionnaire will take no more than 15 minutes to complete. Responses provided to PSRAI will not impact the funding decision for the proposal in any way.

PSRAI will protect the confidentiality of the responses. RWJF will not receive any data that links a name with the survey responses.

If you have any questions about the survey or the use of the data, feel free to email applicantfeedback@rwjf.org.

USE OF GRANT FUNDS

Grant funds are designed to be used to support core activities for implementing the research project within a PBRN network and/or for collaboration in related, multi-network research projects. Funds may be used for project staff salaries, network communications and meetings, project-related supplies and travel, data collection and analysis, and other direct project expenses, including a limited amount of equipment deemed essential to the project. In keeping with policies of the Robert Wood Johnson Foundation, grant funds may not be used to subsidize individuals for the costs of their health care, to support clinical trials of drugs or devices, to construct or renovate facilities, for lobbying, or as a substitute for funds currently being used to support similar activities. Applicants should clearly describe how their proposed scope of work is distinct from any similar PBRN activities already receiving support from RWJF.

HOW TO APPLY

Applicants should submit proposal narratives of no more than 10 single-spaced pages with one-inch margins, accompanied by a budget, budget narrative and curriculum vitae for PI and/or co-PIs. The proposal narrative should include: (1) a statement of the project aims, their significance, and their responsiveness to the objectives of this solicitation; (2) a description of the research approach, including research design, practice settings, measurement approach, data sources, and analytical methods; (3) a discussion of how findings will be disseminated, translated and applied within practice settings; and (4) a timeline and staffing and management plan for the proposed project.

Proposals for this solicitation must be submitted via the RWJF online system. Applicants will receive an e-mail invitation with a link to the RWJF online proposal system and additional instructions. To begin the proposal, select the link in the e-mail and follow the instructions. Before beginning the online proposal process, applicants should define the consortium's organizational membership and determine which organization will be considered the applicant organization. This information should be emailed to

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PublicHealthPBRN@uky.edu with the subject line “DIRECTIVE Applicant Organization for [PBRN 1] and [PBRN 2] Proposal”. **Only one organization from a network in the consortium should apply through the RWJF online application system. Multiple applications from the same network or from the same consortium will not be considered for funding.** To begin the proposal, select the link in the e-mail and follow the instructions. Guidelines and information, including a list of frequently asked questions (FAQs), are available in the online system through the links shown on the left side of all screens.

PROGRAM DIRECTION

Direction and technical assistance for *Public Health Practice-Based Research Networks* are provided by the PBRN National Coordinating Center at the University of Kentucky.

Public Health PBRN National Coordinating Center

University of Kentucky College of Public Health

Lexington, KY 40536

Phone: 859-218-0013; Fax: 859-257-3748

Email: publichealthPBRN@uky.edu

Website: www.publichealthsystems.org/pbrn

Responsible staff members at the national coordinating center are:

- Glen Mays, PhD, MPH, *program director*
- Anna Hoover, PhD, MA, *deputy director*
- Lizeth Fowler, MPA, *program coordinator*

Responsible staff members at the Robert Wood Johnson Foundation are:

- Alonzo Plough, PhD, MPH, *vice president and chief science officer*
- Brian Quinn, PhD, *assistant vice president*
- Naima Wong, PhD, MPH, *program officer*
- Jan Mihalow, *program financial analyst*

Members of the National Advisory Committee are*:

- Robert Kaplan, PhD, National Institutes of Health, *chair*
- Ross Brownson, PhD, Washington University
- Terry Cline, PhD, Oklahoma State Department of Health
- Linda DeGutis, DrPh, independent consultant
- Judith Monroe, MD, U.S. Centers for Disease Control and Prevention
- Carol Moehrle, RN, BSN, Idaho North Central District Director of Public Health
- Carmen Nevarez, MD, MPH, Public Health Institute
- Donna Petersen, ScD, MHS, University of South Florida
- Joan Reede, MD, Harvard Medical School
- Eduardo Sanchez, MD, MPH, American Heart Association

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- Steve Shortell, PhD, University of California
- Patricia Sweeney, JD, MPH, RN, University of Pittsburgh

*Pending Formal Acceptance of Roles

KEY DATES AND DEADLINES

April 23, 2013 (5 p.m. ET)

Deadline for receipt of proposals.*

Mid June 2014

Finalists notified of funding recommendations.

August 15, 2014

Grants initiated.

* All proposals must be submitted electronically through the RWJF online proposal system. Program staff may not be able to assist all applicants in the final 24 hours before the submission deadline. In fairness to all applicants, the program will not accept late or incomplete proposals. While proposals will be accepted until 5:00 p.m. ET, RWJF Help Desk personnel will be available to assist with any difficulties only until 3:00 p.m. ET.

ABOUT THE ROBERT WOOD JOHNSON FOUNDATION

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Sign up to receive email alerts on upcoming calls for proposals at www.rwjf.org/funding.

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REFERENCES

¹ Mays GP, Hogg RA. Expanding delivery system research in public health settings: lessons from practice-based research networks. *Journal of Public Health Management and Practice*. 2012;18(6):485-98.

² Glasgow, R. E. (2013). What does it mean to be pragmatic? Pragmatic Methods, Measures, and Models to Facilitate Research Translation. *Health Education and Behavior*, 40(3), 257-265.

³ Berwick, D.M. (2003). Disseminating innovations in health care. *Journal of the American Medical Association*, 289(15), 1969-1975.

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⁴ Sussman S., Valente T.W., Rohrbach, L.A., Skara, S., & Pentz, M.A. (2006). Translation in the health professions: Converting science into action. *Evaluation and the Health Professions*, 29(1), 7–32.

⁵ Glasgow, R.E., Riley, W.T. (2013). Pragmatic measures: what they are and why we need them. *American Journal of Preventive Medicine*, 45(2), 237-243.

⁶ Klein, K. J., & Sorra, J. S. (1996). The challenge of innovation implementation. *Academy of management review*, 21(4), 1055-1080.

⁷ Ansari, S.M., Fiss, P.C., & Zajac, E.J. (2010). Made to fit: How practices vary as they diffuse. *Academy of Management Review*, 35, 67-92.

⁸ Colditz, G.A., Emmons, K.M., Vishwanath, K., and Kerner, J.F. (2008). Translating science to practice: Community and academic perspectives. *Journal of Public Health Management and Practice*, 14(2), 144-149.

⁹ Mays, G.P., Hogg, R.A., Castellanos-Cruz, D.M., Hoover, A.G., and Fowler, L.C. (2013.) . *American Journal of Preventive Medicine*, 45(6), 752-62.

¹⁰ Mays, G.P. (2012). *Final set of public health delivery measures selected for the multi-network practice and outcome variation examination (MPROVE) study*. Available at: http://works.bepress.com/glen_mays/82

¹¹ Consortium for Advancing Public Health Services and Systems Research. (2012). A national agenda for Public Health Services and Systems Research. *American Journal of Preventive Medicine*, 42, S72-78.

¹² Mays, G.P. (2012). *Selecting measures of public health delivery: Results of a Delphi survey for the MPROVE study*. Lexington, KY: University of KY. Available at: http://works.bepress.com/glen_mays/49

¹³ Center for Sharing Public Health Services. (2014). Resources. Retrieved from <http://www.phsharing.org/resources/>

¹⁴ Public Health Quality Improvement Exchange. (2014). *Browse all submissions*. Retrieved from <https://www.phqix.org/qi-submissions>

¹⁵ Public Health Accreditation Board. (2013). Research questions for accreditation. Public Health Accreditation Board. Available at: <http://www.phaboard.org/wp-content/uploads/Research-agenda-December2013.pdf>

¹⁶ Riley, W.J., Lownik, E.M., Scutchfield, F.D., Mays, G.P., Corso, L.C., and Beitsch, L.M., (2012). Public Health Department Accreditation: Setting the Research Agenda. *American Journal of Preventive Medicine*, 42(3), 263-271.

¹⁷ Institute of Medicine, National Academy of Sciences. (2012). *For the Public's Health: Investing in a Healthier Future*. Washington, DC: National Academies Press.