

Wisconsin Public Health Research Network 2015 Priority Research Questions

The Wisconsin Public Health Research Network (WPHRN) priority research questions (PRQ) were updated in August 2015 using information from an online survey of WPHRN members. A report about the survey and update, *Wisconsin Public Health Research Network Priority Research Questions Update, August 2015* can be found on the [WPHRN website](#).

The 2015 WPHRN PRQ are listed below. Questions or categories have been coded where possible to identify research questions that are also included in the [National Research Agenda for Public Health Services and Systems](#)¹, [Building a Comprehensive Research Agenda: Potential Research Questions for Accreditation](#)², are addressed in the Wisconsin state health plan, [Healthiest Wisconsin 2020, Health Focus Areas](#)³, or are related to the short and long-term priorities of the [Robert Wood Johnson Foundation's Culture of Health](#)⁴. Questions new to the 2015 version of the WPHRN PRQ are so noted.

Public health services and interventions

*Environmental health*⁴

- Does a program of active sampling and testing improve overall water quality of private drinking water wells?
- Do risk-based inspections of facilities result in fewer cases of food borne illness?

*Maternal and child health*⁴

- Does participating in prenatal care coordination (PNCC) and/or the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) reduce the rates of very premature birth?
- Does providing “wrap-around” services at WIC clinics result in improved birth outcomes compared to WIC only services?
- Does integrating additional services with WIC programs (i.e., PNCC, Health Check, immunizations) result in better program outcomes for WIC and/or the integrated services?
- What components (services) within PNCC are associated with positive birth outcomes (e.g., greater gestational age)?
- What outreach strategies are most effective in increasing participation in PNCC?
- What are the hidden cost expenses to a reduction in infant mortality?
- What outcomes would demonstrate the financial value in retaining PNCC programming for health departments? **(New question)**

*Communicable disease*³

- Did implementation of the Wisconsin Electronic Disease Surveillance System (WEDSS) increase health care provider compliance with communicable disease reporting requirements?
- Do the reinfection rates of sexually transmitted infections differ by type of LHD follow-up?

- Are LHD services (e.g. immunizations, sexually transmitted infections prevention and control) provided according to the U.S. Preventive Services Task Force (USPSTF) clinical guidelines and the Guide to Community Preventive Services?
- How has the movement away from public health in school nursing impacted immunization coverage rates among school-aged children? **(New question)**

Service/program priorities ⁴

- What proportion of services provided by local health departments (LHD) in Wisconsin is supported by evidence?
- Are characteristics of community health improvement plan and processes (e.g., leadership, partnerships, data types, formality) associated with greater likelihood or more effective action on identified priorities?
- How do population level services influence health outcomes?
- What are the best methods for documenting population level activities?
- Do LHD effectively address Alcohol and Other Drug Abuse (AODA) issues in both rural and urban communities?
- What LHD programs or services provide the best financial return on investment (ROI)?
- How are LHD in Wisconsin assuring the foundational PH services and cross-cutting competencies? **(New question)**
- How can a more balanced approach of interventions effectively take place on all levels? **(New question)**
- What do LHD need to effectively address policy, systems and environmental change? **(New question)**

Partnership strategies for health improvement ^{3, 4}

- What partnership models are most effective for attaining full integration of community health improvement planning within a jurisdiction?
- What partnership models have been most effective in improving public health outcomes?
- What shared services models have been most effective in improving public health service delivery?
- What are the characteristics of public health activities that are improved by delivery through shared service, multi-jurisdictional arrangements versus those that are most effectively provided through highly localized (e.g. every county) arrangements?
- How should LHD partner with accountable care organizations to achieve the triple aim of improved population health outcomes, better quality patient experience of care, and lower cost per person? **(New question)**
- How do effective public health departments work across sectors? **(New question)**
- What is the return on investment for non-traditional partners to engage in community health improvement? **(New question)**
- What partnership models exist outside of Wisconsin that yield the largest impact and outcomes for the lowest cost in tax levy? **(New question)**
- How do partners view their responsibility in achieving public health outcomes? **(New question)**

Finance^{3,4}

- What LHD characteristics are associated with increasing revenues over time?
- What is the cost of creating a community assessment, a community health improvement plan (CHIP) and a LHD strategic plan in Wisconsin?
- What level of LHD funding is necessary (optimal) for improving or sustaining health outcomes?¹
- Does increased LHD spending result in improved health outcomes?¹
- How can LHD manage their budgets most effectively? **(New question)**
- How can LHD spur more innovative funding models, such as social innovation or impact investing, in the community? **(New question)**
- What is the impact of soft money (grants) on CHA/CHIPP and improved health outcomes? **(New question)**
- What state funding most effectively fills gaps for PH services? **(New question)**
- As general purpose revenue (GPR) and state contributions to LHD budgets decline, how do LHDs shift focus and responsibility to public/private partnerships? **(New question)**
- How are Wisconsin LHD doing with funding foundational PH services? **(New question)**
- What is the difference between counties in Wisconsin regarding how much they each spend on executing the same programs? **(New question)**
- In what ways do LHD have to change their practice in order to be to be viable in the future? **(New question)**
- How and to what level should local governmental public health departments be funded to assure operational capacity? **(New question)**

Organization and structure of public health departments

Local health department accreditation

- How does structure/staffing of LHD influence readiness for accreditation?
- Does LHD accreditation result in improved LHD outcomes or outputs?²
- Does LHD accreditation result in community health improvement?²
- What LHD providers are most effective in promoting accreditation? **(New question)**
- Does an accredited LHD function better than a non-accredited LHD? **(New question)**

Merger

- How do LHD mergers influence local health priorities?
- What are the costs, benefits, and cost savings of LHD mergers, acquisitions, and shared service arrangements?⁴
- Do mergers increase effectiveness of public health programs?

Organizational structure

- How does health and human service organizational structure compared to independent public health organizational structure influence public health staffing and programs?
- How does health and human service organizational structure influence population health outcomes?¹
- How does organizational structure influence service quality?

- Do LHD organized as independent agencies produce higher quality community health assessments as compared to human services agencies?
- Does having an organizational strategic plan influence LHD effectiveness? ¹
- What LHD and community attributes contribute to improving community health status (e.g. greater life expectancy, specific risk indicators)?
- Is the typical governmental structure of LHD conducive to modern day PH practice?
- What LHD organizational structure provides the greatest return on investment?
- What is the best LHD structure to assure foundational PH services? **(New question)**
- How are the LHDs structure/organization related to their outcomes/budgets? **(New question)**

Performance management

- What LHD performance management processes are associated with meeting performance targets?
- What are the best quality indicators for measuring performance of LHDs?

Workforce ³

Competency ⁴

- What work and worker characteristics are associated with LHD workforce competency?
- What is the current level of LHD workforce competency?
- What policy and workforce development programs are needed to improve LHD workforce competency?
- How does workforce education and experience influence public health service delivery?
- How does health officer educational level and experience influence LHD performance compared to PHAB standards?
- What type of provider is required to provide effective PNCC services?
- What are the differences in LHD that have a director with an educational background in budget management and finance vs a director without this educational background? **(New question)**
- What are the most important competencies for public health leadership? **(New question)**
- How many public health workers have systems thinking capabilities or training? **(New question)**

Capacity ⁴

- Does meeting the recommended public health nurse (PHN) to population ratio of 1/5000 have an impact on health outcomes?
- How does workforce turnover influence the implementation of QI initiatives?
- What is the impact of hiring freezes on public health service delivery in a community?
- How do LHD hiring processes influence LHD ability to attract a workforce with the knowledge and skills necessary for contemporary and future public health practice?
- What impact do wage studies have on quality and capacity of PHN workforce? **(New question)**
- Has the PHN to population ratio decreased due to increased population based services compared to individual services? **(New question)**
- How does the trend toward exempt pay for public health nurses influence the ability for LHD to recruit new nurses? **(New question)**
- What is the impact of a team of PH professionals vs all or majority of PHNs on staff? **(New question)**
- How do the outcomes differ between a LHD staffed with primarily PHNs vs other professionals? **(New question)**

- What is the optimal per capita staffing ratio (including PH educators, planners, strategists, etc.) to positively impact local health? **(New question)**

Laws and Policies

Policy-makers

- What type of training for local policy makers is most effective in increasing public health knowledge?
- How does policy-maker knowledge influence local decisions?
- How should elected officials and corporations be engaged to address the social determinants of health? **(New question)**

Tobacco policy^{3,4}

- What was the fiscal impact of smoke-free statutes on newly regulated entities?
- How do tobacco bans impact the use of other addictive substances? **(New question)**
- How has the rate of the use of other drugs and obesity increased as tobacco bans, and taxation have increased? **(New question)**

*Environmental policy*⁴

- Do the economic benefits of frac sand industry outweigh the unknown health effects? **(New question)**
- What are the predicted health effects in Wisconsin of emerging industries (e.g. open pit metallic mining, wind turbines, frac/silica mining, and agriculture)? **(New question)**
- How do policies on green space impact community health outcomes? **(New question)**

*Healthcare reform legislation*⁴

- Did implementation of the Patient Protection and Affordable Care Act (PPACA) decrease utilization of individual-level LHD services (e.g. immunization, PNCC, Wisconsin Well Woman Program, etc.)?
- How has implementation of the PPACA changed or impacted public health services and interventions provided by LHD? **(Modified 2011 question)**
- Has the Public Health Services Act, Section 317 rule change that affected LHD ability to immunize all residents decreased the overall immunization rates of school aged children in Wisconsin? **(New question)**
- What is the impact of Public Health Services Act, Section 317 rule changes on immunization statuses of communities? **(New question)**

*Obesity prevention policy*⁴

- What effect could unhealthy food taxes have on the consumption of unhealthy foods and obesity?
- What level of taxation on unhealthy foods is associated with achieving decreasing consumption of unhealthy foods and reducing obesity?

*Other policies*⁴

- What impact could alcohol/beer tax have on consumption? **(New question)**
- What Wisconsin pilot programs have been effective in addressing racial disparities and how has this been accomplished? **(New question)**

Public health and related systems ⁴

- How should local, governmental public health systems be organized in Wisconsin to best meet emerging challenges?
- How should local, governmental public health systems be organized in Wisconsin to most effectively leverage multi-sector participation and resources?
- How should local, governmental public health systems be organized in Wisconsin to most effectively improve population health outcomes within a given jurisdiction?
- What is most effective prevention message? Where is the message of prevention most effectively delivered? What system partners are essential in assuring prevention outcomes? **(Modified 2011 question)**
- How does regional structure improve or impede local public health alignment? **(New question)**
- How may public health services be articulated in order to support policy change? **(New question)**
- What are the overall costs to society related to redundant services provided by local health departments and medical providers? **(New question)**
- What are the overall costs to society of having a segregated health care infrastructure (patient who receive governmental care vs. main stream health care)? **(New question)**
- How can LHDs encourage use of programs such as Earned Income Tax Credit and Foodshare for those that have socioeconomic challenges? **(New question)**