ADDRESSING HEALTH INEQUITIES: AN ENVIRONMENTAL SCAN AND ASSESSMENT OF A LOCAL HEALTH SYSTEM

Prepared by
Lauri Andress, Ph.D.

With special assistance from

Carrie Henning-Smith
Wisconsin Population Health Fellow
2007- 2009

Courtenay Kessler
Wisconsin Population Health Fellow
2008-2010

Submitted September, 2009

TABLE OF CONTENTS

Introduction

This report examines the capacity of a local health system in the United States to tackle health inequities. A methodological tool, the Health Equity Environmental Matrix (HEEM), is introduced first. The tool was created to assess and characterize the health disparity strategies implemented within local health systems. Next, an account of the application of the HEEM in one local health system is described. Finally, the results of the health equity environmental scan are discussed to assess the sufficiency of the health system to fully address health inequities.

The questions considered in this paper are 1) what might a tool and method to assess local health systems appraise if it is to evaluate the range of strategies to address health inequities?; and 2) how does one local health system measure up when the HEEM is used to evaluate the range, scope, and reach of its health equity strategies.

From this, we comment on the assets and deficits in strategies, skills, and competencies that might inform a collaborative scheme to combat health inequities at the local level via the health system.

Background

The adoption of a non-medical approach to addressing health inequities began in Milwaukee, Wisconsin in 2006 when the City of Milwaukee Health Department founded the Center for Health Equity (the Center)[a]. To guide the development of the Center, a voluntary board was convened and labeled the "Start-Up Council." After much deliberation and a review of the research on the social determinants of health, the Start-Up Council declared that the role of the Center would be to use policy change to address the upstream factors that influence whether people have an equal chance to be healthy and stay healthy ("Milwaukee Center for Health Equity," 2008).

The Center's primary strategies focus on (1) Forming key alliances with government and non-government actors to address the social determinants of health; (2) Identifying and clarifying the social and economic policies and systemic arrangements that can increase or decrease health inequities; and, (3) Building the civic capacity of the community to understand and change the policies and systems underlying health inequities.

With the launch of the Center, the members of the Start-Up Council felt it important to have some knowledge of what other health organizations in Milwaukee were doing to address health inequities. At the end of 2007, the primary researcher, Lauri Andress, (LA) was commissioned to gather the information and produce a profile of the health equity efforts occurring within health systems and organizations in the target area of the Center.

---

[a] In 2009 the decision was made by the Start-Up Council to adopt a state-wide focus for the Center making it the Wisconsin Center for Health Equity.

In discussing the scope and purpose of the Health Equity Environmental Scan (HEES), the stated objective of the Start-Up Council was to avoid duplication and enhance collaboration with other organizations that had an acknowledged project targeting health inequities or disparities. The key research questions were the following:

1. Which health organizations in Milwaukee explicitly declared that they were addressing health disparities?
2. Did any other health organizations make a distinction between health disparities and health inequities similar to the characterization articulated by the Center?
3. Did any other health organization have the same mission and approach as the Center?

A Definition of Health Inequities

The Start-Up Council's definition of health equity represents the intentional selection of a concept that expresses the values of fairness and social justice. The definition of health equity adopted by the Milwaukee Center and subsequently used in this paper considers inequities in health to be the result of deliberate public policy choices and systems that, with intentional action, and alternative societal arrangements or policy decisions, might be avoided, diminished, or ameliorated.

Inequity v. Disparity: The Start-Up Council has characterized the Center's mission and work as focused on health inequities as opposed to health disparities.

Described generally, health inequities are avoidable group health differences resulting from unequal social positions caused by considered policy decisions and societal arrangements taken up and implemented by governments (Andress, 2008a).   These government policies and societal arrangements emanate from societal norms and the cultural toolkit.[b]

Hilary Graham (2004), a British researcher, notes that those factors that account for health – the social determinants of health – are not the same as those features of society that produce health inequalities. The features of society that affect health inequalities follow from unequal societal positions that determine the distribution of the social determinants of health.

Graham (2004) goes on to say that social position is based upon societal features including socioeconomic position, gender, and ethnicity and even nationality or sexuality. In Graham's framework, social position is the pathway by which societal-level factors enter and affect the lives of individuals. These factors are social resources like education, employment opportunities, housing, and neighborhoods. Further, social position patterns

---

[b] The attributes of groups or societies that shape how they classify, evaluate, and assign meaning to understand experiences. These attributes include shared values, codes of manners, dress, language, religion, rituals, norms of behavior, and systems of belief. More generally, the cultural toolkit includes a set of distinctive spiritual, material, intellectual, and emotional features that a society uses to interpret experiences.

behavioral and physiological factors, which again can be both health protecting and enhancing (like exercise) or health damaging (cigarette smoking and obesity).

Typically, the use of the term, "health inequities" is meant to infer intentionality and causation. The use of the term is meant to make evident research demonstrating that patterns of group differences in health result from more than just genetics, individual acts of wanton abandonment, poor health habits, or lifestyle. Rather, group differences in health develop in great part from the acceptance of social inequalities in a system that produces unequal social positions which in turn determine an inequitable distribution of resources (Whitehead & Dahlgren, 2006).

In comparison, the term health disparity is thought to conceal the value-judgments, intentional causality, and political decisions that accompany the use of the term health inequities. The word "disparity" itself simply means difference. Accordingly, the term health disparity is thought to merely refer to the differences in the incidence and prevalence of health conditions and health status between groups. The National Institutes of Health (NIH), National Cancer Institute, Center to Reduce Cancer Health Disparities (2009) defines health disparities as "differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups in the United States."

Health inequities, when juxtaposed against health disparities, are characterized as avoidable and involve values-based judgments about acceptable or unacceptable societal arrangements and policies that affect notions of equality and social position.

In selecting the term health equity over that of health disparity, the Milwaukee Center for Health Equity made an intentional decision to encourage action on the sociopolitical systems that result in the unequal distribution of power, wealth, resources, and opportunities and the consequent inequality in more visible social and economic determinants of health, e.g., access to schools and education, healthcare, income, and/or good working conditions and neighborhoods.

The Local System

The City of Milwaukee is the largest city in the state of Wisconsin with a population of approximately 573,000. The city bears a disproportionate burden of health disparities in the state. In 2006, the infant mortality rate for African Americans in the City of Milwaukee was 18.2 deaths per 1,000 births, while for Whites it was 7.3 (City of Milwaukee Health Department, n.d.). Milwaukee City ranks worse than all but one Wisconsin County for Years of Productive Life Lost (YPLL) prior to age 75. The city's rate is 10,632 YPLL per 100,000 people, while neighboring Ozaukee County has the lowest YPLL rate in the state at only 4,039 (Athens, Booske, Taylor, Rohan & Remington, 2007). In addition, while Milwaukee city accounts for only 11% of the state's population, it accounts for 28% of the state's excess deaths (Kempf, Remington, Booske, Kindig, & Peppard, 2006).

Further, these and other health outcomes and health determinants in Milwaukee are distributed along socioeconomic status (SES) lines. A study by Vila, Booske, Wegner, and Remington (2007) showed that of 17 different health measures, almost all of them were worst in the geographic areas of Milwaukee lowest in SES and best in the areas of Milwaukee with the highest SES.

Methodology

The Health Equity Environmental Matrix

The development of the Health Equity Environmental Matrix (HEEM) by LA began with a literature review of national and international journal articles, reports, and writings on the social determinants of health and possible strategies and interventions to address health inequities.

The literature review included several reports from the Prevention Institute (2006) characterizing health disparities, causation, and key community factors that play a pivotal role in determining health and disparities. This scan expanded to other national and international efforts to define causes of inequities and promising strategies. Several reports from an Australian health organization also contributed greatly to the effort to characterize various health equity strategies (Boyd, 2008).

Additionally, data on organizations and their strategies were compiled. Over time, organizations and strategies began to display similarities allowing them to be classified into tactical groups according to shared characteristics. The tactical groups directed further research efforts to examine the range of strategies that might be used to tackle the key factors said to cause health inequities.

The process was iterative and included brainstorming, the clustering of concepts and information, and a search for supporting evidence as the analysis progressed. Based on the literature review and concept clustering, LA identified a set of overarching practices and strategies by which to classify efforts to address health disparities.

In the end, the literature review and synthesis distinguished 14 tactics as adequate to characterize the range of health disparity initiatives in a local health system. These tactics were used to design a Health Equity Matrix for categorizing health equity strategies. Descriptions and definitions of the tactics are provided in Appendix A.

The Health Organization Sampling Frame

A list of organizations likely to be engaged in health disparities initiatives was assembled from two sources. An expert panel comprised of the Start-up Council supplied the first set of organizations. This list was expanded by the addition of another database of organizations assembled by the University of Wisconsin, Milwaukee (UWM), Office of

Public Health Planning. The UWM database consisted of organizations in Milwaukee interested in and considered to be key stakeholders in an effort to develop a school of public health for the University.

The final list of organizations consisted of 128 organizations. These organizations were then categorized into the following groups: community based organizations (CBOs), federally qualified health centers (FQHCs), government organizations, health insurance companies, health providers, universities, private corporations, foundations, and a miscellaneous category that included health care associations.

Foundations and private companies were eliminated from the list in order to isolate the health organizations most likely to have initiatives similar to the Center for Health Equity. Simultaneously, the Start-Up Council submitted an additional five health organizations for analysis. In the end, one hundred four organizations were included in the final health equity environmental scan.

The Health Equity Environmental Scan

The initial part of the health equity environmental scan was carried out in early 2008 by a second researcher (CHS).[c] An Internet search was conducted using each organization's primary name. In those cases where a direct match for the organization was not located, each of the closely related Internet listings was scanned for evidence of a match to the organization.   The websites of each organization were reviewed to produce a profile that contained the following information:

1. The website address
2. Whether the terms: "health disparity," "health disparities," "health equity," or "health inequity" were used on the website
3. Whether the organization conducted any policy advocacy and, if yes, what kind and what issues.
4. Whether the organization provided direct services and, if yes, what kind.

In the second phase of the environmental scan, LA selected all of the profiles for organizations found to have any of the key words on their website. A second review of the websites was undertaken by LA to gather more insight and get a fuller meaning about information in the profiles.

Finally, strategies employed by the organizations were categorized by LA using the Health Equity Matrix and its 14 tactics. If an organization's health disparity strategies corresponded to a tactic, the number one was assigned in the matrix. Alternatively, if the strategy did not fit into a defined tactic, a zero was designated in the matrix for that tactic.

---

[c] Carrie Henning-Smith was a University of Wisconsin Population Health Fellow from 2007 to 2009.

Results

One hundred four organizations were profiled using information from their website. Of these organizations, only 19 (18.76%) were reported to have the words "health disparity," "health disparities," "health equity" or "health inequity" on their websites. For greater detail about the tactics employed by each of the 19 identified organizations, see Appendix B.

A summation of the frequency with which organizational strategies fit into the tactics (Table 2) indicates that the most prevalent health disparity efforts focused on specific populations, risk factors, and lifestyle.

- ➢ Specific populations, 18 organizations;
- ➢ Risk factors, 16 organizations; and
- ➢ Behavior or lifestyle, 15 organizations.

Fourteen of the 19 organizations had disparity efforts that focused on disease categories and/or healthcare quality, access, or cultural competency. Eleven organizations emphasized health disparity efforts based on geographic locations.

The tactics found less often among Milwaukee's health disparity initiatives were the following:

- ➢ Research on health equity, 7 organizations;
- ➢ Education, reports, data collection, 8 organizations;
- ➢ Intersectoral alliances, 9 organizations; and
- ➢ Community systems, 9 organizations

The tactics from the Health Equity Matrix found least frequently in health disparity initiatives were the following:

- ➢ Upstream root factors - 2 organizations
    - o Interventions that attempt to address the societal causes of risk factors and disease outcomes. These interventions extend beyond medical or health interventions and include the alleviation of societal harms ranging from low or no wages to an adequate income or affordable housing. These interventions seek out and address the source of or root causes of health problems. These upstream interventions based on root factors take into account the built environment as separate from the natural environment.
    - o Organizations using tactic:
        - ▪ Department of Health & Family Services, Public Health Division[d]

---

[d] In June 2008, the Wisconsin Department of Health & Family Services was reorganized into the Department of Health Services and the Department of Children and Families, which also includes programs formerly under the auspices of the Department of Workforce Development. This division was announced in November 2007 and included in the Governor's 2007-2009 budget (Wisconsin Office of the Governor,

- Wisconsin Public Health Council

- Community engagement for building civic capacity - 2 organizations;
    - An intervention that either incorporates or exists solely for the purpose of organizing citizens to engage in a deliberative process of public work, collective decision-making, and civic action that impacts the upstream factors that influence health equity.
    - Organizations using tactic:
        - Black Health Coalition
        - Fighting Back, Inc. Milwaukee Community Tobacco Coalition

- Policy initiatives - 6 organizations
    - Intentionally seeking to influence policies and legislation that have an effect on the social determinants of health, *or*
    - Intentionally acting to alleviate health inequities by developing strategies to change laws and policies that influence the social determinants of health
    - Organizations using tactic:
        - Fighting Back, Inc. Milwaukee Community Tobacco Coalition
        - United Way of Milwaukee
        - Black Health Coalition
        - Wisconsin Public Health Council
        - Department of Health & Family Services Public Health Division
        - Wisconsin Primary Health Care Association

None of the nineteen organizations with health disparity efforts in the sample focused on the natural environment.

Table 2. Frequency of Organization Strategies by Tactics

Cluster	Population	Risk Factor	Behavior-Lifestyle	Healthcare, quality, access, cultural competency	Disease	Geographic	Community Systems	Intersectoral alliances; collaboration	Health equity research	Education, reports, data collection	Policy initiatives, action	Upstream root factors	Community engagement, civic capacity, policy action	Environment, air, water, land
Number of Organizations	18	16	15	14	14	11	9	9	7	8	6	3	2	0

The Unique Purpose of the Milwaukee Center for Health Equity

The Milwaukee Center for Health Equity has adopted an explicit, narrow focus on policy and systems change to address social and economic determinants of health that determine social position and thus the distribution of opportunities and important resources. The Center is interested in: 1) increasing the understanding of health inequities and the social

---

2007). The Public Health Division is located in the Department of Health Services which also includes long term care and mental health services.

determinants of health; 2) building the civic capacity of marginalized groups and communities as a means of affecting policy change and improving the psychosocial effects of social exclusion often experienced by groups bearing the burden of health inequities; and, 3) working in a collaborative fashion with civil society and advocacy organizations to change social and economic policies that contribute to health inequities.

The findings of the Milwaukee HEES at the time of the analysis suggest the Milwaukee Center for Health Equity has carved out a unique role for itself in comparison to other local health organizations.   The Milwaukee HEES revealed no other health organizations in the sample that made a distinction between health disparities and health inequities similar to the characterization articulated by the Center. Further, only a few health organizations employed the set of tactics most congruent with the mission of the Center. Tactics most similar to the Center's planned approach include:

Community Engagement: Only two organizations assessed by the HEES were found to employ community engagement by organizing citizens to carry out civic action. These included the Black Health Coalition and Fighting Back, Inc. As one example of community engagement and its relation to health equity, Fighting Back, Inc. has focused on improving the system that addresses alcohol, tobacco, and other drug abuse (ATODA) prevention activities in Milwaukee. At the time of this scan, the organization was part of the Milwaukee Community Tobacco Coalition (MCTC). The MCTC was created to develop and execute a strategic plan that addresses the implementation of anti-smoking education, the reduction of health disparities and the development of policy change specific to tobacco issues. Fighting Back, Inc. also provides youth with the training to communicate with adult policy makers on issues that impact Milwaukee youth.

Policy Initiatives and Action: Six organizations utilized the tactic of seeking to influence policies and legislation to affect the social determinants of health. For example, the Wisconsin Primary Health Care Association is organized to strengthen community health centers. Community health centers play a role in addressing health inequities when they provide front-line, community-oriented, comprehensive preventive care and troubleshoot health and social issues early on, thus reducing the need for full intervention by the health care system. By educating their membership on quality improvement strategies and procedures to provide high quality and culturally competent care, and advocating for policies to assist community health centers, the Wisconsin Primary Health Care Association helps to inform public policy that affects these health centers.

Upstream Root Factors: Two organizations shared the Center's tactic of addressing upstream root factors or societal causes of risk factors and disease outcomes. One of these organizations, the Wisconsin Public Health Council, was also characterized as seeking to influence policy initiatives. The Health Council was created by the 2003 Wisconsin Act 186. By statute, the Council's purpose is to advise the Department of Health Services, the Governor, the Legislature and the public on progress in implementing the state's 10-year public health plan. They are also able to develop and advocate for evidence-based practice and policy recommendations. A review of Wisconsin's State health plan, "Healthiest Wisconsin 2010: A Partnership Plan to

Improve the Health of the Public" revealed several policies aimed at upstream determinants of health such as income (Wisconsin Department of Health and Family Services, n.d.).

Intersectoral Alliances: The Center has enunciated a commitment to multi-sectoral collaborations with other organizations including grassroots issue advocacy groups, citizens, policymakers, other non-health government agencies, and academic researchers both in and outside the public health and health care arenas.

Nine organizations in the Milwaukee area were using this tactic. An example of an intersectoral alliance that reaches out beyond health across sectors is the Milwaukee Homicide Review Commission. The Center for Urban Population Health (CUPH) is a member of the Milwaukee Homicide Review Commission (MHRC).

The multi-level, multi-disciplinary, and multi-agency homicide review process is aimed at reducing the occurrence of homicides in Milwaukee. The MHRC has produced an environment where several sectors and agencies share information and work collectively on violence prevention strategies.

To further expound on the Center's unique mission we may consider what it is not doing in comparison to the other Milwaukee health organizations with an interest in health disparities:

Behavior and lifestyle: The Center will not attempt to change behaviors or lifestyle of groups experiencing health inequities. This deliberate decision to abstain from programming to change behavior and lifestyle rests upon the recognition that social conditions (determined by social position predicated upon social structure) shape the choices that are made either by constraining or facilitating behavioral decisions and efforts to act autonomously or assert self-responsibility.

Healthcare Quality or Access: The Center also does not seek to expand access to healthcare nor address the cultural competency of healthcare providers. While recognizing the importance of healthcare access, the Center's decision is built upon research indicating that social conditions, more than health care, contribute to group differences in health (Schoeni, James, House, Kaplan, & Pollack, 2008).

Bunker, Frazier and Mosteller (1994) have estimated that only about five years of the approximately thirty years of health improvements in U.S. life expectancy over the twentieth century were due to preventive or therapeutic medical practice. This assertion is consistent with more recent research showing that medical care likely accounts for only 10 to 20 percent of the variation in population health in the US and other developed countries (McGinnis & Foege, 1993; McGinnis, Williams-Russo, & Knickman, 2002).

Disease, Risk Factors and Population: In an effort to work upstream on the root causes of health outcomes, the Center has also avoided focusing upon a specific disease category or set of risk factors. A disease state is the manifestation of the linkage of material, social, economic, political, psychological and biomedical phenomena to health and well-being.

Therefore, the concept of working upstream requires that efforts be directed not at the diseases themselves but rather at these root causes that likely cut across diseases.

In the future, the Center may find it more efficient and effective to work in specific geographic areas or with particular populations that have a common social determinant of health or policy issue that they wish to address. Moreover, the Center will give considerable weight to SES in framing problems, strategies, and solutions.

This is in contrast to working with a specific population on a behavioral or lifestyle issue. An example of a behavioral approach might be targeting African Americans and other minority groups to increase knowledge about healthy food choices. Alternatively, a health equity approach might begin by working with that population in relation to the context or social conditions that shape their lifestyle or behavior. This might include a geographic issue like access to healthy food options, or safe places to engage in physical activity in the neighborhood.

A conceptual framework from the U.K.'s National Institute for Health and Clinical Excellence (NICE) explains that upstream, structural factors[e] are mediated through the life course, and/or the life world (Kelly et al., 2009). The life course and life world approaches recognize that health is socially patterned, demonstrating that critical points in a person's life experiences occur in the form of benefits and abuses. Those critical points or experiences on life's journey are like gate-ways, or forks in the road, setting in motion patterns that may endure and have long-lasting effects.

Different social groups have distinctive experiences – patterns that make up their life-course. These experiences may be self-reinforcing, producing and reproducing patterns of health advantage and disadvantage (McGinnis, Williams-Russo, & Knickman, 2002).

Differences between life worlds for different social groups are the social manifestations of differences in physical life chances. Life worlds operationalize the differential experiences of power, exploitation and access to resources. Where life worlds are on display, the impact of upstream societal factors on health may be more easily seen.

For example, the trajectory through life for the child of a single mother receiving welfare benefits and living in public sector housing will be very different from that of a child born to a professional couple in an upper income community. With the life course approach we cut across disease states or risk-factors to see more clearly the gate-ways, benefits, and abuses of children with similar life world.

---

[e] Upstream determinants of health include: institutions that mediate social life; the environment, including potentially noxious substances, microbes and particles which might be present in macro- and micro-environments; socio-political elements such as the economy or supra-national state formations like the European Union, and concomitant legislation, taxation, and the rules and regulation used to manage relations within civil society and between civil society and the state; and, the degree to which the state permits democratic engagement, political and economic freedoms, and free speech.

Thus, an approach to health equity that runs through diseases or risk factors does not immediately display the upstream root causes that lead to a health outcome. On the other hand, a health equity strategy beginning with a place or a population will more readily display differences in life world and life course experiences where the causal mechanisms of health inequities operate, helping to more clearly illuminate the pathways to ill health (McGinnis, Williams-Russo, & Knickman, 2002).

The Milwaukee Center for Health Equity has set out to understand the impact of life worlds on resources, opportunities and health outcomes. The Center will address health inequities by concentrating on the social conditions and contextual issues set up and reinforced by public policies.

How the Local System Measured Up Under the HEES

Milwaukee's local health system is doing a moderately good job of designing a system capable of addressing health inequities. Many of the organizations with a declared health disparity interest maintain a traditional orientation working with racial/ethnic populations. The incidence of health disparities by SES is sometimes noted. The analysis, however, picked up very few initiatives that focus on groups of low SES. The activities largely focus on behavior/lifestyle changes, disease categories, risk factors, or heath care access as a way to get at group differences in health.

On the other hand, roughly half of the health organizations that claim to have health disparity initiatives have a Community Systems view and have formed cross-sector alliances that extend outside health. A Community Systems orientation takes into consideration the social context or system responding to the elements in a community that can either facilitate or act as a barrier to improved health behaviors or the ability to access much needed resources.

Nevertheless, Milwaukee's local public health system could increase efforts to design partnerships with sectors outside health that focus on other determinants of health such as the environment, community development, neighborhoods, educational systems, or income/asset/wealth-building initiatives.

There appears to be a scarcity of health disparity strategies and actions aimed at policy initiatives that seek to influence the social determinants of health. Very few health organizations have dedicated strategies to address upstream root factors or the socio-economic causes of risk factors and disease outcomes. This is in comparison to a reality where many Milwaukee health organizations with policy initiatives focus exclusively upon advocacy aimed at expanding healthcare access.

While the HEES is not capable of determining this directly, evidence from the organization's websites indicates health disparity programs that could benefit from more knowledge about the social determinants of health. A better grasp of the evidence base on the social determinants of health and health equity including the actions and policies

that are most likely to promote health and equity should be more carefully studied by Milwaukee health organizations.

One result might be adopting a social determinants framework of the monitoring role that health organizations traditionally fulfill. There is a need to develop and track a set of indicators for the social determinants of health, e.g., Economic Security, Livelihood and Security, Education, Environmental Quality, Health Care Access, Housing, Civic Involvement/Political Access, Community Safety and Security, and Transportation.[f]

Discussion

To date, research on the social determinants of health has focused on theories that tie health inequities to social position and levels of inequality present in a society (Wilkinson & Pickett, 2009). Social position and social interactions, structured by societal features including rules, policies, regulations, institutions and systems, are the pathways by which societal-level resources enter and affect the lives of individuals (Gairdner, 1862).

Social position patterns a group's share of resources, the kinds of social exclusion and inclusion experienced, and the behavioral and physiological factors, which can be both health protecting and enhancing (like exercise, a sense of control and autonomy, access to affordable housing and quality foods) or health damaging (cigarette smoking, obesity, or the over-production of cortisol linked to chronic anxiety and diseases).

How do we as a society begin to tackle health inequities brought on by social status as patterned by social conditions? More to the point is the question of how the health sector should respond to this problem. Efforts to address health inequities require new approaches that must extend beyond the traditional practices of the health sector. On the whole, the principal idea is that the health sector must be more or at least equally as concerned about social conditions that determine behavior and lifestyle practices as they are concerned about behaviors and individual actions.

First, socioeconomic policies, systems, and institutions that determine social position must be challenged. Tackling these systemic factors requires an exercise in democracy together with community will-making, public deliberation, and public agenda setting. At every stage of the process, competing values and considerations of social and market justice, and definitions of fairness, self-responsibility and the role of government will be important underlying considerations.

---

[f] The University of Wisconsin School of Medicine and Public Health, Population Health Institute has produced a series of "Healthiest State" reports at **www.pophealth.wisc.edu/uwphi**. The four-year project will identify effective investments and monitor Wisconsin's progress towards becoming the nation's healthiest state with less health disparity. They plan to assess Wisconsin's population health in a comparative format that considers the population health of other US states and integrates a social determinants perspective.

Previous research examining the knowledge, skills, competencies, and culture of a state public health division helped to define integral components of any health system with a goal of addressing health inequities. Called "health equity readiness" (HER) the four broad overarching concepts include: 1) public policy and political efficacy; 2) multi-sectored collaboration; 3) social determinants of health knowledge; and 4) a social change ethos (Andress, 2008b). See diagram at
http://www.bridgingthehealthgap.com/images/health_equity_slidelg.jpg

Public policy and political efficacy:
Part of an effective health equity strategy requires an understanding of the public policy process. The public policy process includes an appreciation of agenda setting, building social movements, and community organizing. Additionally, a health system must adopt a broader policy agenda that extends beyond health care access.

The role of community and the public deliberation process is of great importance in changing policies that foster social conditions and determine social status. Interactions with the community can no longer be a popular tool for legitimizing pre-determined programs, agendas, and research efforts (Abelson, 1999).

Multi-sectored collaboration:
Many skilled organizations have been working on upstream social conditions and related policies at the community level for quite some time. It is neither advisable nor necessary for health systems to begin anew or undertake efforts to tackle social determinants of health alone. Accordingly, the health sector must become a partner in multi-level strategies and collaborations that cross the boundaries often interposed in academics, research, and government settings.

Health efforts aimed at tackling health inequities cannot be solved by an isolated institution, system, or program. Instead, the health sector will need to aim for health disparity strategies that cut across a broad range of sectors, and partnerships among systems, programs, and disciplines with varied knowledge, skills, and resources.

Social determinants of health knowledge:
Also of great significance is the creation of a workforce trained in the social determinants of health (Davey Smith & Krieger, 2008). This new information is expressed as both an ethical ideology and a knowledge base built around the theories, research, and evidence on the social determinants of health.

Social change ethos:
Lastly, and perhaps most importantly, health systems will be called upon to adopt a new ethos. In addition to physical and biological change, health systems will need to comprehend and participate in social change. As an agent of social change, a health organization has the legal discretion and resources to lead and participate in efforts to alter public policies and institutional systems that have the effect of intentionally or unintentionally widening the gap between the wealthy and everyone else (Box, 2007).

Limitations

The Health Equity Environmental Scan only examined health organizations in a local system. External validity or the ability to apply the health equity environmental scan to other health systems at the national or state level is questionable. Health systems at the national and state level may have other ways of functioning that result in different or more distinctive strategies to address group differences in health. For example, state health systems do not typically provide services or interventions. Rather they have greater responsibilities for long-range planning, data collection and assessment, as well as grant-making capabilities. These functions might require the addition of other tactics to the Health Equity Matrix.

Further, the question of whether the HEES might be used to assess a system of organizations outside the health sector should be considered. It has already been stressed that a complex set of factors are responsible for group differences in health. A health equity system at the local level necessarily requires a broad range of partners and collaborative initiatives. There are many organizations outside the health sector that could be assessed for their suitability to be part of a collaborative, multi-sectoral system to fight health inequities. For example, many community-level issue advocacy groups exist to address public policies that focus on issues such as wages, affordable housing or early childhood education and development. Foundations often have grant-making strategies that can contribute to improvements in the social and economic determinants of health including community development or the creation of an effective education system.

A comprehensive HEES, assessing entities outside the health sector, would have to take account of the different kinds of organizations that must exist collaboratively to make up a complete strategy to address health inequities. Further, the equity environmental scan would have to more thoroughly assess the proficiency of the system in several areas not sufficiently gauged by the current Health Equity Matrix. These areas include public policy skills and political efficacy, knowledge on the social determinants of health, and the presence of a social change ethos.

To accomplish this comprehensive HEES, a different sampling frame would be required along with a new way to determine who should be included in the assessment. Additionally, to more fully evaluate public policy skills and political efficacy, knowledge on the social determinants of health, and the presence of a social change ethos, a mixed methods research scheme with different data gathering and analysis techniques would need to be incorporated into the HEES (Greene, 2007).

The reliability or repeatability of the current Health Equity Matrix may also be questionable. It is not clear whether the matrix would provide the same result over and over again. First, the issue of inter-rater reliability needs to be resolved. Two researchers reviewed the profiles, but only the primary researcher (LA) analyzed the health disparity strategies and profiles and made assignments to the tactics.

In addition, the construct validity of Health Equity Matrix categories may be problematic. The degree to which inferences can legitimately be made from the definitions of the categories in the matrix to the theoretical constructs on which those definitions are based may be questioned. Further, the predictive validity of the matrix should be examined more closely. The tactics and definitions that make up the Health Equity Matrix should be reviewed by an expert panel. There are bound to be varying degrees of debate and disagreement over the definitions of the tactics and the need for additional descriptions to capture other health equity strategies.

For example, the research-based practice of involving the community in a study from its conceptualization to its evaluation, referred to as community-based participatory research (CPBR), might be a separate health equity strategy and cluster in the matrix. While the matrix includes a tactic to characterize strategies targeting the citizens of a community, its definition specifically excludes CBPR.

The current matrix tactic, Community Engagement for Civic Capacity, focuses on building community civic capacity to engage citizens in the democratic process as a separate, viable health disparities strategy. This cluster is based on research indicating that groups of low social status often experience health inequities not only as a result of very few resources but also because of social exclusion and feelings of powerlessness and lack of autonomy. It specifically refers to building the power of marginalized groups to be democratically engaged in public policy decision making. This kind of community interaction results in two outcomes: 1) an expansion of the policy agenda to include the needs of less powerful groups; and 2) an alteration in the group's visible status and internal sense of being sociably excluded and powerless. Thus, CBPR may be added to reflect a related but somewhat conceptually different tactic.

The health disparity tactic labeled as "Research on Health Equity" may need to be altered. As it stands now, the cluster comprises three categories of strategies that may or may not be different. The first category captures basic, clinical, social, and behavioral research on health disparities carried out by institutions such as the National Institutes of Health. The other health equity research categories might better be characterized as "upstream" research because of their focus on pathways, including relationships to root causes and health outcomes: (1) research on the measurement and tracking of the determinants of health inequities; and, (2) research linking root factors to poor health outcomes including mechanisms, causality, and linkages.

The tactic labeled as Policy Initiatives and Action may be challenged because of its narrow definition. The matrix definition focused on intentional actions taken to influence policies and legislation that have an effect on the social determinants of health such as wages, educational systems, or community development for instance. As pointed out earlier, many health organizations, particularly hospital systems, focus on policy but concentrate on proposals aimed at expanding the capacity of the system to deliver more core services. Tactics of this kind were labeled as Health Care Quality. Some may feel that policy efforts to expand access to healthcare are 1) viable health equity strategies that

deserve to be counted under policy initiatives; and/or 2) an additional health equity tactic specifically labeled "Health Care Services."

Conclusion

The Milwaukee Center for Health Equity has carved out a unique role for itself based on the research and theories on the social determinants of health. Their primary interest, as distinct from other Milwaukee health organizations, is to transform public policies that establish social conditions. The Center is tackling health inequities by working upstream on the social and economic policies that set up variations in social status and the inequitable allocation of resources.

To accomplish the goals of the Center it was critical to understand the range of strategies in use within the local system to address health disparities and to identify potential partners and opportunities to collaborate. A health equity environmental scan assessed the health disparity efforts of local health organizations in Milwaukee in comparison to the health equity concept that informs the Center.

Using a matrix comprised of 14 health equity tactics, evidence gathered from the HEES demonstrates enormous differences in orientation between local Milwaukee health organizations and the Center. The findings emphasize that, if future health disparity strategies are to succeed, Milwaukee health organizations will need to target not only racial/ethnic groups, behavioral change, and expanding access to healthcare, but social condition stressors and public policies as well.

The effort to design the HEES including a range of tactics to capture the numerous strategies employed by health organizations needs to be revisited. The definitions, breadth, and scope of tactics should be reviewed by an expert panel. A vigorous discussion on the merits of assessing just health organizations or including other organizations in the HEES should be undertaken. Last, an overarching framework might be developed to guide the Health Equity Matrix and tactical categories. One possible set of overarching concepts to aide in refining the Matrix could come from the existing "health equity readiness" concepts: 1) public policy and political efficacy; 2) multi-sectored collaboration; 3) social determinants of health knowledge; and 4) a social change ethos (Andress, 2008b).

There is considerable controversy among epidemiologists and public health professionals about how far one should go in influencing political processes (Mackenbach, 2009). Never the less, during the past decades, the idea that health needs to be brought into the political arena has become part of mainstream public health. In fact, this idea already has a strong foothold in many modern textbooks of public health, and "influencing government policy" has become a standard ingredient of handbooks of public health practice (Pencheon, Guest, Melzer, & Muir Gray).

Rudolf Virchow, a nineteen German physician, public health activist, and anthropologist is famous for his observation that "medicine is a social science, and

politics nothing but medicine at a larger scale." Like Virchow and many others in public health today, the Milwaukee Center for Health Equity believes that when whole populations are sick, political action may be needed to cure them.

Appendix A.

Definitions of Tactics for the Health Equity Matrix
March 2008

1. POPULATION
   - An intervention based upon the characteristics of the targeted group. Examples: African-American males ages 18-24, Hispanic girls ages 12-18, Single mothers

2. RISK FACTOR(S) – addressed directly or through grants
   - An intervention that addresses an environmental, behavioral, or biologic factor confirmed by temporal sequence, usually in longitudinal studies, which if present directly increases the probability of a disease occurring, and if absent or removed reduces the probability. Risk factors are part of the causal chain, or expose the host to the causal chain. Once disease occurs, removal of a risk factor may not result in a cure (Beck, 1998).

3. BEHAVIOR, LIFESTYLE, HEALTH EDUCATION – addressed directly or through grants
   - An intervention that has as its goal strengthening health knowledge and skills that are thought to be essential in health behaviors and good health outcomes. Targeting a group or population experiencing health inequities, the intervention may use individual skill building, e.g., safe sex communications or negotiations, or community education efforts such as health fairs, brochures, or forums.

4. HEALTH CARE QUALITY OR ACCESS, CULTURAL COMPETENCY
   - An initiative that has as its goal improving health care inequities by focusing on access to and/or the quality of health care delivered to groups experiencing health inequities based upon race/ethnicity or socioeconomic status.

5. DISEASE – addressed directly or through grants
   - An intervention that addresses any abnormal condition of the body or mind that causes discomfort, dysfunction, or distress to the person affected or those in contact with the person.
   - Covers injuries, disabilities, syndromes, symptoms, deviant behaviors, and atypical variations of structure and function.

6. GEOGRAPHIC AREA
   - An intervention determined by the geographic location of the project.

7. COMMUNITY SYSTEMS
   - An attempt to address health inequities that takes into consideration the social context or system in which a population lives and works. The intervention or initiative is interactive with the context adapting to the elements in a community that can either facilitate or allay efforts to address a health problem.

8. INTERSECTORAL ALLIANCE – COLLABORATION
   - A recognized relationship between part or parts of the health sector with part or parts of another sector that has been formed to take action on an issue to achieve health outcomes or intermediate health outcomes in a way that is more effective, efficient, or sustainable

than could be achieved by the health sector acting alone (World Health Organization, 1997).

9. RESEARCH ON HEALTH EQUITY – addressed directly or through grants
- Basic, clinical, social, and behavioral research on health disparities, e.g., National Institutes of Health
- Research on the measurement and tracking of health inequities using a set of indicators that encompass the social determinants of health, e.g. the Connecticut Association of Directors of Health have created a health equity index that tracks nine social determinants linked to health status: Economic Security, Livelihood and Security, Education, Environmental Quality, Health Care Access, Housing, Civic Involvement/Political Access, Community Safety and Security, and Transportation.
- Research linking root factors to poor health outcomes including the mechanisms, causality, and linkages

10. EDUCATION – REPORTS, DATA COLLECTION
- Information, education, and awareness on the subject of health equity or health disparities for the purpose of increasing knowledge about the topic targeting the community.
- Publishing reports, producing evidence of and/or collecting data that documents the existence of health inequities

11. POLICY INITIATIVES AND ACTION
- Intentionally seeking to influence influencing policies and legislation that have an effect on the social determinants of health
- Intentionally acting to alleviate health inequities by developing strategies to change laws and policies that influence the social determinants of health

12. UPSTREAM ROOT FACTORS
- Interventions that attempt to address the societal causes of risk factors and disease outcomes. These interventions extend beyond medical or health interventions and include the alleviation of societal harms ranging from low or no wages to an adequate income or affordable housing. These interventions seek out and address the source of or root causes of health problems. These upstream interventions based on root factors take into account the built environment as separate from the natural environment.

13. COMMUNITY ENGAGEMENT FOR CIVIC CAPACITY – POLICY ACTION
- An intervention that either incorporates or exists solely for the purpose of organizing citizens to engage in a deliberative process of public work, collective decision-making, and civic action that impacts the upstream factors that influence health equity.

14. ENVIRONMENTAL, I.E., AIR, LAND, WATER
- Interventions that focus on those aspects of human disease and injury that are determined or influenced by factors in the natural environment including the pathological effects of various chemical and biological agents. For "Built Environment" see "Upstream Root Factors."

Appendix B.

Table 1. Milwaukee Health Equity Matrix

Milwaukee Health Equity Matrix	TACTICS													
	Population	Risk Factor(s)	Behavioral Lifestyle, Health Education	Health Care Quality or Access, Cultural Competency	Disease	Geographic Area	Community Systems	Intersectoral Alliance–Collaboration	Research on Health Equity	Education, Reports, Data Collection	Policy Initiatives and Action	Upstream Root Factors	Community Engagement for Civic Capacity Policy Action	Environmental, i.e., Air, Land, Water
ORGANIZATIONS	PRESENT = 1 NOT PRESENT = 0													
Children's Hospital of Wisconsin, Children's Research Institute (8)	1	1	1	1	1	1	1	0	1	0	0	0	0	0
UW-Madison School of Medicine & Public Health, Center for the Study of Cultural Diversity in Healthcare (8)	1	1	0	1	1	1	1	1	1	0	0	0	0	0
Medical College of Wisconsin (10)	1	1	1	1	1	1	1	1	1	1	0	0	0	0
University of Wisconsin–Milwaukee College of Nursing (9)	1	1	1	1	1	1	1	1	1	0	0	0	0	0
Center for Urban Population Health (6)	1	0	0	1	0	1	1	1	1	0	0	0	0	0
County of Milwaukee General Assistance Medical Program (3)	1	0	0	1	0	0	1	0	0	0	0	0	0	0
Columbia–St. Mary's Serving Our Community (6)	1	1	1	1	0	1	1	0	0	0	0	0	0	0
Wisconsin Primary Health Care Association (5)	1	1	0	1	0	1	0	0	0	0	1	0	0	0
Marquette Neighborhood Health Center (5)	1	0	1	1	1	1	0	0	0	0	0	0	0	0
Aurora Health Care, Sinai Medical Center, Family Practice Residency Program (8)	1	1	1	1	1	1	1	0	0	1	0	0	0	0
Froedtert & Community Health, Inc. Commitment to Community (6)	1	1	1	1	1	1	0	0	0	0	0	0	0	0
Cigna Health Care (6)	1	1	1	1	1	0	0	0	1	0	0	0	0	0
Cream City Medical Society (CCMS) (5)	1	1	1	1	1	0	0	0	0	0	0	0	0	0
United Migrant Opportunity Services, Inc. (UMOS) (5)	1	1	1	0	1	0	0	0	0	1	0	0	0	0
Fighting Back, Inc., Milwaukee Community Tobacco Coalition (8)	1	1	1	0	1	0	0	1	0	1	1	0	1	0
United Way of Milwaukee (5)	1	1	1	0	0	0	0	1	0	0	1	0	0	0
Black Health Coalition (10)	1	1	1	1	1	0	0	1	1	1	1	0	1	0
Wisconsin Public Health Council (11)	1	1	1	0	1	1	1	1	0	1	1	1	0	0
Department of Health and Family Services Public Health Division (9)	1	1	1	0	1	0	1	1	0	1	1	1	0	0

References

Abelson, J. (1999). Bridging Academic disciplines and Policy sectors: Understanding the influences on community participation, Centre for Health Economics and Policy Analysis working paper series 1999-03. Hamilton, Canada: Centre for Health Economics and Policy Analysis, McMaster University.

Andress, L. (2008a). The concept of health equity. Retrieved from **http://www.bridgingthehealthgap.com/uploads/The_Concept_of_Health_Equity_1.pdf**

Andress, L. (2008b) Health equity readiness: (1) Competences and (2) Summary: the Wisconsin Division of Public Health assessment. Retrieved from **http://www.bridgingthehealthgap.com/uploads/health_equity_readiness_wisc_work_andress.pdf**

Beck JD. (1998). Risk revisited. Community Dentistry and Oral Epidemiology, 26(4), 220-5.

Box, R. C. (2007). The public service practitioner as agent of social change. In R. C. Box (Ed.), Democracy and public administration (pp. 194-211). Armonk, NY: M. E. Sharpe.

Boyd, M. (2008). People, places, processes: Reducing health inequalities through balanced health approaches. Victorian Health Promotion Foundation. Retrieved from **http://www.vichealth.vic.gov.au/~/media/ResourceCentre/PublicationsandResources/Health%20Inequalities/PeoplePlacesProcesses.ashx**

Bunker, J., Frazier, H., & Mosteller, F. (1994) Improving health: Measuring effects of medical care. Milbank Quarterly, 72(2), 225-58.

City of Milwaukee Health Department. (n.d.). Infant mortality. Retrieved from **http://www.city.milwaukee.gov/WomenandChildHealth23777/InfantMortality.htm**

Athens, J. K., Booske, B.C., Taylor, K.W., Rohan, A.K., & Remington, P.L. (2007). Wisconsin county health rankings, 2007. University of Wisconsin Population Health Institute.

Davey Smith, G., & Krieger N. (2008). Tackling health inequities. British Medical Journal, 337, a1526. doi: 10.1136/bmj.a1526

Gairdner, W.T. (1862). Public health in relation to air and water. Edinburgh, Scotland: Edmonston & Douglas.

Graham, H. (2004). Social determinants and their unequal distribution: Clarifying policy understandings. Milbank Quarterly, 82(1), 101–24.

Greene, J.C. (2007). Mixed methods in social inquiry. San Francisco, CA: Jossey-Bass.

Kelly, M.P, Stewart, E., Morgan, A., Killoran, A., Fischer, A., Threlfall, A., et al. (2009). A conceptual framework for public health: NICE's emerging approach. Public Health, 123(1), e14-20.

Kempf, A. M., Remington, P. L., Booske, B. C., Kindig, D.A., & Peppard, P.E. (2006). The burden of excess deaths in Wisconsin. Brief Reports, 1(2). Retrieved from **http://uwphi.pophealth.wisc.edu/publications/briefReports/briefReportv01n02.pdf**

Mackenbach, J.P. (2009). Politics is nothing but medicine at a larger scale: Reflections on public health's biggest idea. Journal of Epidemiology and Community Health, 63(3), 181-4.

McGinnis, J. M., & Foege, W.H. (1993). Actual causes of death in the United States. Journal of the American Medical Association, 270(18), 2225-43.

McGinnis, J. M., Williams-Russo, P., & Knickman, J.R. (2002). The case for more active policy attention to health promotion. Health Affairs, 21(2), 78-93.

Milwaukee Center for Health Equity. (2008). Milwaukee Center for Health Equity. Retrieved from **http://www.city.milwaukee.gov/ImageLibrary/Groups/healthAuthors/MINT/PDFs/MCHE_4_pager_for_web.pdf**

National Institutes of Health, National Cancer Institute, Center to Reduce Cancer Health Disparities. Available at: **http://crchd.cancer.gov/disparities/defined.html**

Pencheon, D., Guest, C., Melzer, D., & Muir Gray, J.A. (Eds.). (2000). Oxford handbook of public health practice. Oxford, England: Oxford University Press.

The Prevention Institute. (2006). The imperative of reducing health disparities through prevention: Challenges, implications, and opportunities. Retrieved from **http://www.preventioninstitute.org/documents/DRA_I_Reducing_HD_thru_Prx_FINAL.pdf**

Schoeni, R. F., James S. House, J. S., Kaplan, G. A., & Pollack, H. (Eds.) (2008). Making Americans healthier: Social and economic policy as health policy: National Poverty Center Series on Poverty and Public Policy. New York: Russell Sage Foundation Publications.

Vila, P. M., Booske, B. C., Wegner, M. V., & Remington, P. L. (2007). Preventable causes of death in Wisconsin, 2004. Wisconsin Medical Journal, 106(7), 373-9.

Whitehead, M., & Dahlgren, G. (2006). Concepts and principles for tackling social inequities in health: Levelling up Part 1. World Health Organization Studies on Social and Economic Determinants of Population Health, No. 2. Retrieved from **http://www.euro.who.int/document/e89383.pdf**

Wilkinson, R. & Pickett, K. (2009). The spirit level: Why more equal societies almost always do better. London, England: Allen Lane Press.

Wisconsin Department of Health and Family Services, Division of Public Health. (n.d.). Healthiest Wisconsin 2010: A partnership plan to improve the health of the public.

Wisconsin Office of the Governor. (2007). Governor Doyle to Establish New Department of Children and Families. Madison, WI: Office of the Governor. Retrieved from **http://www.wisgov.state.wi.us/journal_media_detail.asp?prid=3039&locid=19**

World Health Organization. (1997). Report of an International Conference: Intersectoral action for health: A cornerstone for health for all in the twenty-first century. Geneva. Retrieved at **http://whqlibdoc.who.int/hq/1997/WHO_PPE_PAC_97.6.pdf**