

## **A Perspective on the Development of the Healthy People 2020 Framework for Improving U.S. Population Health**

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### **ABSTRACT**

Since the late 1970s, the federal Healthy People Initiative has been a visible component of the United States' approach to improving population health. In each decade, a new version of Healthy People is issued, featuring updated goals and identifying topic areas and quantifiable objectives for health improvement during the succeeding ten years, with assessment at that point of progress or lack thereof. Progress has been limited for many objectives, leading to concerns about the effectiveness of Healthy People in shaping outcomes in the context of a decentralized and uncoordinated US health system. This article describes development of Healthy People 2020, launched in December of 2010, from the perspectives of three members of a public advisory committee appointed to guide the process: The Secretary's Advisory Committee on Health Promotion and Disease Prevention Objectives for 2020 (SAC). The SAC made recommendations, almost all of which were adopted in some form, based on extensive assessments of strengths and weaknesses of the program and deliberations about critical areas to update. As a result, compared to prior versions, Healthy People 2020 gives more prominence to health promotion and preventive approaches, and adds a substantive focus on the importance of addressing societal determinants of health. A new expanded digital interface facilitates use and dissemination rather than bulky printed books as produced in the past. The impact of these changes to Healthy People will be determined in the coming years.

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## INTRODUCTION

The United States federal Healthy People Initiative is intended to play a crucial, integrative role in guiding national, state, and local approaches to setting quantifiable health objectives and monitoring progress. First conceptualized in 1979, when working toward health targets was a new concept in health policy, Healthy People was strategically envisioned as a national mechanism for action and investment prioritization through the identification and measurement of progress towards a common set of major health objectives.<sup>1</sup> From that point forward, this process has continued to define a set of national health objectives at the beginning of each decade, with specific targets for the end of the decade. The Healthy People goals and objectives have the potential to serve as a call to action to states and local authorities because they are issued by the federal government and are linked to national health statistics.

Although Healthy People does not carry statutory authority to direct the activities of or hold accountable components of the US health system, it constitutes a detailed framework and plan for improving the Nation's health and can be adopted for use in policies and programs. The objectives and targets address health and health care issues across a broad spectrum. They can be used for assessing and reporting progress within and across local and state jurisdictions, as well as at the federal level. For example, an authoritative annual reporting of county level health rankings relies heavily on Healthy People objectives and targets for benchmarking.<sup>2</sup>

The effectiveness of Healthy People has been measured by comparing initial status (baseline data) with mid-course and final assessments made at the national level to determine how much change actually has occurred over the decade and whether targets actually have been achieved.<sup>3-5</sup> Of note, these assessments have often revealed a lack of progress toward many targets and a widening of health disparities in relation to many health indicators (see Table 1). The lack of progress raises awareness of the weaknesses of the US health care system and questions the ability of Healthy People to overcome these weaknesses.

**Table 1**  
*Most Current Data on Achievement of Past Healthy People Objectives  
 during the Development of Healthy People 2020*

<b>Most Recent Data Source</b>	<b>Number of Objectives/ Targets</b>	<b>Achieved Target</b>	<b>Progressed Toward Target</b>	<b>Showed no Progress or Regressed from Target</b>	<b>Data Unavailable</b>
<b>1990 Health Objectives</b> <i>(Final Review)</i> NCHS, 1992	226 objectives, 266 targets*	32%	34%	11%	23%
<b>Healthy People 2000</b> <i>(Final review)</i> NCHS, 2001	319	21%	41%	17%	10%
<b>Healthy People 2010</b> <i>(Midcourse Review)</i> DHHS, 2006**	467	6%	30%	16%	40%

\* All percentages for the 1990 Health objectives reflect attainment of the 266 measured targets.

\*\* Percentages for Healthy People 2010 objectives do not add up to 100% in this table because 12 percent of objectives (57 out of 467) showed mixed progress and have been excluded.

NCHS = National Center for Health Statistics DHHS = Department of Health and Human Services

**Source:** Phase I Report Recommendations for the Framework and Format of Healthy People 2020. Section III. Available from URL: <http://www.healthypeople.gov/2010/hp2020/advisory/PhaseI/sec3.htm> (Accessed 16 December 2013).<sup>5</sup>

A detailed analysis of the history and evolution of the Healthy People initiative has previously been published. In that review Green and Fielding describe the relationship of the US initiative to global developments in health promotion and disease prevention and the nature of the continuing efforts to address gaps in baseline data, clarify the process for setting objectives and targets and improve effectiveness in other ways.<sup>6</sup> This article describes the development of the most recent version of this initiative, Healthy People 2020, from the perspectives of three members of an external committee appointed to guide the process: The Secretary's Advisory Committee on Health Promotion and Disease Prevention Objectives for 2020 (hereafter, "SAC"). We describe the SAC process for developing

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recommendations about new features that could update the overall framework in light of the evolution of national thinking about health and disease and address criticisms of past versions. We describe the key design features of the 2020 initiative that emanated from SAC recommendations and some of the thinking that led to them. Finally, we show how Healthy People 2020 articulates directly with the most recent key developments in the US public health and health care arenas: the Patient Protection and Affordable Care Act<sup>7</sup> and the recent National Prevention Strategy.<sup>8</sup>

## **DEVELOPMENT OF HEALTHY PEOPLE 2020: THE PROCESS**

The Healthy People 2020 development process took place over approximately three years, led by federal staff within the Office of Disease Prevention and Health Promotion of the Department of Health and Human Services (DHHS). Preparatory work included the conduct of a Healthy People User Study, an independent evaluation of prior iterations of Healthy People.<sup>9</sup> This provided, from the outset, a list of questions, concerns, and recommendations related to how the program might be improved. For example, users at state and local levels indicated that the lack of specific guidance on how to implement objectives was a major weakness of prior versions of Healthy People. Other key concerns related to the escalating number of objectives, the lack of transparency in setting targets, and the difficulty of using the printed form of Healthy People, which consisted of heavy, difficult to use volumes. DHHS convened a Federal Interagency Working Group comprising, in addition to staff from the Public Health Service, other staff from a range of federal agencies whose missions and activities influence health, e.g., departments of agriculture, education, housing and urban development, justice, interior, and veterans affairs, and the environmental protection agency. The Federal Interagency Working Group reviewed and commented on draft proposals.

The public phase of the process began late in 2007 with the solicitation of nominations for the SAC. Whereas prior advisors had been drawn from within the Public Health Service, the DHHS leadership sought input that was external to government and would allow an increased level of public input, and obtained a charter authorizing formation of a public advisory committee charged with making recommendations to the Secretary of DHHS. Thirteen SAC members were chosen from a large pool of nominees, of whom all except one were able to serve throughout. These 12 advisors together brought diverse expertise and perspectives. SAC members served as individuals rather than as representatives of organizations or advocates

for specific positions. The SAC was charged with providing advice on developing goals, objectives, and initiatives to facilitate implementation of this critical federal initiative.<sup>10</sup> By law, the SAC operated under the Federal Advisory Committee Act (FACA) rules that require a transparent process in which all key deliberations and decisions took place in a public forum and there were formal opportunities for input from members of the public, e.g., in the form of written or oral comments at national and regional meetings. The SAC advised throughout the development process, beginning in January 2008 and continuing until 2011, approximately one year after Healthy People 2020 was launched.

The SAC convened several well-attended in-person public meetings and numerous web-based teleconferences and formed subcommittees and *ad hoc* working groups to consider selected issues in depth; these subcommittees could and did involve experts from outside of the SAC. SAC members also participated in regional public hearings convened by DHHS staff. Thus, in addition to the results of the User Study, SAC deliberations were informed by concurrent feedback obtained at public meetings and through voluminous written comments posted on the advertised website that was designed for this purpose.

In the remainder of this article, we describe the results of the Healthy People 2020 development process. SAC perspectives and recommendations were issued in a series of written reports and recommendations (see Table 2). Through these reports, the SAC provided perspectives on the role and function of the Healthy People program, its vision, mission, overarching goals, and the structure of the objectives, how targets should be defined, and ways to think about priority setting. The SAC identified several audiences (users) for Healthy People 2020 and considered the needs and perspectives of these different users, giving particular attention to users in states and local health agencies (see Table 3). User audiences were seen to go beyond those primary audiences who would seek out Healthy People 2020 guidance to include secondary audiences for whom Healthy People outreach would be appropriate. What ultimately became Healthy People 2020 reflected the Federal Interagency Working Group's vetting and interpretation of the SAC guidance in the context of federal agency perspectives and realities. The series of SAC reports, containing specific recommendations, all of which are on the public record (see Table 2), became key steps in the Healthy People 2020 development process, along with the official release of draft objectives and public comment period that included regional public meetings.

**Table 2**

*Key Issues Addressed and Guidance  
Provided by the Secretary's Advisory Committee on Health Promotion  
and Disease Prevention Objectives for 2020*

<b>Aspect or Issue Addressed</b>	<b>Guidance Provided by the Scientific Advisory Committee</b>
<b>Role and Function of Healthy People 2020</b>	<ul style="list-style-type: none"> <li>• Potential roles of HP and designed recommendations to allow HP2020 to serve the needs of several different potential audiences and users. <b>See:</b> Phase I Report. Recommendations for Framework and Format of Healthy People 2020. Section IV. Available from URL: <a href="http://www.healthypeople.gov/2010/hp2020/advisory/PhaseI/sec4.htm">http://www.healthypeople.gov/2010/hp2020/advisory/PhaseI/sec4.htm</a> (Accessed 16 December 2013).<sup>5</sup></li> <li>• Recommended vision and mission statements and overarching goals for HP2020 as well as the HP2020 Action Model. The framework was designed to emphasize the importance of intervening on upstream determinants of health and disease throughout the life course to prevent behavioral risk factors, promote well-being and health-related quality of life, and achieve equity, in addition to the traditional focus on specific diseases or injuries. <b>See:</b> Phase I Report. Recommendations for the Framework and Format of Healthy People 2020. Available from URL: <a href="http://www.healthypeople.gov/2010/hp2020/advisory/PhaseI/default.htm">http://www.healthypeople.gov/2010/hp2020/advisory/PhaseI/default.htm</a> (Accessed 16 December 2013).<sup>5</sup></li> </ul>
<b>Societal Determinants of Health, Health Disparities, and Health Equity</b>	<ul style="list-style-type: none"> <li>• Definitions and descriptions of health determinants in physical, social and economic environments; recommendation that these be addressed to prevent fundamental causes of diseases, reduce disparities, and achieve health equity. Recommendation for a “health in all policies” approach involving collaboration among different branches of government to reach those outside of the health sector with authority and resources for addressing societal determinants. <b>See:</b> Healthy People 2020: An opportunity to address societal determinants of health in the United States. Available from URL: <a href="http://www.healthypeople.gov/2010/hp2020/advisory/SocietalDeterminantsHealth.htm">http://www.healthypeople.gov/2010/hp2020/advisory/SocietalDeterminantsHealth.htm</a> (Accessed 16 December 2013)<sup>18</sup>; and Koh HK, Piotrowski JJ, Kumanyika S, Fielding JE. Healthy people: a 2020 vision for the social determinants approach. <i>Health Educ Behav.</i> 2011;38:551-7.<sup>19</sup></li> <li>• Recommendation for a specific definition of health disparities linked to social disadvantage as a measure of the extent to which health equity is being achieved. <b>See:</b> Braveman PA, Kumanyika S, Fielding J, Laveist T, Borrell LN, Manderscheid R, Troutman A. Health disparities and health equity: the issue is justice. <i>Am J Public Health.</i> 2011;101:S149-55.<sup>15</sup></li> </ul>

Table 2 contd.

<b>Priority setting</b>	<ul style="list-style-type: none"> <li>• Guidance about considerations and approaches for use in setting priorities among HP2020 objectives. <b>See:</b> Phase I Report. Recommendations for the Framework and Format of Healthy People 2020. Appendix 14. Explanation of prioritization criteria for sorting objectives. Available from URL: <a href="http://www.healthypeople.gov/2010/hp2020/advisory/PhaseI/appendix14.htm">http://www.healthypeople.gov/2010/hp2020/advisory/PhaseI/appendix14.htm</a> (Accessed 16 December 2013).<sup>5</sup></li> </ul>
<b>Guidance for Implementation</b>	<ul style="list-style-type: none"> <li>• Detailed report on ways to evaluate sources of knowledge to support evidence-based actions offered and recommended a realistic but rigorous approach to ensuring that implementation strategies for HP are grounded in science. <b>See:</b> Evidence-Based Clinical and Public Health: Generating and Applying the Evidence. Available from URL: <a href="http://www.healthypeople.gov/2010/hp2020/advisory/EvidenceBasedClinicalPH2010.htm">http://www.healthypeople.gov/2010/hp2020/advisory/EvidenceBasedClinicalPH2010.htm</a> (Accessed 16 December 2013)<sup>23</sup>; and Recommendations on Action Steps and Evidence for Healthy People 2020. Available from URL: <a href="http://www.healthypeople.gov/2010/hp2020/advisory/ASERRecommendations2010.htm">http://www.healthypeople.gov/2010/hp2020/advisory/ASERRecommendations2010.htm</a> (Accessed 16 December 2013).<sup>29</sup></li> <li>• List of recommendations for immediate and long term actions to ensure the adoption and effectiveness of HP efforts. <b>See:</b> Recommendations for Implementing Healthy People 2020. Available from URL: <a href="http://www.healthypeople.gov/2010/hp2020/advisory/FACA_ImplemRecommendations.htm">http://www.healthypeople.gov/2010/hp2020/advisory/FACA_ImplemRecommendations.htm</a> (Accessed 16 December 2013).<sup>24</sup></li> </ul>
<b>Leading Health Indicators (LHIs)</b>	<ul style="list-style-type: none"> <li>• Fourteen measures and associated objectives for use in monitoring achievements at the national level, as well as state and local comparisons; informed by the National Prevention Strategy and also with health indicators recommended by an Institute of Medicine Committee. <b>See:</b> Recommendations for Leading Health Indicators for Healthy People 2020. Available from URL: <a href="http://www.healthypeople.gov/2020/about/advisory/LHI_Recommendations_Memo.pdf">http://www.healthypeople.gov/2020/about/advisory/LHI_Recommendations_Memo.pdf</a> (Accessed 16 December 2013).<sup>30</sup></li> </ul>

**Table 3**  
*Healthy People 2020 Audiences and their Information Needs*

<b>Primary Audience/User Group</b>	<b>What they should know about Healthy People 2020</b>
Federal agencies; State and Local health departments; Professional associations, societies; Advocacy organizations; Philanthropies	<ul style="list-style-type: none"> <li>• Relevance of HP to their audiences</li> <li>• Uses of HP for planning, program management, development, evaluation</li> </ul>
Academics, research and development organizations	<ul style="list-style-type: none"> <li>• Why and how they should share HP with their students</li> <li>• How to align research with HP objectives</li> <li>• Why translational and applied research (especially community-based participatory) are important to achieving and monitoring HP objectives</li> </ul>
<b>Secondary Audience/User Group</b>	<b>What they should know about Healthy People 2020</b>
Policy Organizations/Entities	<ul style="list-style-type: none"> <li>• Relevance of HP to health and health care literacy</li> <li>• Why HP should be on the legislative agenda</li> </ul>
State and local elected officials	<ul style="list-style-type: none"> <li>• How HP can help identify the most important policy changes for improving health and reducing disease and injury burden in your area</li> <li>• How health indicators in your area compare with others</li> </ul>
Faith-based organizations	<ul style="list-style-type: none"> <li>• Why HP is relevant to your organization's members</li> <li>• How members can be more informed of issues within HP</li> <li>• How organizations can get involved with HP</li> </ul>
General public, community based organizations, voluntary organizations, those familiar with community needs	<ul style="list-style-type: none"> <li>• How HP can offer guidance for personal decisions (being informed of risk factors, diseases, being able to answer the question, «What can I do?»)</li> <li>• How to become involved with HP</li> </ul>
Business/private sector	<ul style="list-style-type: none"> <li>• How HP can offer guidance for promoting worksite health</li> <li>• How to become involved with HP</li> </ul>
Health care (industry, community health centers, professionals, workers)	<ul style="list-style-type: none"> <li>• Relevance of HP to their audiences (mediated communication)</li> <li>• Uses of HP for planning, program management, development, evaluation</li> </ul>

**Source:** Adapted from Phase I Report. Recommendations for the Framework and Format of Healthy People 2020. Section V. Guidelines for implementation of Healthy People 2020. Exhibit 6. Communicating about Healthy People 2020 with key audiences. Available from URL: <http://www.healthypeople.gov/2010/hp2020/advisory/PhaseI/sec5.htm> (Accessed 16 December 2013).<sup>5</sup>



## **DEVELOPMENT OF HEALTHY PEOPLE 2020: KEY STRATEGY FEATURES**

Healthy People 2020 can be viewed as a strategic approach for improving the health of the US population over a ten-year timeline, applicable nationally, regionally, and in states, counties, cities and towns. Its goal is defining and realizing the vision of “a society in which all people live long, healthy lives”.<sup>10</sup> The Healthy People strategy was designed to define and promote a common sense of purpose and goals, with specific targets. The impact of Healthy People depends on the extent to which it motivates and guides actions of components of the US health care system, in which there is a division of responsibilities between state, local and federal authorities. Accountability lies within these authorities. The systems are not aligned structurally, and many aspects of what is needed to achieve a healthy population are not covered. There are both public and private health care insurance systems, but many people with no or inadequate health insurance and access to care—a problem that the Patient Protection and Affordable Care Act (discussed later) seeks to address. States and localities in different parts of the country have different resources and populations with different demographic characteristics and health profiles. Health and health care landscapes and, therefore, the health related issues of primary interest differ for localities within the same state, e.g., in urban vs. rural areas. For these reasons, the development process for Healthy People 2020 paid particular attention to the need to be meaningful to and usable by policy makers and practitioners across the spectrum of potentially relevant contexts both within and outside of government, and even by the public at large.

### **Overarching Goals**

Healthy People 2020 revolves around four pivotal, interrelated themes—expressed as overarching goals and linked to specific Foundation Health Measures defined so as to be used to assess progress in achieving these goals (see Table 4).<sup>12</sup> Notably, these include two new goals recommended by the SAC to bring Healthy People more in line with current health promotion paradigms. One new goal is promoting quality of life, healthy development, and healthy behaviors across life stages, and the other is creating social and physical environments that promote good health. These additions emphasize root determinants of health, ill-health, and injury. The SAC considered the addition of these goals to be important because, in spite of its name, Healthy People has been shaped by structural and economic realities of the US health system, which focuses primarily on *disease* care. An Institute of Medicine panel report in 2001 described this

“disease-care system” as a disorganized patchwork quilt that results in service discontinuities, high costs, and ineffective care.<sup>13</sup> Developing an effective strategy to give a more coordinated focus to this system and foster improvements in overall population health has been the continuing key challenge for the Healthy People initiative.

**Table 4**  
*Healthy People 2020 Goals and Measures of Progress*

<b>Overarching Goals of Healthy People 2020</b>	<b>Foundation Measures Category</b>	<b>Measures of Progress</b>
Attain high quality, longer lives free of preventable disease, disability, injury, and premature death	General Health Status	<ul style="list-style-type: none"> <li>• Life expectancy</li> <li>• Healthy life expectancy</li> <li>• Physical and mental unhealthy days</li> <li>• Self-assessed health status</li> <li>• Limitation of activity</li> <li>• Chronic disease prevalence</li> <li>• International comparisons (<i>where available</i>)</li> </ul>
Achieve health equity, eliminate disparities, and improve the health of all groups	Disparities and Inequity	Disparities/inequity to be assessed by: <ul style="list-style-type: none"> <li>• Race/ethnicity</li> <li>• Gender</li> <li>• Socioeconomic status</li> <li>• Disability status</li> <li>• Lesbian, gay, bisexual, and transgender status</li> <li>• Geography</li> </ul>
Create social and physical environments that promote good health for all	Social Determinants of Health	Determinants can include: <ul style="list-style-type: none"> <li>• Social and economic factors</li> <li>• Natural and built environments</li> <li>• Policies and programs</li> </ul>
Promote quality of life, healthy development, and healthy behaviors across all life stages	Health-Related Quality of Life and Well-Being	<ul style="list-style-type: none"> <li>• Well-being/satisfaction</li> <li>• Physical, mental, and social health-related quality of life</li> <li>• Participation in common activities</li> </ul>

**Source:** Healthy People 2020. Available from URL: [http://www.healthypeople.gov/2020/topicsobjectives2020/pdfs/hp2020\\_brochure.pdf](http://www.healthypeople.gov/2020/topicsobjectives2020/pdfs/hp2020_brochure.pdf) (Accessed 16 December 2013).<sup>12</sup>

The introduction of an explicit focus on creating healthy environments is perhaps the most far reaching of the innovations in Healthy People 2020. In line with strategies that have become increasingly common in health promotion globally, it promotes the “health in all policies” approach that

seeks to create conditions favorable to health through inter-sectoral collaborations.<sup>14</sup> This type of paradigm expansion was viewed as an important first step in motivating system change. It strengthens the focus on prevention by directly challenging the sole reliance on disease treatment as the major route for improving population health. In addition, the concept of prevention was expanded to include preparedness against acute threats to health, including natural disasters, disease outbreaks, or acts of aggression or terror.

Healthy People 2020 carries over from prior versions the key theme of eliminating health disparities and raises the bar by articulating health equity as the ultimate goal. Based on deliberations of a subcommittee appointed to consider these issues in detail, the SAC recommended a national definition of health disparities and health equity. The language of these definitions clarified that health differences deserving of special emphasis in public health strategies were not necessarily all health differences but particularly those stemming from systematic social disadvantage.<sup>15</sup> It also pointed out that improving health for the entire population rather than only closing gaps among subpopulations should be a key priority.

## **HEALTHY PEOPLE 2020 FRAMEWORK**

The need to address a broad array of health determinants is reflected in the action model developed by the SAC (Figure 1)<sup>5</sup> which was adapted for inclusion in the final version of Healthy People 2020. The action model, which displays the multiple, nested levels of health determinants across the life course, is based on a commonly used ecological model<sup>16</sup> as it appeared in an Institute of Medicine Report of 2002.<sup>17</sup> The SAC introduced the action orientation of the framework to address concerns expressed by users that prior versions of Healthy People did not articulate, motivate, or inform specific actions to achieve objectives or meet targets. The model highlights the importance of seeing interventions as the critical inputs for altering specific health determinants, which then lead to improvements in one or more of a broad set of health outcomes. The model also underscores the need for a continuous process of assessment, monitoring, evaluation, and dissemination. This lends a dynamic quality to the strategy and promotes timely accountability, in contrast to the prior static approach in which progress was assessed only at mid-course and the end of a decade—far too infrequent or too late for course corrections. The concept of evaluation was built into the objectives and targets.



**Fig.1.** Scientific Advisory Committee Ecological Model Recommended as a Framework for Healthy People 2020.

**Source:** Secretary's Advisory Committee, Phase 1 Report, 2008.<sup>5</sup>

## Topic Areas

Objectives in Healthy People emanate from topic areas identified as warranting separate identification with respect to setting objectives and targets. Topic areas serve as the main gateway to Healthy People guidance. Topic areas and their related objectives are not necessarily unique, but rather represent focal points for building awareness and user recognition. The difficulty of making links among topic areas in earlier versions of Healthy People that relied on a printed format was a major limitation, but this did not apply to Healthy People 2020 once the decision was made to use a web-based platform for access and dissemination (see below). Therefore, the SAC viewed the addition of new topic areas as advantageous and sought to identify new aspects of health promotion and disease prevention that deserved to be highlighted as such.

All of the initiatives through 2000-2010 included objectives that addressed diseases, risk factors, behaviors, and populations. The SAC identified new topic areas for inclusion in Healthy People 2020, to address

specific issues and also to underscore the enhanced focus on prevention and health promotion. One key addition was the inclusion addressing social determinants not only as an overarching goal but also as a specific topic area. This issue, although well established in health policy in the global context,<sup>14</sup> has been absent as an explicit focus in US health policy.<sup>18,19</sup> The emphasis on social determinants built on the recommendation of the SAC to the DHHS Secretary to go beyond a disease-oriented approach to recognize the root causes of ill-health. The SAC emphasized that issues of poverty, education and social structure be brought into focus as prime influences on many dimensions of health, both individually and for communities and populations. The expectation was that, once identified as a specific topic area and followed through with specific definitions, objectives and targets, that topic area would expand the view of the public and policy makers to think outside the health sector in taking actions to improve health. The language accompanying this approach clarifies that we cannot make sufficient progress in health without the involvement of other sectors, such as housing, education, and taxation. This approach also holds considerable promise for reducing the gaping disparities in health that are closely linked to social, economic, and environmental disadvantage.<sup>15,18,19</sup>

Another important and timely addition to the topic list was Emergency Preparedness. In the aftermath of US events such as the September 11, 2001 terrorist attack<sup>20</sup> and the subsequent anthrax attack,<sup>21</sup> Hurricane Katrina and other natural disasters and terrorism threats, the need for a comprehensive focus on preparedness for the full range of emergencies was evident. The objectives associated with this topic area are based on the *National Health Security Strategy of the United States of America*, of which the overarching goals are to build community resilience and to strengthen and sustain health and emergency response systems.<sup>22</sup>

To fill gaps with respect to the ability of Healthy People to address other important aspects of population health, new topic areas facilitated identification of objectives associated with specific populations or life stages: e.g., “Early and Middle Childhood,” “Adolescent Health” and “Older Adults,” and, in one case, sexual orientation: “Lesbian, Gay, Bisexual, and Transgender Health.” The ease of global spread of infectious diseases, such as SARS and H1N1, was for the first time given formal recognition by the addition of “Global Health,” while “Healthcare-Associated Infections” was added due the increased difficulty in treating organisms predominantly found in hospitals and long term care facilities. Disease or organ specific additions included “Blood Disorders and Blood Safety”, and “Dementias” including Alzheimer’s disease. “Sleep Health”

was another new topic. The majority of topics still remain disease-focused. However, to go beyond the inherently limited assessments of health status based on morbidity and mortality outcomes, Healthy People 2020 added “Health-Related Quality of Life & Wellbeing”, which includes domains related to physical, mental, emotional and social functioning. Finally, “Genomics,” was added to the list of topics to recognize the influence of scientific advances in that field on health research and approaches to disease prevention and treatment.

### **Objectives and User Interface**

Since the first Healthy People report in 1979, successive decennial versions have grown in scope, with the addition of more and more objectives and sub-objectives grouped under first 15 (1990) and then 22 (2000) priority areas, and then reconfigured into 28 focus (topic) areas (2010). Objectives increased from 226 in Healthy People 1990 to 319 in Healthy People 2000, and further to 467 in Healthy People 2010.<sup>5</sup> Healthy People 2020 saw additional expansion to 42 topics and nearly 600 objectives. The continuing pressure to expand seemed to ignore the concern that Healthy People had become unwieldy, largely because all versions through Healthy People 2010 compiled objectives and targets in heavy tomes that also were difficult to navigate with respect to making connections among the various topics areas and objectives. To address this problem and also pave the way for achievement of several forward looking goals, the SAC recommend a web-based system as the primary mechanism for dissemination and use (see [www.healthypeople.gov](http://www.healthypeople.gov)) (see Box 1).

The web-based approach decreased the likelihood of having to exclude worthy topic areas simply for practical reasons and also enabled Healthy People 2020 to take full advantage of the digital revolution in creating a much more user-friendly interface. The web interface fulfills the need to communicate with a broad-based community of users including through social media and applications that could allow access through mobile phones and other types of existing or future digital devices. The SAC viewed as critical to success the ability of users at the community level to engage with Healthy People 2020, tailoring it to answer questions and solve problems from their perspectives. This is in contrast to a view of Healthy People as a prescription written at the national level and handed down for implementation in states and localities. The web-based interface allows for linking across and within Healthy People topic areas and to databases and published evidence sources and practice guidelines. It facilitates use of data for benchmarking and tracking progress on a continuous or at least more

easily updated basis. Users in states and municipalities can tailor the information obtained to their needs, for example, to further understanding of particular issues, for exploration of different priorities, and ultimately to support planning and evaluation. A SAC recommendation that was not incorporated into Healthy People 2020 by the Secretary's office was to organize objectives into three conceptual groupings: interventions, determinants and outcomes, as shown on the action model in Figure 1, and three user levels—national, state and local—that would serve as the best entry points into the web-accessible data base.<sup>5</sup> The potential utility of including this type of categorization can be assessed in future iterations.

### Box 1

#### *Healthy People 2020 Systematic Online and Social Outreach*

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The Secretary's Advisory Committee developed a vision of an online system for HP2020 that would be a web-based interactive resource to expand reach and usability, and ultimately make the initiative accessible to a wider audience of stakeholders. This online space was envisioned to be a user-friendly, "one-stop shop" for public health and health care professionals, policymakers, and community members to learn about the objectives, collaborate and plan interventions, and implement strategies to reach the objectives set forth for 2020.

**See:** Recommendations for Implementing Healthy People.<sup>24</sup>

A parallel communication strategy was designed to increase awareness and implementation of the initiative and the online system by engaging stakeholders and regularly keeping audiences informed on its progress. In order to promote the new web site, foster its use and implementation by stakeholders, and grow the overall Healthy People user base, the following communication channels were identified to promote HP2020:

- A LinkedIn group dedicated to HP2020 stakeholders.  
Available from URL: <http://www.linkedin.com/groups/Healthy-People-2020> (Accessed 17 December 2013).
- A HP2020 Twitter feed.  
Available from URL: <https://twitter.com/GoHealthyPeople> (Accessed 17 December 2013).
- GovDelivery, an e-mail subscriber service for users to receive updates, news, and announcements.  
Available from URL: [https://public.govdelivery.com/accounts/USOPHSODPHPHF/subscriber/new?category\\_id=USOPHSODPHPHF\\_C5](https://public.govdelivery.com/accounts/USOPHSODPHPHF/subscriber/new?category_id=USOPHSODPHPHF_C5) (Accessed 17 December 2013).
- Integration with the Department's YouTube channel.  
Available from URL: <http://www.youtube.com/user/ODPHP> (Accessed 17 December 2013).

At the time of this writing, there were nearly 6,500 members in the LinkedIn group and the Twitter account had over 40,000 followers.

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**Source:** Adapted from Manderscheid R, Wukitsch K. Healthy People 2020: developing the potential of digital and mobile communication tools to touch the life of every American. In review.<sup>31</sup>

Twitter and Linked-In updates are being employed to identify potential Healthy People 2020 online users. This approach makes it feasible for Healthy People 2020 to touch the life of every interested American. As our information technology continues to evolve rapidly, Healthy People 2020 also will need to evolve. Traditional online systems are now being supplemented by mobile applications. For Healthy People 2020, these mobile applications may take the form of a virtual advocacy group organized through mobile phones or a comparison of data between two locales presented on a tablet. Clearly, the next generation of this work will involve the introduction and broad-based use of Mobile Systems.

### **Focus on Evidence**

Healthy People 2020 adds an explicit emphasis on using the best available evidence to inform objectives, targets, and action plans and for assessments of effectiveness and links objectives and targets on the website to relevant prevention and treatment guidelines. SAC deliberations highlighted the major benefits possible from acting effectively on what we already know about interventions that are effective in preventing or reducing many types of health risks. The committee also argued for the strategic use of evidence to identify approaches that do *not* work in order to direct resources to the most promising interventions. A separate SAC report was devoted to conceptual and practical guidance on how evidence can best be used and tailored to the needs of specific communities.<sup>23</sup>

### **Guidance for Implementation**

Healthy People 2020 also included specific guidance about how to implement the recommendations for translating into action the approaches represented in the Healthy People 2020 framework. The SAC provided recommendations for immediate adoption and also for adoption over several years.<sup>24</sup> Among the principal recommendations for immediate action were: to devote sufficient resources to develop and maintain a robust interactive Web site; to build on existing initiatives; to support innovation to embrace the health determinants orientation; to choose evidence-based interventions where available, and to evaluate other activities in pursuit of Healthy People 2020 objectives.

Notable longer term recommendations included: developing of a tool kit for users that encourages adoption of models and strategies that were successful for Healthy People 2010; providing practical examples for emulation, through identifying and disseminating models of excellence by states or localities; and, particularly, encouraging multi-sector partnerships while building an accountability infrastructure.



## **LEADING HEALTH INDICATORS AND THE NATIONAL PREVENTION STRATEGY**

Healthy People does not specify national priorities as such, but as in prior versions does identify Leading Health Indicators (LHI).<sup>25</sup> These indicators satisfy the need for a limited number of measures that help to provide commonly recognized benchmarks to assess improvements in the health of the US population. Most reflect factors related to specific health behaviors and outcomes; one focuses on education as a social determinant of health. An additional two indicators focus on the important topics of preparedness and public health infrastructure. The LHIs were released at the Annual American Public Health Association meeting in November 2011, approximately one year after the launch of the main Healthy People 2020 website in 2010. DHHS is now reporting on one of these indicators each month.

The framework proposed originally by the SAC for Healthy People 2020 was used to craft these LHI recommendations, and the SAC played a pivotal role in their development. This framework emphasizes the important role of the social and physical determinants of health, of health disparities and health equity, and changes over the life course in health related outcomes. Thus, for each LHI objective, selections were made with future health status and outcomes specifically in mind. Reference points for developing LHI recommendations included the National Prevention Strategy<sup>8</sup> (described below) and a related Institute of Medicine report, *Leading Health Indicators for Healthy People 2020: Letter Report*.<sup>26</sup> Eight of the 12 LHI health related topics are identical to the National Prevention Strategy Strategic Directions and Priorities. Nine of the 12 LHI health related topics are identical to those in the Institute of Medicine Report.

Healthy People 2020 also played a major role in adding a focus on upstream health determinants to the national governmental concern about health care costs and quality. This has helped to balance the pervasive concern over disease care with attention to disease prevention and health promotion. The National Prevention Strategy announced by DHHS in 2011 was a historical document because it was the first time that the US government set national prevention goals for our society.<sup>8</sup> It was also important historically because it was developed by all of the agencies in DHHS in collaboration with other agencies outside of health that had a mission related to health. This was strongly influenced by Healthy People 2020, which had been launched in December of the prior year.

## **HEALTHY PEOPLE 2020 AND THE PATIENT PROTECTION AND AFFORDABLE CARE ACT**

The Patient Protection and Affordable Care Act (PPACA) is arguably the most significant effort to reform the US health care system of the past half century.<sup>7</sup> The PPACA represents the national response to the major health dilemmas of our time—lack of health insurance coverage, inequitable access to care, and soaring health care costs, as well as widespread obesity, substance abuse, and a high burden of many largely preventable chronic diseases which contribute to sub-optimal health in the US. It is vitally important for individual US citizens, as well as for the population as a whole, that the PPACA actually achieve the triple aim articulated by Berwick, a well-known and progressive advocate of health system improvement in the US and former Acting Administrator of the Center for Medicare and Medicaid Services: 1) better population health; 2) better quality health care; and 3) reduced costs.<sup>27</sup> Healthy People 2020 was designed with these aims in mind even prior to the passage of the PPACA and it provides relevant tools and strategic guidance for implementation of the legislation.

As we look forward, it now seems clearer than ever that improved population health is a key factor in controlling health care costs. In Healthy People 2020, social and physical health determinants are considered to be Foundation Health Measures. The model of social and physical health determinants across the life cycle articulated through Healthy People 2020 can only become a reality if we actually confront, modify and measure key social and physical environmental health determinants. For example, if we are to reduce obesity, we must be able to track progress related to the social environments that lead to caloric overconsumption and inadequate physical activity. Accelerating the development and implementation of such measures will be essential if we are to assess adequately our progress in achieving the triple goals of the PPACA.

Efforts to improve population health will confront dramatic disparities in health status—between rich and poor, white and black or brown, and the better and less educated, among others. It is a major role of the PPACA to address disparities such as these. For this work, Healthy People 2020 has provided an operational definition of health disparity and an operational definition of health equity.<sup>15</sup> By itself, a measure of disparity is simply the statement of a problem; health equity measures the degree to which the problem has been addressed. Measuring both is essential to assess progress. For each of the LHIs reported by DHHS<sup>25</sup> both disparity and equity should be reported for key population groups.

## KEY CHALLENGES GOING FORWARD

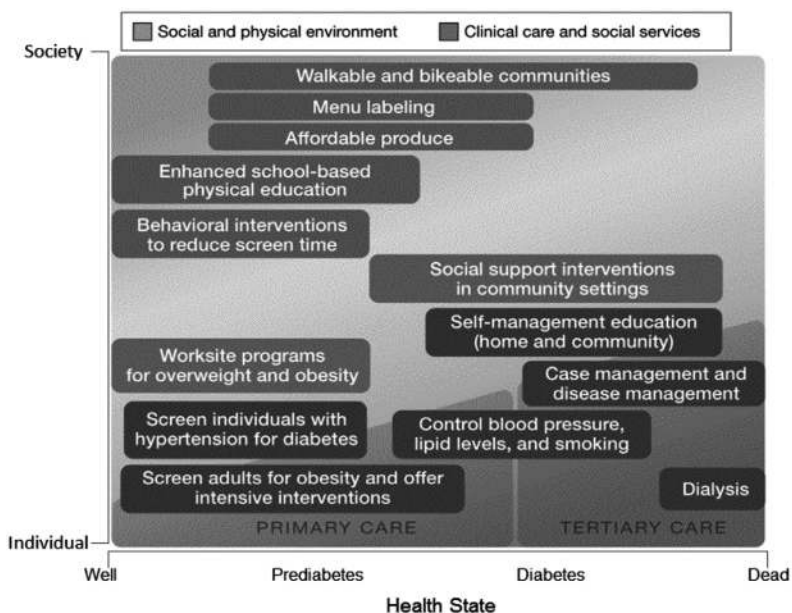
Going forward, a number of key challenges remain for Healthy People. First, the SAC recommended that health improvement targets be based upon the best evidence of the effect size of potential interventions. Yet, many targets were set arbitrarily, often expressed as a ten percent improvement over the 2010 target. A need exists to set future targets based upon findings from the systematic reviews of the U.S. Preventive Services Task Force, the Community Preventive Services Task Force, and the Cochrane Collaboration, as well as other careful meta-analyses of intervention studies.

A second challenge is the difficulty of tracking progress for many of the objectives. Many key data elements are measured far too infrequently. As a result, it is not possible to determine at several points during the decade whether progress has been made, and, if so, to what degree. Having this information more often would facilitate the recommended use of a continuous quality improvement approach to inform mid-course corrections in the strategies and tactics needed to ameliorate specific health problems, such as obesity.

Third, although the SAC provided guidance for concepts and tools that could be useful in setting priorities and input on the Leading Health Indicators, it did not prioritize the Healthy People 2020 objectives or recommend that this be done at the national level. This was largely because of the attempt to make Healthy People relevant to diverse grassroots audiences who would not necessarily rally round a single set of priorities based on national averages. However, lack of prioritization obscures the great differences in potential reduction of disease and injury burden for different objectives, including for different population subgroups. Priorities could help policymakers target public funding allocations based on the best scientific information and could also assist states, counties, and communities to coalesce around the best opportunities for population health improvement. Lack of clear priorities makes it harder to obtain the necessary synergy for the most burdensome health problems.

Fourth, a related issue is how to integrate medical care delivery efforts with those focused on the broader health determinants in populations. An urgent need exists for a clear logic model to show the influences of each intervention upon outcomes of interest in both spheres of action. As an example, Figure 2 shows the relationship of efforts to reduce the toll of diabetes, from prevention at the population level to individual treatment of the disease and its complications at the person level.<sup>28</sup> Such models can help bring different entities together around a common vision of how to

best attack a health problem. They also can help to integrate policy and program initiatives, permitting a comprehensive approach. For example, diabetes prevention could be addressed by changing the composition of meals served in public schools and, simultaneously, by frequent screening and treatment for ocular and podiatric complications of the disease.



**Fig. 2.** The Spectrum of Health and Strategies to Improve It: Representative Model as Applied to Diabetes.

**Source:** Fielding JE, Teutsch, SM. An opportunity map for societal investment in public health. *JAMA*. 2011;305:2010-1.<sup>28</sup> Adapted and Reprinted with permission of the American Medical Association.

Fifth, social disparities due to poverty, poor housing, low income, etc., are barriers to equity in health in the US aggravated by lack of universal health insurance coverage and exclusions for prior medical conditions in much of the private insurance sector. Health care reform as in the PPACA will help to alleviate some of this inequality, but other social measures will be needed to address the social disparities.

Finally, and in conclusion, perhaps the greatest challenge is to change the mindset of the public around how best to reduce the preventable burden of disease and injury. For most health issues, the prevailing and predominant model is bio-medical, and significant opportunities exist to improve both

prevention and treatment within medical practice. Yet, as not widely recognized and applicable to high income countries as well as low and middle income countries, the most significant opportunities to improve health will come from addressing the very broad social, physical and economic determinants, most often through policy and system changes.<sup>14</sup> Single interventions at the policy level can contribute to achieving multiple Healthy People objectives. For example, a tax law change that reduced the rate of poverty would lead to significant declines in almost all of the diseases with large preventable burdens. Similarly, an increase in the high school graduation rate could reduce the toll of many health problems, particularly in the most disadvantaged sub-groups. Overall, population oriented interventions have the greatest promise to reduce the yawning disparities that reflect inequities in health status.

**Acronyms List:**

DHHS = U.S. Department of Health and Human Services

LHI = Leading Health Indicators

PPACA = Patient Protection and Affordable Care Act

SAC = The Secretary's Advisory Committee on Health Promotion and Disease Prevention Objectives for 2020

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**REFERENCES**

1. U.S. Department of Health and Human Services. History and development of Healthy People. Washington (DC): DHHS; updated 15 November 2011. Available from URL: <http://www.healthypeople.gov/2020/about/history.aspx> (Accessed 23 April 2013).
2. Robert Wood Johnson Foundation and Wisconsin Population Health Institute. County health rankings and roadmaps. Available from URL: <http://www.countyhealthrankings.org/> (Accessed 17 December 2013).
3. Sondik EJ, Huang DT, Klein RJ, Satcher D. Progress toward the healthy people 2010 goals and objectives. *Annu Rev Public Health.* 2010;31:271-81, 4p following 281.
4. The Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2020. Phase I Report: Recommendations for the Framework and Format of Healthy People 2020. Washington (DC): U.S. Department of Health and Human Services; 28 October 2008. Available from URL: <http://healthypeople.gov/2020/about/advisory/Reports.aspx> (Accessed 23 April 2013).

5. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics. Healthy People 2010 Final Review. Hyattsville (MD): NCHS; 2012. Available from URL: [http://www.cdc.gov/nchs/healthy\\_people/hp2010/hp2010\\_final\\_review.htm](http://www.cdc.gov/nchs/healthy_people/hp2010/hp2010_final_review.htm) (Accessed 17 December 2013).
6. Green LW, Fielding JE. The U.S. healthy people initiative: its genesis and its sustainability. *Annual Rev Public Health*. 2011;32:451-70.
7. National Conference of State Legislatures. The Affordable Care Act: a brief summary. Washington (DC): NCSL; March 2011. Available from URL: <http://www.ncsl.org/portals/1/documents/health/hraca.pdf> (Accessed 23 April 2013).
8. National Prevention Council. National Prevention Strategy: America's plan for better health and wellness. Washington (DC): U.S. Department of Health and Human Services, Office of the Surgeon General; June 2011.
9. National Opinion Research Center at the University of Chicago. NORC Final Report: Healthy People User Study. Bethesda (MD): U.S. Department of Health and Human Services; 18 November 2009, revised 28 March 2010. Available from URL: <http://aspe.hhs.gov/health/reports/09/userstudy/report.shtml> (Accessed 23 April 2013).
10. The Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2020. Washington (DC): U.S. Department of Health and Human Services; updated 8 September 2011. Available from URL: <http://healthypeople.gov/2020/about/advisory/default.aspx> (Accessed 23 April 2013).
11. U.S. Department of Health and Human Services. About Healthy People. Washington (DC): DHHS; updated 17 December 2012. Available from URL: <http://www.healthypeople.gov/2020/about/default.aspx> (Accessed 23 April 2013).
12. Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services. Healthy People 2020. Washington (DC): DHHS; November 2010. Available from URL: [http://www.healthypeople.gov/2020/topicsobjectives2020/pdfs/hp2020\\_brochure.pdf](http://www.healthypeople.gov/2020/topicsobjectives2020/pdfs/hp2020_brochure.pdf) (Accessed 17 December 2013).
13. Committee on Quality of Health Care in America, Institute of Medicine. Crossing the Quality Chasm. A New Health System for the 21st Century. Washington (DC): National Academy Press; 2001
14. Marmot M. Closing the health gap in a generation: the work of the Commission on Social Determinants of Health and its recommendations. *Glob Health Promot*. 2009;Suppl 1:23-7.
15. Braveman PA, Kumanyika S, Fielding JE, Laveist T, Borrell LN, et al. *Am J Public Health*. 2011;101:S149-55.
16. Dahlgren G, Whitehead M. Policies and Strategies to Promote Social Equity in Health. Stockholm: Institute for Futures Studies; 1991.

17. Committee on Assuring the Health of the Public in the 21st Century, and Board on Health Promotion and Disease Prevention, Institute of Medicine. *The Future of the Public's Health in the 21st Century*. Washington (DC): National Academies Press; 2002.
18. The Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2020. *Healthy People 2020: An opportunity to address societal determinants of health*. U.S. Washington (DC): Department of Health and Human Services; 26 July 2010. Available from URL: <http://healthypeople.gov/2020/about/advisory/SocietalDeterminantsHealth.pdf> (Accessed 23 April 2013).
19. Koh HK, Piotrowski JJ, Kumanyika S, Fielding JE. Healthy people: a 2020 vision for the social determinants approach. *Health Educ Behav*. 2011;38:551-7.
20. United States Federal Bureau of Investigation. Ten years after: the FBI since 9/11. FBI. Available from URL: <http://www.fbi.gov/about-us/ten-years-after-the-fbi-since-9-11> (Accessed 17 December 2013).
21. United States Federal Bureau of Investigation. Amerithrax or Anthrax Investigation. FBI. Available from URL: <http://www.fbi.gov/about-us/history/famous-cases/anthrax-amerithrax> (Accessed 17 December 2013).
22. Office of the Assistant Secretary for Preparedness and Response, U.S. Department of Health and Human Services. *National Health Security Strategy of the United States of America*. Washington (DC): DHHS; December 2009. Available from URL: <http://www.phe.gov/Preparedness/planning/authority/nhss/strategy/Pages/default.aspx> (Accessed 23 April 2013).
23. The Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2020. *Evidence-based clinical and public health: generating and applying the evidence*. Washington (DC): U.S. Department of Health and Human Services; 26 July 2010. Available from URL: <http://healthypeople.gov/2020/about/advisory/EvidenceBasedClinicalPH2010.pdf> (Accessed 23 April 2013).
24. Chair and Vice-Chair, The Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives 2020. *Recommendations for implementing Healthy People 2020*. Washington (DC): U.S. Department of Health and Human Services; August 2010. Available from URL: <http://healthypeople.gov/2020/about/advisory/FACAImplementationRecommendations.pdf> (Accessed 23 April 2013).
25. U.S. Department of Health and Human Services. *Healthy People 2020. Leading Health Indicators*. Washington (DC): DHHS; updated 18 April 2013. Available from URL: <http://www.healthypeople.gov/2020/LHI/default.aspx> (Accessed 23 April 2013).
26. Institute of Medicine. *Leading Health Indicators for Healthy People 2020. Letter Report*. Washington (DC): National Academies Press; 15 March 2011.
27. Berwick DM, Nolan TW, Whittington J. The triple aim: care, health and cost. *Health Aff*. 2008;27:759-69. Available from URL: <http://content.healthaffairs.org/content/27/3/759.full> (Accessed 17 December 2013).

28. Fielding JE, Teutsch SM. An opportunity map for societal investment in health. *JAMA*. 2011;305:2110-1.
29. Chair and Vice-Chair. The Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2020. Recommendations on Action Steps and Evidence for Healthy People 2020. Washington (DC): U.S. Department of Health and Human Services; revised 26 October 2010. Available from URL: <http://www.healthypeople.gov/2010/hp2020/advisory/ASERecommendations2010.htm> (Accessed 16 December 2013).
30. Chair and Vice-Chair. The Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2020. Recommendations for Leading Health Indicators for Healthy People 2020. Washington (DC): U.S. Department of Health and Human Services. Available from URL: [http://www.healthypeople.gov/2020/about/advisory/LHI\\_Recommendations\\_Memo.pdf](http://www.healthypeople.gov/2020/about/advisory/LHI_Recommendations_Memo.pdf) (Accessed 16 December 2013).
31. Manderscheid R, Wukitsch K. Healthy People 2020: developing the potential of digital and mobile communication tools to touch the life of every American. In review.