Leading Health Indicators for Healthy People 2020
Letter Report

For the past three decades, the Department of Health and Human Services (HHS) has issued a national agenda aimed at improving the health of all Americans over each 10-year span. Under each of these Healthy People initiatives, HHS established health targets and monitored how well people were reaching them over time. Healthy People 2020 lays out the proposed agenda for the current decade, which will end in 2020.

As Healthy People 2020 is in its early days, HHS asked the Institute of Medicine (IOM) to review the objectives and recommend leading health indicators that could help sharpen the focus of the agenda. The IOM convened a committee of experts to respond to its charge. The committee’s report, Leading Health Indicators for Healthy People 2020, considered, among other resources, the work of another IOM committee that examined how a private, nonprofit group called State of the USA was developing reliable indicators that measure the nation’s health.

National Mission of Improving Health

As envisioned by HHS, the mission of Healthy People 2020 is broad in scope. It will identify nationwide health improvement priorities; increase public awareness and understanding of determinants of health, disease, disability, and understanding of opportunities for progress; provide measurable objectives and goals applicable at national, state, and local levels; engage multiple sectors to take actions to strengthen policies and improve practices that are driven by the best available evidence and knowledge; and identify critical needs for research evaluation and data collection. The agenda’s overarching
goals include enabling the nation to achieve health equity and eliminate disparities; create social and physical environments that promote good health; and promote quality of life, healthy development, and healthy behaviors across life stages.

**Defining Critical Health Terms**

Healthy People 2020, like previous versions, is structured to identify a number of topics and objectives that collectively provide a blueprint for improving the nation’s health. With the steady advance of science and medicine, each decade’s agenda has grown increasingly detailed. Healthy People 2020 lists 42 topics and nearly 600 objectives. By comparison, Healthy People 2000 listed 15 topics and 226 objectives. As part of its charge, the IOM committee was asked to develop 12 key indicators and 12 topics as well as to selectively identify 24 objectives that are critical to the nation’s health needs.

As a first step, the committee refined the definitions of the four terms. A **topic** is defined as a general category relevant to health; for example, chronic illness. An **indicator** is defined as a measurement; for example, prevalence of cardiovascular disease. An indicator could relate to multiple topics; for example, the indicator **percentage of adults with a body mass index—BMI—equal to or greater than 30** could relate to the topics of chronic disease and health behaviors. **Leading health indicators** are measurements of health-related concepts that reflect major public health concerns. Finally, an **objective** is defined as a statement of movement in an indicator toward a quantitative target; for example, reducing the prevalence of cardiovascular disease by 10 percent.

With this basis, the committee developed a conceptual framework within which the topics, indicators, and objectives would be developed or selected. The framework incorporates, among other things, what is called the **life course health model**. In this model, the impact of specific risk factors and determinants of health varies during the life course, and health and disease result from the accumulation of the effects of risk factors and determinants. The combination of these two components produces a health trajectory that represents the cumulative effect of risk factors and determinants at each point in the life course. Typically, the trajectory rises during childhood, adolescence, and early adulthood; plateaus during middle age; and declines with advancing age. This trajectory can be improved by reducing risk factors and promoting health through actions at both individual and society levels, applied at specific points or during specific stages of the life course, especially during the early years of life.

The committee also developed a set of criteria for selecting objectives. For example, the objectives should be actionable—that is, responsive to policies or initiatives by public or private health agencies—and they should be based on the latest scientific evidence. To the extent possible, objectives also should have annual data sources, with comparable data available at the state and county level.

The complete set of topics, indicators, and objectives recommended by the committee is displayed in Table 1. The parenthetical at the end of each objective contains the Healthy People identifier for that objective.
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<th>TOPICS</th>
<th>INDICATORS</th>
<th>OBJECTIVES</th>
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| Access to Care                | Proportion of the population with access to health care services            | 1. Increase the proportion of persons with health insurance (AHS 1).  
2. Increase proportion of persons with a usual primary care provider (AHS 3).  
3. (Developmental) Increase the proportion of persons who receive appropriate evidence-based clinical preventive services (AHS 7). |
| Healthy Behaviors            | Proportion of the population engaged in healthy behaviors                    | 4. Increase the proportion of adults who meet current federal physical activity guidelines for aerobic physical activity and for muscle-strengthening activity (PA 2).  
5. Reduce the proportion of children and adolescents who are considered obese (NWS 10).  
6. Reduce consumption of calories from solid fats and added sugars in the population aged 2 years and older (NWS 17).  
7. Increase the proportion of adults who get sufficient sleep (SH 4). |
| Chronic Disease              | Prevalence and mortality of chronic disease                                  | 8. Reduce coronary heart disease deaths (HDS 2).  
9. Reduce the proportion of persons in the population with hypertension (HDS 5).  
10. Reduce the overall cancer death rate (C 1). |
| Environmental Determinants   | Proportion of the population experiencing a healthy physical environment    | 11. Reduce the number of days the Air Quality Index (AQI) exceeds 100 (EH 1).                                                                                                                        |
| Social Determinants          | Proportion of the population experiencing a healthy social environment       | 12. (Developmental) Improve the health literacy of the population (HC/HIT 1).  
13. (Developmental) Increase the proportion of children who are ready for school in all five domains of healthy development: physical development, social-emotional development, approaches to learning, language, and cognitive development (EMC 1).  
14. Increase educational achievement of adolescents and young adults (AH 5). |
| Injury                       | Proportion of the population that experiences injury                         | 15. Reduce fatal and nonfatal injuries (IVP 1).                                                                                                                                                           |
| Mental Health                | Proportion of the population experiencing positive mental health            | 16. Reduce the proportion of persons who experience major depressive episodes (MDE) (MHMD 4).                                                                                                             |
| Maternal and Infant Health   | Proportion of healthy births                                                 | 17. Reduce low birth weight (LBW) and very low birth weight (VLBW) (MICH 8).                                                                                                                         |
| Responsible Sexual Behavior  | Proportion of the population engaged in responsible sexual behavior         | 18. Reduce pregnancy rates among adolescent females (FP 8).  
19. Increase the proportion of sexually active persons who use condoms (HIV 17).                                                                                                                        |
| Substance Abuse              | Proportion of the population engaged in substance abuse                     | 20. Reduce past-month use of illicit substances (SA 13).  
21. Reduce the proportion of persons engaging in binge drinking of alcoholic beverages (SA 14).                                                                                                         |
| Tobacco                      | Proportion of the population using tobacco                                  | 22. Reduce tobacco use by adults (TU 1).  
23. Reduce the initiation of tobacco use among children, adolescents, and young adults (TU 3).                                                                                                         |
| Quality of Care              | Proportion of the population receiving quality health care services           | 24. Reduce central line-associated bloodstream infections (CLABSI) (HA 1).                                                                                                                              |

NOTE: The numbering of the objectives is directly from Healthy People 2020.
Finally, the committee proposed new information for incorporation into Healthy People 2020. Among the agenda's 42 topics, the committee determined that three lacked written objectives. With permission of HHS, the committee proposed measures or objectives for: social determinants of health; health-related quality of life and well-being; and lesbian, gay, bisexual, and transgender health.

**Conclusion**

The committee concludes that the indicators and selected objectives in Healthy People 2020 should prove valuable in eliciting interest and awareness among the general population; motivating diverse population groups to engage in activities that will exert a positive impact on specific indicators and, in turn, improve the overall health of the nation; and providing feedback on progress toward improving the status of specific indicators.

HHS may wish to highlight the indicators and objectives in communications to state and local health departments, use them as a guide for funding priorities in department programs, and use them as priority guides for ongoing departmental public health data collection and reporting activities.