

PUBLIC HEALTH RESEARCH AND EVALUATION

Note to readers and users of the *Healthiest Wisconsin 2020* Profiles: This *Healthiest Wisconsin 2020* Profile is designed to provide background information leading to collective action and results. This profile is a product of the discussions of the Focus Area Strategic Team that was convened by the Wisconsin Department of Health Services during September 2009 through November 2010. The objectives from this Focus Area have been recognized as objectives of *Healthiest Wisconsin 2020*. (Refer to Section 4 of the *Healthiest Wisconsin 2020* plan.) A complete list of *Healthiest Wisconsin 2020* Focus Area Strategic Team Members can be found in Appendix A of the plan.

Definition

Public health research and evaluation means developing and implementing population-based, practice-based research and evaluation of policies, programs, and outcomes to assure that efficient and effective public health interventions are initiated and based on evidence. It includes:

- Developing a prioritized research agenda focusing on the 23 focus areas of *Healthiest Wisconsin 2020*.
- Initiating and participating in program and policy evaluation and research.
- Publishing and reporting results of research and evaluation in practice to improve population health outcomes and advance public health policy and action.

Importance of the Focus Area

Wisconsin has many resources in place to support research and evaluation to help everyone live better, longer. These resources include state and local health departments and tribes, direct care service providers, educational systems, researchers, payer systems, quality improvement projects, professional associations, non-profit organizations, schools of public health, and the Institute for Wisconsin's Health. A prioritized agenda is needed to assure that research and evaluation are systematically implemented by all members of the public health system.

The technical colleges and institutions of higher education represent a critical asset with strong biomedical research capacity. basic and advanced education is available to support the core governmental public health disciplines including medicine, dentistry/oral hygiene, nursing, health education, nutrition, and environmental and occupational health. The preponderance of research is conducted by institutions of higher education, and although the amount of national resources targeting research has increased, little is directed toward public health research.

Current and future research and evaluation needs

- Enhanced data-sharing collaboration among local health departments by developing comparable data systems that can be readily used for evaluation and research.

- Expanded community-based participatory research in which all collaborators are equitably involved in the research process and the unique strengths of each are recognized.
- Identification of key public health interventions that expand capacity to protect and promote the health of the public, such as developing a nutrition and physical activity agenda; improving environmental and workplace risk communication; decreasing violence and strengthening community capacity to prevent violence; and developing research-based strategies to improve birth outcomes.
- Establishment of sustainable research resources from both the public and private sectors.
- Enhanced capacity to translate research into practice more quickly as a way to implement new strategies to improve health and move community health improvement forward more aggressively.
- Expanded partnerships among local health departments and evaluation of how these partnerships are assimilated into practice (e.g., Perinatal Data System).

There are considerable risks if the availability of public health research does not change. Although research and evaluation efforts will continue at some level they will remain fragmented and their potential isolated. Without a concerted effort to create incentives for public health research through funding, research and evaluation will continue to focus largely on the biomedical model of treating medical conditions rather than on the public health model of prevention. However, with adequate funding, a public health research agenda can be developed and adopted by public health system partners and the results used to focus on prevention and strengthen public health practice.

To move Wisconsin toward the goals of improved health, equity, and elimination of health disparities, it is paramount that research and evaluation move in the same direction. Engaging Wisconsin researchers, focused on Wisconsin population groups, is the best way to assure that research is relevant and useful to the public health system partners. Partnerships that include the sectors identified in the outer ring of the *Healthiest Wisconsin 2020* framework are essential to put research findings into practice, promote effective policies and align systems. Researchers and public health partners require integrated and standardized data systems that provide local, state, and national data.

Many public health programs and services go for years without an evaluation to determine their effectiveness in improving population health outcomes. Infrastructure, the driver of programs, is seldom evaluated since it has been difficult to sustain public health programs long enough to evaluate their success in improving population health outcomes and their ability to modify the powerful factors that influence the health of the public. A comprehensive evaluation model should become a requirement of all health and equity programs. If program evaluation is built into programs from the start, programs can become more effective and efficient, and best practices shared with others.

Currently, there is no process in Wisconsin to share the effectiveness of research, best practices, promising practices, or evaluation outcomes. To move the health and equity of Wisconsin forward, sharing of valid and reliable methods and instruments is needed. A public health data repository that links data, search engines, and evidence-based programs would improve accuracy

and foster translation into practice by the many sectors that constitute Wisconsin's public health system.

Wisconsin Data Highlights

- The 92 local health departments and the Department of Health Services have made notable achievements over the past decade to build partnerships, engaging many of the community partners; this in turn has stimulated growth in program evaluation and participatory community research. These public health departments collaborate on surveillance systems used to track immunizations; Women, Infants, and Children services; communicable diseases; environmental hazards and indicators; maternal and child health services; and others.
- Wisconsin supports both research and community initiatives. The University of Wisconsin Population Health Institute annually ranks the health of every county in Wisconsin and was recently awarded a grant from the Robert Wood Johnson Foundation to develop report cards for all health departments in the U.S. Institutions of higher education are in a strong position to exert influence to assure that sufficient and stable resources are available to support a strong public health system.
- The Wisconsin State Laboratory of Hygiene, Wisconsin's public health reference laboratory, is a national leader. This laboratory provides clinical, environmental, and industrial hygiene analytical services, specialized public health procedures, reference testing, training, technical assistance, and consultation for private and public health agencies. These services are essential to achieve the public health goals of the state.
- The Wisconsin Public Health Council is well-placed to support policy efforts to move a public health research agenda forward.
- Wisconsin has demonstrated strong leadership in the development of electronic medical records and was an early adopter in advancing managed care throughout Wisconsin.
- Direct care services are delivered by provider networks, safety net providers, community clinics, and long-term care-providers. These providers are critical to the public health system in Wisconsin.

Objective 1

By 2020, a broad-based public health research and evaluation council will develop research and evaluation priorities; increase collaboration in research and data sharing; and report to the public about progress.

Objective 1 Indicators

- Establishment of a public health research and evaluation council.
- Publication of priorities and progress reports.

Objective 1 Rationale

A public health research and evaluation council would establish a statewide research agenda rather than having the research needs of Wisconsin determined by more narrowly focused federal and private institutions, agencies, or interests. It would provide a forum in which to share valid and reliable research methods and promote data collection and integrated data systems. It would serve as an expert source for evaluation guidance and a force to incorporate evaluation into public health policies and programs.

Objective 2

By 2020, programs and policies to improve public health in Wisconsin will be science-based, recognized by an expert panel, and include an evaluation.

Objective 2 Indicator

Proportion of programs and policies that are based on research showing effectiveness and that include adequate evaluation to assess effectiveness. (Indicator to be developed.)

Objective 2 Rationale

Program evaluation is an essential organizational practice in public health; however, it is not practiced consistently across program areas, nor is it sufficiently well-integrated into the day-to-day management of most programs (U.S. Centers for Disease Control and Prevention, 1999).

Objective 3

By 2020, research projects will be implemented addressing no fewer than two-thirds of the disparity objectives identified in *Healthiest Wisconsin 2020*.

Objective 3 Indicator

Number of research or evaluation projects either completed or under way judged by the research and evaluation council to meet criteria established by the Minority Health Leadership Council and other stakeholders.

Objective 3 Rationale

Profound disparities exist among people in all stages of life. Disparity can be seen in health behaviors, risk factors (e.g., tobacco use, poor oral health, poor diet [including low consumption of fruits and vegetables], physical inactivity, and environment and worksite hazards), insurance coverage, access to health care, health outcomes, and disease burden. Understanding the underlying causes of these disparities and co-morbidities is necessary to ensuring effective interventions that address economic, structural, cultural, and individual barriers to optimal health are developed and implemented for diverse population groups and communities (Centers for Disease Control and Prevention [CDC], 2006).

Potential evidence- or science-based actions to move the focus area objectives forward over the decade

- Assure that program evaluation is integrated into the day-to-day management of programs.

- Integrate the five elements of program evaluation: (1) use science as a basis for decision-making and public health action; (2) expand the quest for social equity through public health action; (3) perform effectively as a service agency; (4) make efforts outcome oriented; and (5) be accountable (*Framework for Program Evaluation in Public Health*, CDC, 1999; *The Guide to Community Preventive Services*, CDC; *Guide to Clinical Preventive Services*, U.S. Agency for Health Care Research and Quality).

References

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