SECTION 1
OVERVIEW

*Everyone Living
Better, Longer*

*Healthiest
Wisconsin
2020*

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OVERVIEW

The title of this plan, *Healthiest Wisconsin 2020: Everyone Living Better, Longer*, is a statement of pride and a statement of aspiration for improving health and the quality of life for all. People in Wisconsin take pride in their heritage and expect to achieve the goals they set for themselves. Wisconsin is a great state with great people. In establishing the goals for *Healthiest Wisconsin 2020*, the stakeholders who created this plan recognized that some of our communities are not as safe or as healthy as they could be; some people in our state lack basic requirements for healthy living; and opportunities for the pursuit of health are not equal. There is no reason Wisconsin should not aspire to be the healthiest state, but to meet that goal it must first address the persisting disparities in health outcomes and the conditions that contribute to them.

THE PUBLIC HEALTH SYSTEM

The mission of public health has been defined as "the fulfillment of society's interest in assuring conditions in which people can be healthy" (Institute of Medicine, 1988). The public health system refers to the people, programs, structures, and other resources that work together to provide conditions that support the health of a population. This includes state and local governmental public health departments, but also other government agencies, community-based organizations, health care systems, businesses, educational institutions, faith organizations and others.

Although they bear statutory responsibility for planning for and protecting the public's health, governmental public health departments are only one part of the public health system. Other agencies, non-governmental organizations and institutions play critical roles in creating conditions in which people can be healthy. Public health departments place increased emphasis on facilitation, leadership, and stewardship because they cannot be "the primary actor in every situation that affects the health of the public, because assuring a healthy state cannot be accomplished through a single plan of action or through the efforts of a single governmental agency or sector of the economy" (Institute of Medicine, 2003). Wisconsin's public health system must be broad, dynamic, cooperative, and collaborative in order to solve complex problems affecting health and the environment that are greater than any one partner can address alone.

Wisconsin Statute 250.03(L) lists 10 essential services to be carried out by the public health system (originally published as part of the Public Health in America Statement, 1994):

1. Monitor the health status of populations to identify and solve community health problems.
2. Investigate and diagnose community health problems and health hazards.
3. Inform and educate individuals about health issues.
4. Mobilize public and private sector collaboration and action to identify and solve health problems.
5. Develop policies, plans, and programs that support individual and community health efforts.
6. Enforce statutes and rules that protect health and ensure safety.
7. Link individuals to needed personal health services.
8. Assure a competent public health workforce.
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services.
10. Provide research to develop insights into and innovative solutions for health problems.

Those who help carry out one or more of the 10 essential public health services are part of Wisconsin's public health system and important partners in *Healthiest Wisconsin 2020*.

Successful Community Partnership Prepared to Respond to Disaster

"…Flooding in western Wisconsin and eastern Minnesota resulted in the deaths of three people from the flood waters, destruction and damage to over 60 private homes, displacing about 200 people and putting several hundred more in danger of illnesses such as typhoid, cryptosporidiosis and gastroenteritis from contaminated private wells. The La Crosse County Health Department sanitarians, public health nurses and health educators coordinated services with other local health departments; town, village, city, county and state elected officials; fire departments; emergency government; law enforcement; the American Red Cross and others, including across state lines, to keep people healthy. Drinking water samples were collected by various helping organizations and transported to the La Crosse County Health Department laboratory and the Wisconsin State Laboratory of Hygiene for testing. Staff at all laboratories quickly responded to the influx of many times the normal amount of testing by working the needed evening and weekend hours to provide quick results to enable the quick return of families to safe homes."

Doug Mormann, MS
Health Officer and Director, La Crosse County Health Department

Multiple priorities compete for the time and resources of people and organizations. In order for different sectors and organizations to successfully work together (for example, to vaccinate a community, to ensure safe and healthy food or to prevent violent injuries), effective partnerships are required. In effective partnerships, partners share certain values; participate fully in the development of plans and ownership for success; and fairly contribute time, talent, and resources to the achievement of goals and objectives. With effective partnerships, the costs and benefits of participation add up to a positive, or at least an affordable, balance.

The 2010 State Health Plan called for collaborative partnerships as a key infrastructure priority. Since then, partnerships have evolved as a basic public health business process in Wisconsin. *Healthiest Wisconsin 2020* also calls for sustainable partnerships, not only to assure engagement of new partners and communities, but to move the public health system to the next level where all partners demonstrate shared leadership, shared resources, and shared accountability to improve health across the life span, and eliminate health disparities and achieve health equity. The public should expect nothing less.

The Unique Status of Tribes as Partners in Building Wisconsin's Public Health System

"Because of their existence predating the formation of the United States, the tribes are recognized under law as distinct political entities, unique from one to another, independent of the States formed around them, and having a direct relationship to the federated states comprising the United States under the Supremacy Clause and the Commerce Clause of the United States Constitution…. Substantially more than just interest groups or service populations and having their own arrays of concerns and priorities, the tribes are political and jurisdictional partners with the State in addressing issues and solutions in public health."

Jim Hawkins, J.D., Legal Counsel
Great Lakes Inter-Tribal Council, Lac du Flambeau

BUILDING ON THE MOMENTUM OF
HEALTHIEST WISCONSIN 2010

The Strategic Leadership Team (See Appendix A) sought continuity between *Healthiest Wisconsin 2020* and its predecessor state health plan, *Healthiest Wisconsin 2010*. The Team chose not to "reinvent the wheel," but rather to build on *Healthiest Wisconsin 2010* successes and learn from its challenges. Examples of what was learned from the challenges of *Healthiest Wisconsin 2010* include:

- Accountability for plan achievement is necessarily shared—but without organizations assuming specific roles, true accountability is sometimes lacking.

- Scattered groups working on a relatively large number of objectives can disperse energy and miss opportunities for concerted advocacy and action. Identifying a modest number of synergistic objectives for universal attention might remedy this.

- Plan partners need ways to share news about new initiatives, lessons learned, and critical advocacy opportunities. It is important to find ways to foster communication between plan partners, particularly those working on the same objectives.

- It is important to identify targets and indicators for the goals, not only for the objectives of the plan.

- Identification of indicators to measure objective achievement should occur during the planning phase rather than during the implementation phase. This would allow communities to "weigh in" on the indicators as the 10-year objectives are being proposed.

- The objectives and indicators should undergo a rigorous review by program and data experts. Several 2010 objectives were too broad or vague for measurement; many indicators could not be measured for want of data or definition.

- A statewide public health plan requires the full engagement, ownership, leadership, and accountability of the Department of Health Services, not just the Division of Public Health.

- Without robust statewide and local data, there cannot be adequate measurement of progress. Now as then, data collection and management are fractured, intermittently funded, and often rely on categorical grants (federal, national, and private). Health plan monitoring systems cannot depend primarily on grants – they must be built and reliably supported year after year to compare data and determine progress.

- A communications and marketing plan is critical to weave plan goals and objectives into the fabric of society, reach diverse communities and identify new and unconventional partners. Health plan goals compete with many other day-to-day priorities and interests. Plan goals and objectives require considerable marketing ("making the sale") to achieve a sufficient level of commitment and urgency to accomplish them on a meaningful scale.

There were many successes during the past decade, including the following examples:

- Significant expansion of health insurance availability, making Wisconsin's uninsured rate one of the lowest in the nation. Rates of child health insurance rose from 88 percent in 2000 to 93 percent in 2008, and with the passage of BadgerCare Plus in 2008, most are eligible for affordable coverage.

- New programs, taxes and laws reducing tobacco use and exposure to environmental tobacco smoke. Sustained declines in cigarette smoking occurred among youth, adults and pregnant women.

- A shared vision of a "public health system" that extends beyond governmental public health agencies to include many other public and private actors, leading to considerable growth of public-private health partnerships at both state and local levels. Partnerships have become a routine public health system business process.

- Increasing focus on preventable risk factors for disease, injury, disability and premature death and on the underlying determinants of health in planning, policy and programs.

- The passage of key public health laws, including laws requiring local community health improvement planning and requiring health departments to provide the 10 essential services of public health (see Appendix B).

- The expansion of public health as a core mission of the University of Wisconsin School of Medicine and Public Health and the creation of the University of Wisconsin-Milwaukee School of Public Health.

- Development of new and enhanced public health degrees at the master's and doctoral levels, certificate and continuing education programs at the Medical College of Wisconsin, University of Wisconsin System schools, and other colleges and universities across our state.

- Establishment of the Healthy Wisconsin Leadership Institute.

- Establishment of an independent Institute for Wisconsin's Health.

- Funding of community-academic partnerships by the Healthier Wisconsin Partnership Program at the Medical College of Wisconsin, and the Wisconsin Partnership Program at the University of Wisconsin School of Medicine and Public Health.

- Creation of the Wisconsin Public Health Council, by the Governor, to monitor state health plan progress and implementation, as well as progress in coordinating the response to public health emergencies.

- Creation of the Minority Health Leadership Council within the Department of Health Services to address current and emerging public health needs of racial and ethnic minority populations throughout Wisconsin.

- Successful implementation of hundreds of community health improvement projects by collaborative partners statewide, regionally, and locally.

- Incorporation of one or more of the *Healthiest Wisconsin 2010* goals and objectives into the strategic plans of state agencies, statewide collaborations, and local government and private organizations.

- Establishment of websites pointing to evidence-based and science-based practices related to plan objectives, and tracking objective achievement.

- Research and workshops to address ways to improve health and reduce health disparities in Wisconsin.

While *Healthiest Wisconsin 2010* was only one of many reasons for these positive changes, it provided justification, stimulated collaborations, and increased alignment and momentum for many of these initiatives. (See Appendix C for a detailed chart comparing *Healthiest Wisconsin 2010* with *Healthiest Wisconsin 2020*.)

Figure 1 depicts the major elements of the *Healthiest Wisconsin 2020* Framework.

Figure 1. *Healthiest Wisconsin 2020* **Framework**
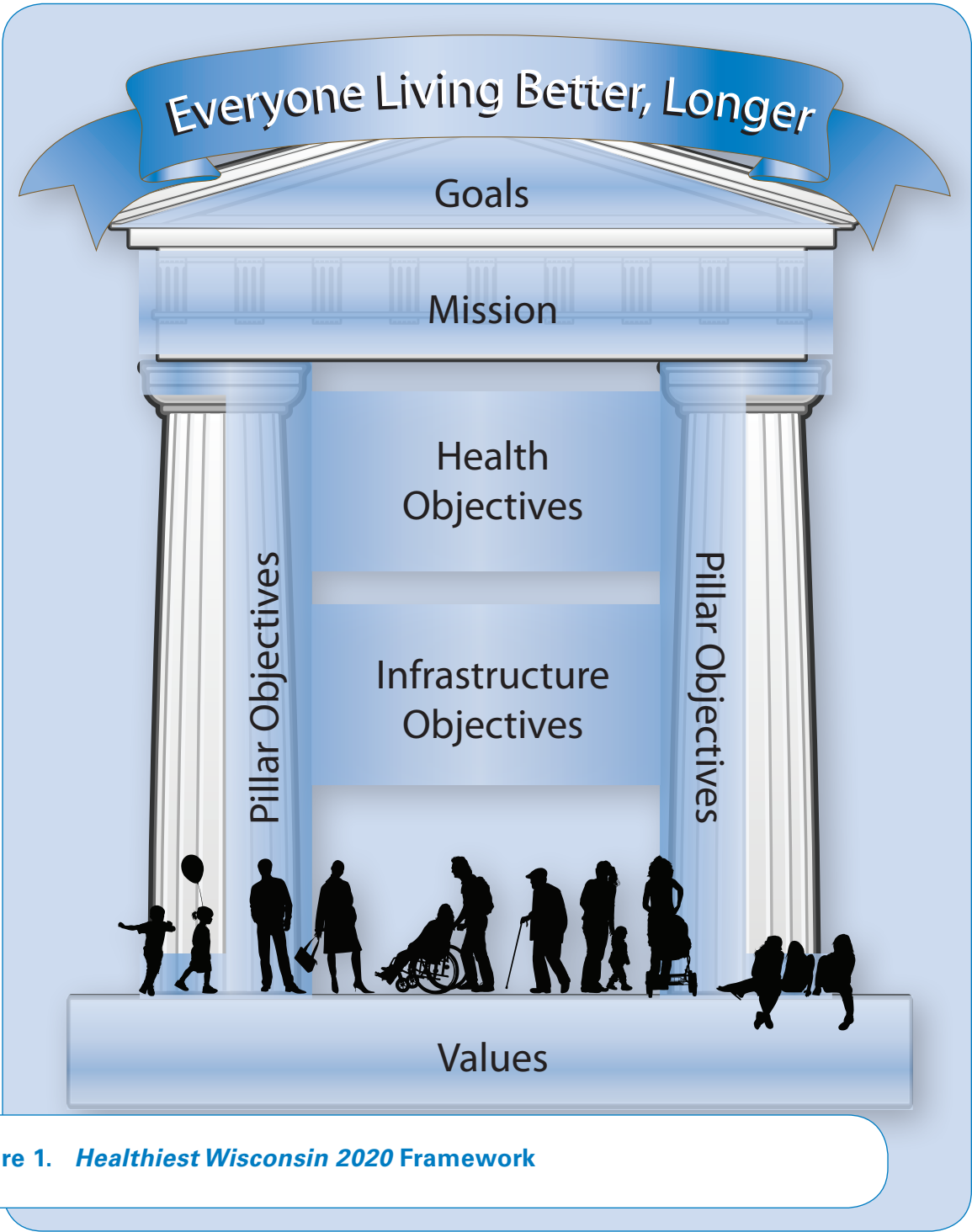
Key building blocks in the prior decade's plan allowed *Healthiest Wisconsin 2020* to begin from a stronger starting position. These key building blocks include:

- **Public health infrastructure focus.** *Healthiest Wisconsin 2020* continues to focus on key infrastructure objectives that strengthen public health system capacity as a whole. Over the past 10 years, work on the state health plan has given partners and stakeholders a better understanding of the importance and complexity of the public health system as a whole, including the essential roles of both government and non-governmental partners. *Healthiest Wisconsin 2020* builds on this shared understanding and commitment to a strong public health system.

- **Public health system partners.** *Healthiest Wisconsin 2020* builds on the strong, mature community-level partnerships that are experienced in organizing collective efforts for improvements. The public health partnership process has become so strong that collaboration has become a routine part of the public health system fabric.

- **Health and infrastructure priority areas.** *Healthiest Wisconsin 2010* organized the state health plan objectives into categories called health and system (infrastructure) priorities. The *Healthiest Wisconsin 2020* Strategic Leadership Team, based on recommendations of two technical teams, determined that the new plan should continue to focus on the 2010 priority areas because Wisconsin's most pressing health and infrastructure concerns had not changed over the past 10 years. The Team also noted that some important areas were missing from the 2010 list of priorities; for example, chronic disease management, emergency preparedness and response, healthy growth and development, health literacy, and research and evaluation. These areas, along with the 2010 priority areas, became the focus areas for the 2020 plan. *Healthiest Wisconsin 2020* contains 12 Health Focus Areas, nine Infrastructure Focus Areas and two Overarching Focus Areas.

New features of *Healthiest Wisconsin 2020* are:

- **A deeper focus on the broader determinants of health in addition to risk factors.** This focus on root causes provides for population-level changes that have the potential for longer-lasting health improvements.

- **Identification of two Overarching Focus Areas,** Health Disparities and Social, Economic and Educational Factors that Influence Health, as a way of assuring that these core issues receive prominent attention. Objectives from these two focus areas are also identified as Pillar Objectives, critical to the overall achievement of the plan's goals and, therefore, a responsibility for everyone.

- **Identification of five themes that recur across many focus areas** and draw attention to common requirements at a systems level. Objectives developed from these themes are part of the set of Pillar Objectives that require everyone's attention.

- **Development of objectives and indicators as an integral part of the planning phase.** Earlier identification of objectives and indicators has allowed for better coordination across the plan. Focus area profiles (to be published separately) provide additional background, data, and examples of evidence-based practices.

- **Development of an implementation proposal.** Implementation planning was a completely separate step for *Healthiest Wisconsin 2010*. A proposed implementation plan is included in *Healthiest Wisconsin 2020*, facilitating a faster transition from planning into action.

ARE WE HEALTHY YET?

By some indicators, Wisconsin's population is considered fairly healthy. In the 2009 report, America's Health Rankings, Wisconsin ranked 12th best overall when compared to other states (United Health Foundation, 2009). This ranking was driven by several areas in which Wisconsin has performed well; for example, the proportion of the population with health insurance; the proportion of children receiving recommended immunizations; and low rates of workplace deaths. In another assessment, Wisconsin was ranked first for overall health care quality in 2007 (Agency for Healthcare Research and Quality, 2007).

Infant Mortality – Calling the Future into Question

"An untimely death is a singular tragedy, but it is never a solitary one. Ralph Abernathy said, "I don't know what the future may hold, but I know who holds the future." The death of an infant ripples outward, shattering families, which splinters communities, which calls that future into question. I worked in African communities for 14 years to improve maternal and child health outcomes, ensuring that children born in West Africa had access to the future. Upon returning to Wisconsin, I found it difficult to accept that our infant mortality rates are worse than some of the communities I had just left. And I refuse to accept it."

Lorraine Lathen, MA
President, Jump at the Sun Consultants, LLC
Program Leader, Lifecourse Initiatives
for Healthy Families, Wisconsin
Partnership Program

Based on such findings, it might appear as though Wisconsin should be satisfied with its overall health, and not need a course change. Unfortunately, those data do not tell the whole story, and conceal some disturbing trends. The following examples illustrate some of these:

- Wisconsin's overall health ranking of 12th best in the nation in 2009 marked a drop from seventh best in 1990. In addition, for four of the past 10 years, Wisconsin was ranked lower, at 15th (United Health Foundation, *America's Health Rankings*, overall rankings by year).

- Wisconsin's state rank for age-adjusted death rates has slipped from 11th to 14th over 10 years. If these trends continue, Wisconsin would slip to 18th place in another 10 years (Booske, et al., 2007).

- Wisconsin ranked 23rd among states in a combined measure of infant health in 2007 (Booske, et al., 2007).

- Wisconsin ranked 28th in a combined measure of elder health in 2007 (Booske, et al., 2007).

- Wisconsin recently ranked worst among states for adult binge drinking, worst for current alcohol use among youth, third in binge drinking among youth, and fourth in the incidence of youth riding with a driver who had been drinking (United Health Foundation, *America's Health Rankings*, 2009).

- Wisconsin ranked 10th worst (and far below the median) on the percentage of mothers who smoked during pregnancy, compared to 31 states with similar data in 2006 (Annie E. Casey Foundation Kids Count Data Center, 2009a).

- Wisconsin was 18th worst among states in the percent of people who use tobacco (United Health Foundation, *America's Health Rankings*, 2009).

- Wisconsin had the sixth lowest proportion of children exercising regularly in 2007 (Annie E. Casey Foundation Kids Count Data Center, 2009b).

- Milwaukee had the second highest rate of the sexually transmitted disease Chlamydia among the largest 50 U.S. cities in 2007; Milwaukee's rate was 50 percent higher than the rate in Chicago (United Health Foundation, *America's Health Rankings*, 2009).

- In 2009, Wisconsin was listed as lowest of the 50 states for per-capita state funding of public health. Wisconsin's spending on public health is about one-third of the national average ($35.43 versus $93.53) (United Health Foundation, *America's Health Rankings*, 2009).

- Between 1993 and 2003, 4,700 hazardous substance release events were identified, resulting in 41,314 evacuees (Wisconsin Department of Health Services, 2007).

- In 2000, there were approximately 175,500 work-related injuries and illnesses in Wisconsin, with nearly one-third resulting in days away from work (Wisconsin Department of Health Services, 2007).

Disparities in health outcomes between Wisconsin racial and ethnic groups and certain other populations are especially severe. Disparities between White and African American residents of Wisconsin are among the most extreme in the nation. Disparities affecting Native Americans, some other racial or ethnic groups, people of differing sexual identities and orientations or gender identities, lower economic or educational status, and people with disabilities are also marked. (Considerably less information is available on disparities for groups other than African American and White populations because of gaps in data or problems with small samples. This is an area for improvement noted in this state health plan.)

- A 2007 report card gave Wisconsin a grade of "D" for infant health disparities (28th rank among states) (Booske, et al., 2007). That report also gave a "D" grade for health disparities among children and young adults and for working-age adults.

- In 2006, Wisconsin had the fourth highest rate of African American infant mortality in the U.S. (Annie E. Casey Foundation, 2009c). Between 2003 and 2005, Wisconsin had the nation's third highest disparity between African American and White infant death rates (Centers for Disease Control and Prevention, 2008).

- Wisconsin also had the second highest Black-to-White ratio of teen pregnancy rates in 2005. Although the state ranked sixth lowest in overall teen pregnancy rates, Wisconsin African American women had the second highest rate among all states (Guttmacher Institute, 2010).

- In 2001-2005, the age-adjusted mortality rate for diabetes was 3.3 times higher among American Indians, 2.3 times higher among African Americans, 1.4 times higher among Hispanics/Latinos, and 1.2 times higher among Asians compared to Whites (Wisconsin Department of Health Services, 2008).

- In 2007-2009, 41 percent of Wisconsin high school students with same-sex sexual contact had considered suicide in the past 12 months, compared with 16 percent of students with only opposite-sex sexual contact (2007 and 2009 Youth Risk Behavior Survey, Wisconsin Division of Public Health, AIDS/HIV Program, unpublished analysis, March 2010).

- The number of HIV diagnoses in 2009 among men who have sex with men (MSM) in Wisconsin is estimated to be 47 times the number of HIV diagnoses among other men and 78 times the number of HIV diagnoses among women. More than one in three (36 percent) of Black/African American MSM in Wisconsin are estimated to be infected with HIV. This compares to 12 percent of Hispanic/Latino MSM and 5 percent of White MSM (Wisconsin Division of Public Health, AIDS/HIV Program, 2010).

- In Wisconsin, more than one in four (27.3 percent) of lesbian, gay, and bisexual adults ages 18-64 reported that they lack health care coverage, compared to 10.9 percent of heterosexual adults (2008 Behavioral Risk Factor Survey, Wisconsin Division of Public Health, AIDS/HIV Program, 2010).

- Among children aged 2-4 enrolled in WIC in 2008, 14 percent were overweight. By race/ethnicity, 10 percent of African American children, 24 percent of American Indian children, 16 percent of Asian children, 19 percent of Hispanic/Latino children, and 11 percent of White children enrolled in WIC were overweight (Wisconsin Department of Health Services, Track 2010 data system).

Discrimination – An Insidious Obstacle to Overcome

"Lesbian, gay, bisexual, and transgender people in Wisconsin would thrive if not for the daily obstacles that stand in their way toward health, well-being, and full participation in society. In the context of safe, supportive communities, they would be full contributing partners in a robust society, with organizations and leadership to support them along the way."

Gary Hollander, PhD
Executive Director, Diverse and Resilient, Inc., Milwaukee

Thus improvement is needed to maintain Wisconsin's healthy advantages, and particularly to address systematic inequities and health disparities. Such systematic and across-the-board health disparities also strongly suggest the need for systematic, as opposed to individual-level, remedies. *Healthiest Wisconsin 2020* provides a framework with specific objectives for meeting the challenge.

WHY DO WE NEED A STATE HEALTH PLAN? ISN'T HEALTH AN INDIVDUAL ISSUE?

The Determinants of Population Health

Health is partly an individual matter, reflecting a person's unique genetic inheritance, use of medical care, and behaviors. While important, these are only part of the picture. As illustrated in Figure 2, Determinants of Population Health, larger-scale policy and practice decisions influence the health of a neighborhood, community, state or nation by shaping the opportunities and options to achieve optimum health (Remington, et al., 2010). The *Healthiest Wisconsin 2020* mission describes these as the "conditions in which people can be healthy."

Figure 2. Determinants of Population Health

Adapted with modifications from University of Wisconsin School of Medicine and Public Health, Mobilizing Action Toward Community Health, County Health Rankings," accessed at http://www.countyhealthrankings.org/about-project/background.
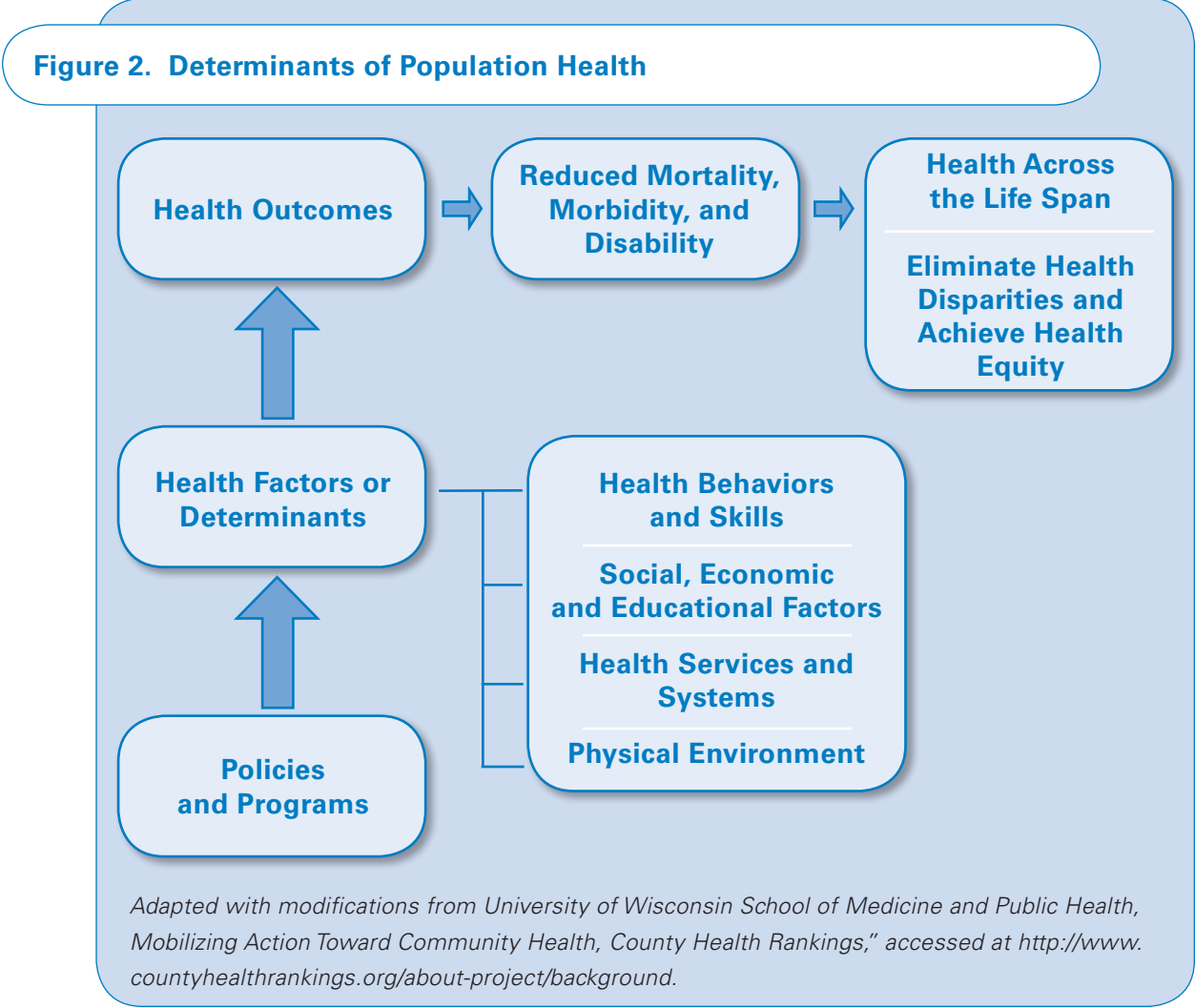
Major health factors include health behaviors and skills (for example, smoking cigarettes or eating nutritious foods); social, economic, and educational factors; health services and systems (for example, quality of and access to medical care); and the physical environment. Decisions that appear to be highly individual, like whether and how we visit a doctor, use medication, smoke tobacco, or help children engage in physical activity, are also highly influenced by many different policies and community conditions. Even as we make our individual choices, those choices are bounded and influenced by major decisions about policies, systems and programs made at the community level or higher that influence available options. While *Healthiest Wisconsin 2020* recognizes that individual behavior matters, it also focuses on high-impact (systems-level) policies that affect the health determinants.

Health behaviors and skills – A health factor

Behaviors such as smoking, overeating, alcohol and drug use, the use of safety measures and physical activity patterns greatly influence health. But these behaviors are only partly a function of personal, conscious choice. Behavior is also learned in families, and influenced heavily by marketing, cultural norms, ease of choice, costs, the expectations of peer networks, and hard-to-change habits or addictions. Product marketers know the choices people make can be influenced by carefully adjusting perception, price, placement, promotion, policies and other factors.

Modifying Individual Behaviors Involves Multiple Partners and Systems

"Many physicians and health care providers contribute to successful patient in-office behavior change by implementing evidence-based interventions for public health problems such as tobacco cessation; alcohol misuse through screening, brief intervention, and treatment; and obesity prevention such as measuring body mass and abdominal girth…. Physician involvement with public health is critical to building the capacity to shift harmful behavior patterns and perceptions for improved overall population health."

Michael Kretz, M.D.
Former Health and Human Services
Medical Advisor
Sr. Croix County, New Richmond

Thus to achieve *Healthiest Wisconsin 2020* objectives related to healthy behaviors, public health system partners will need to work together to adjust policies, the physical environment and the social environment to make healthy behaviors the convenient, desirable, default decision. Making it easy to make the best choices for health is an important strategy. For example, recently tobacco smoking has become more expensive, less convenient, and less accepted as the social norm, while smoking cessation has become far more convenient and applauded. These changes resulted in successful reductions in smoking behavior when earlier efforts often failed.

Social, economic, and educational factors – A health factor

Another group of health determinants is described as social, economic, and educational factors. These include income/wealth; how people meet their needs

for food, shelter, education, and physical security; and the extent to which they have supportive families, friends, cultural norms and traditions. Research shows a particularly strong association of both individual and community levels of health with these health factors. Social and economic factors sometimes play a stronger role in influencing health than the strongest individual health behaviors (see Lantz, et al., 1998; Marmot & Wilkinson, 2005; Kawachi & Kennedy, 1997). The important connection of low income and low educational achievement with health disparities led the *Healthiest Wisconsin 2020* Strategic Leadership Team to include a focus on these populations in plan objectives related to health disparities.

> **Working to Change the Social, Economic and Educational Factors that Influence Health**
>
> "Working in some of Milwaukee's lowest income areas where residents are at particular risk for unhealthy nutrition, lack of physical activity, overweight and obesity, our project worked with eight member agencies of United Neighborhood Centers of Milwaukee to change…food and fitness environments, programming and policy… . Our project was able to leverage significant extramural funds to continue the important work of improving the nutrition and physical activity policies for children, youth and families in the central city."
>
> John Meurer, M.D., and David Nelson, Medical College of Wisconsin; Tony Shields, United Neighborhood Centers of Milwaukee

To cite one example of the cascade effect from such structural social disadvantage, a 2008 study from the Harvard School of Public Health found children living in segregated neighborhoods experience health disparities from inferior access to resources like education, safe recreation, and availability of healthy foods (Acevedo-Garcia, et al., 2008).

Structural disadvantage in groups of people subject to discrimination, bias or stigma is a social and economic factor of particular importance to *Healthiest Wisconsin 2020*. The plan is influenced by the need to address the accumulated legacy of past discrimination, and ongoing legal, social or economic barriers that prevent equal access to conditions for health. The Health Disparities Focus Area Strategic Team, the Strategic Leadership Team and other community voices insisted that the plan specifically address health disparities of groups that experience discrimination based on race, ethnicity, sexual identity or orientations (gay, lesbian and bisexual people and those who do not define themselves in such terms); gender identity (such as transgender people); and people with disabilities.

Health services and systems – A health factor

People need good health care to prevent, identify, treat, and manage disease, injury and disability. Medicine's capacity to improve the length and quality of life continues to grow. Nevertheless, people may rely too heavily on the ability of medical care to restore them to good health, when prevention is more effective at a lower cost to the individual and society. For example, scholars estimate that improvements in medical care added about five years to the expected length of life in the United States between 1900 and 1990, while 25 years were added by other factors such as improvements in the standard of living, environmental hygiene, food and water safety, and other health determinants outside the medical care setting (Bunker, Frazier & Mosteller, 1994). Between 1990 and 2000, it cost approximately $50,000 for medical care to extend the life expectancy of a 15-year-old child by one year (Cutler, Rosen, & Vijan, 2006). In comparison, the estimated cost to add a year of life expectancy by water filtration and chlorination was about $500 in 2003 dollars (and such measures reduced child mortality by two-thirds at the beginning of the 20th century) (Cutler & Miller, 2005).

Furthermore, there is considerable variation in the effectiveness, quality and safety of health services; more care is not always healthier, absent organized efforts to improve the safety and quality of care (Institute of Medicine, 2001).

While individuals make some choices regarding the use of health services, their choices are made in a system that makes many other decisions on their behalf. Whether care is nearby, affordable, coordinated or fragmented, of high or low quality, culturally competent or not, is the product of many decisions made or influenced by government, insurance companies, employers and health care organizations. Thus, although a person's choice of a health care provider may be an extremely personal choice, the organization of our health system is a policy decision.

> ### Coordinated Systems Can Improve Health
>
> "While medical care provider organizations and public health each have important roles in community health improvement, the real strength is in our partnership. By working together, we can more effectively achieve our overall societal goal of living long and living better."
>
> Frank D. Byrne, M.D., F.A.C.H.E., President, St. Mary's Hospital, Madison

Physical environment – A health factor

The last major health factor is the physical environment. This includes things such as air and water quality; food safety; housing, school and workplace conditions; community design for walking and recreation; transportation systems; zoning patterns; and civil and safety engineering. Until recently, much of the focus in this area has been on eliminating hazards like childhood lead poisoning caused by lead in paint, or conditions that encourage the spread of communicable diseases, such as when accumulated water in old tires provides a breeding ground for mosquitoes that carry pathogens like West Nile virus. Similarly, habitat modification such as widening trails and keeping grass and shrubs trimmed can minimize human contact with tick-borne pathogens.

More recently, there has been an appreciation of how changes in community design influence health behaviors and social interactions. For example, a neighborhood design that makes it inviting and safe to use a local park or walk to a store can reduce automobile use, increase safe exercise, increase social interactions and networks and reduce pollution. Thus obesity, social integration (including for people with disabilities), and other health outcomes are increasingly being associated with the design of the "built environment" (Dannenberg, et al., 2003).

Using Scientific Evidence to Improve the Environment

"The story of David and Goliath comes to mind when you compare the marketing budgets and influence the tobacco industry has in our state compared to public health tobacco prevention funding…. Rather than a stone, knowledge was the weapon of choice in this modern day battle with the tobacco giants.

Once Appleton went smoke-free and the smoke and misinformation cleared, honest business owners reported increased sales and greater employee satisfaction with improved working conditions. News spread and soon other communities wanted improved health."

Kurt Eggebrecht, M.Ed
Health Officer and Director
Appleton City Health Department

High-Impact Policy and Systems Change, Alignment, and Collaboration

As long as social policies continue to reproduce less-than-healthy conditions, Wisconsin will continue to experience suboptimal health and health disparities. Under such conditions, simply spending more on medical care or programs to promote healthy behaviors has limited impact.

Sometimes policies are poorly aligned to provide incentives for better health. For example, the U.S. health care system is paid well to treat illness but paid poorly to prevent it. This lack of aligned incentives is one reason why the U.S. has the highest per-person health care costs in the world (almost double those of the next highest nation) while it compares poorly with many nations in average life expectancy.

It is more effective to align incentives toward health. One high-impact approach is to seek single policy changes that simultaneously affect many health factors. An example is smoke-free indoor air laws. Not only does this reduce non-smokers' exposure to chemicals causing cancer, asthma and heart disease, it also makes smoking less attractive to teens, less tempting to those struggling to quit, and a burden to those who must huddle outside to smoke. Thus one law sets many changes in motion, all of which favor health.

(Several of the Pillar Objectives identified in the following chapters are examples of such synergistic, high-impact policy changes.)

Another useful approach is to ensure that many policies and systems are brought into alignment with healthy conditions rather than working at cross-purposes. For decades, federal health agencies preached against tobacco use while other federal agencies subsidized tobacco's production and subverted its regulation. Over time, such policies have been changed so that overlapping federal policies and systems increasingly "pull in the same direction" to make tobacco less, not more, attractive. Not surprisingly, smoking rates are falling. Such policy and system alignment calls for ". . . long-term public and political commitment to ensure that policies, financial and organizational resources, and public and political wills are in place" (Institute of Medicine, 2003).

Effective Public Policy can Change Health Outcomes

"….If we want to greatly improve the health of the people of Wisconsin—and if we're serious about reducing racial and other forms of health inequality—we need to identify and implement changes in public policy that the evidence shows will greatly reduce poverty and joblessness, particularly among African-Americans and Hispanics but also among many low-income Whites in both urban and rural areas."

David R. Riemer
Director, Community Advocates Public Policy Institute
Community Advocates, Inc., Milwaukee

NATIONAL HEALTH CARE REFORM: WISCONSIN READY TO LEAD

The passage of national health care reform (The Patient Protection and Affordable Care Act) is an example of a major realignment in policy that helps align incentives toward prevention and improved effectiveness in both health care and community-level health promotion. This historic legislation, which became law in March 2010, has the potential to help millions of people and small businesses in Wisconsin access better insurance coverage while also rewarding prevention-oriented systems of care that could reduce future costs. Because of the work the state has done over the past seven years to build its health care system, Wisconsin is ideally situated to implement reform.

Wisconsin has already built one of the nation's best systems of health care access through BadgerCare Plus, BadgerCare Plus Core, SeniorCare and FamilyCare, with the second highest proportion of insured residents and affordable access available for all children and most adults. Recent changes in Medicaid contracting provide strong incentives for better care and greater attention to prevention. The state was recently ranked first in health care quality as well, thanks in part to public-private partnerships that collaborate to measure and improve the quality of care, thus helping providers compete to provide the best care. National health insurance reform provides further opportunities to build on Wisconsin's health care successes.

Over the next decade, health care reform implementation will work synergistically with efforts to achieve the *Healthiest Wisconsin 2020* goals. Both are aimed at improving the health of Wisconsin people by increasing their access to care and by supporting high quality and effectiveness in delivering better health outcomes. Both efforts recognize that an ounce of prevention is worth a pound of cure.

Aligning Policies for Health

Major health determinants are sensitive to policies in many different fields. Health care and public health failed to stop childhood lead poisoning as long as policies in the energy, transportation, mining, housing, banking and insurance sectors either ignored or rewarded the creation of lead hazards (Markowitz & Rosner, 2002).

Aligning different policies and systems for health is best accomplished when diverse sectors join to contribute their experience, expertise and influence. The Partnership Model below (Figure 3) depicts the variety of partners whose work can align to improve health in Wisconsin.

Figure 3. *Healthiest Wisconsin 2020: Everyone Living Better, Longer: Partnership Model*

GOALS

Improve health across life span

Eliminate health disparities and achieve health equity

CONDITIONS WHERE PEOPLE CAN BE HEALTHY

Behaviors and skills

Social, economic and educational factors

Health services and systems

Physical environment

Effective policies and systems aligned for better health

Achieving Healthiest Wisconsin 2020 Objectives

Professional societies

Health care & hospitals

State & local health departments

Community based & advocacy organizations

Tribes

Faith communities

Laboratories

Human services

Education

Business, labor finance & commerce

Natural resources & waste management

Justice & law enforcement

Transportation energy & built environment

Housing & building safety

Agriculture, food & veterinary

Civic society

Other policies & systems

State & local elected officials

An impressive ongoing story involves insurers, transportation departments, law enforcement, automobile manufacturers and emergency medical services working together to reduce traffic deaths over several decades in the U.S. (Hemenway, 2009).   As another example, imagine what it takes for a neighborhood to create conditions to become more physically active (an objective in the fights against obesity, diabetes, heart disease, bone and joint disease, and mental illness). To accomplish this goal requires that parents, schools, urban planners, architects, transportation systems, park and recreation staff, employers, civic clubs, health professionals and others work together to reduce barriers, create incentives and prepare people for enjoyable, safe exercise as a part of routine daily activity.

While it may seem that individuals have no place in this scenario, nothing could be further from the truth. Healthy change is often driven by someone with a compelling story or idea that leads to widespread collaborations and major improvements in health at the community or even global level.

> **Tribal Wisdom**
>
> "The further back we go on the chain of events that leads to a problem, the stronger the healing can be."
>
> Sparky Waukau, Menominee Tribal Leader

SUMMARY

Individual factors are an important influence on health, but a person's or family's ability to make good choices is limited without community policies and systems that support healthy choices, healthy environments, health-enhancing social networks, and the resources needed to implement healthy decisions. Wisconsin's fullest health potential will come from communities that have effective policies and systems aligned for health. For this reason, *Healthiest Wisconsin 2020* focuses particularly on strengthening the community's capacity for effective, health-promoting policies and systems.

This state health plan is designed for use by policy makers, organizations, communities and individuals, who need to work together to implement its objectives. The foundation built by past plans, the new emphasis on aligned policies and systems in *Healthiest Wisconsin 2020*, and new opportunities afforded by health care payment reform position Wisconsin for significant progress in the decade ahead.

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