The National Healthy People Initiative:

History, Significance, and Embracing the 2030 Oral Health Objectives

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Abstract

Since 1979, the U.S. Department of Health and Human Services has worked with multiple subject matter experts and the public to develop and issue a set of ambitious, measurable objectives known as "Healthy People." These objectives are aimed at improving the health of the nation issued at the start of each decade, and feature specific targets to be achieved at the end of the decade. The fifth iteration, Healthy People 2030, consists 358 measurable public health objectives associated with evidence-based interventions. Oral health is represented by 11 specific objectives aimed at reducing dental caries in children and adolescents, reducing untreated decay and periodontal disease in adults, and promoting evidence-based prevention strategies, including community water fluoridation, dental sealants, oral cancer screenings, and, most importantly, increasing access to dental services. In fact, access to the oral health care system for children, adolescents, and adults is identified as a Healthy People 2030 Leading Health Indicator - a highpriority Healthy People 2030 objective selected to drive action toward improving health and well-being – for the second straight decade. With the continued promotion of multidirectional integration of oral health and overall health across multiple disciplines, many - including policymakers, oral health professionals, other healthcare professionals, dental and public health organizations, and community advocates – have a role in affecting the outcome of the Healthy People 2030 oral health objectives.

Introduction

In 1979, Surgeon General Dr. Julius Richmond issued a landmark report entitled *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention.*¹ This report established the framework for "Healthy People," a collection of science-based, measurable national objectives released each decade that are aimed at improving the health of the nation. Healthy People 2030 marks the fifth decade of these national health priorities, and oral health has had multiple objectives in each of these iterations.

Informed by the most current science and breakthroughs, Healthy People 2030 includes measurable oral health objectives with targets, features a set of Leading Health Indicators, and highlights five key social determinants of health: economic stability; education access and quality; social and community context; health care access and quality; and the neighborhood and built environment. As the recent *Oral Health in America: Advances and Challenges* report demonstrates, all five of these social determinants of health, when favorable, "contribute to better oral health and facilitate favorable oral health trajectories during the life course."²

Laying the Foundation: Healthy People 1990

Healthy People 1990 focused on health across the life span with overarching goals to decrease mortality in infants and adults and to increase independence among older adults. Objectives were

organized into three areas: preventive services, health protection, and health promotion. In that first iteration of Healthy People, oral health objectives were classified under the health protection area, and included 12 very ambitious objectives³:

- i. By 1990, the proportion of nine-year-old children who have experienced dental caries in their permanent teeth should be decreased to 60 percent (baseline was 71 percent).
- ii. By 1990, the prevalence of gingivitis in children six to 17 years old should be decreased to 18 percent (baseline was 23 percent).
- iii. By 1990, in adults the prevalence of gingivitis and destructive periodontal disease should be decreased to 20 percent and 21 percent, respectively (baselines were 25 percent and 23 percent, respectively).
- iv. By 1990, no public elementary or secondary school (and no medical facility), should offer highly cariogenic foods or snacks in vending machines or in school breakfast or lunch programs (no baseline data).
- v. By 1990, virtually all students in secondary schools and colleges who participate in organized contact sports should routinely wear proper mouth guards (no baseline data).
- vi. By 1990, at least 95 percent of school children and their parents should be able to identify the principal risk factors related to dental diseases and be aware of the importance of fluoridation and other measures in controlling these diseases (no baseline data).
- vii. By 1990, at least 75 percent of adults should be aware of the necessity for both thorough personal oral hygiene and regular professional care in the prevention and control of periodontal disease (baseline was 52 percent).
- viii. By 1990, at least 95 percent of the population on community water systems should be receiving the benefits of fluoridated drinking water (baseline was 60 percent).
- ix. By 1990, at least 50 percent of school children living in fluoride-deficient areas that do not have community water systems should be served by an optimally fluoridated school water supply (baseline was six percent).
- x. By 1990, at least 65 percent of school children should be proficient in personal oral hygiene practices and should be receiving other needed preventive dental services in addition to fluoridation (no baseline data).
- xi. By 1990, a comprehensive and integrated system should be in place for periodic determination of the oral health status, dental treatment needs, and utilization of dental services of the U.S. population (no baseline data).
- xii. By 1985, systems should be in place for determining coverage of all major dental public health preventive measures and activities to reduce consumption of highly cariogenic foods (no baseline data).

Oral Health as a Leading Health Indicator

By the time Healthy People 2020 was published, Healthy People had significantly expanded to almost 1,300 objectives (1,111 measurable objectives), including 33 oral health objectives,⁴ in 42 topic areas. One of the most significant aspects of Healthy People 2020 was the development of Leading Health Indicators, a small subset of objectives selected to spotlight high-priority health issues and actions that can be taken to drive progress toward the Healthy People goals and targets and address morbidity and mortality. In recognition of its role in overall health, oral health was selected as one of the 12 topics. More specifically, Healthy People 2020 Oral Health Objective OH-7, which had a stated goal to "increase the proportion of children, adolescents, and adults who used the oral health care system in the past year" and called for a 10 percent improvement over a baseline access rate of 44.5 percent at the beginning of the decade, was selected as a Leading Health Indicator for oral health and one of 26 Leading Health Indicators overall. Unfortunately, despite the increased attention to oral health access, there was very little change, and the final access rate at the end of the decade was 43.3 percent accessing dental care in the past year, far from the goal of 49.0 percent.⁵

Streamlined Approach: Healthy People 2030

Launched in 2020 and streamlined to promote foci on a reduced number of objectives, Healthy People 2030 includes 358 specific and measurable public health objectives with targets and that are associated with evidence-based interventions. The vision for this fifth iteration of Healthy People is "a society in which all people can achieve their full potential for health and well-being across the lifespan."⁶ The overarching goals for Healthy People 2030 not only build on previous iterations, but also place additional emphasis on advancing health equity, health literacy and social determinants of health:

- Attain healthy, thriving lives and well-being free of preventable disease, disability, injury, and premature death.
- Eliminate health disparities, achieve health equity, and attain health literacy to improve the health and well-being of all.
- Create social, physical, and economic environments that promote attaining the full potential for health and well-being for all.
- Promote healthy development, healthy behaviors, and well-being across all life stages.
- Engage leadership, key constituents, and the public across multiple sectors to take action and design policies that improve the health and well-being of all.

The Healthy People 2030 oral health goal is to "improve oral health by increasing access to oral health care, including preventive services." As part of the overall streamlining of Healthy People objectives, oral health (OH) objectives have been reduced from 33 in Healthy People 2020 to 11 in Healthy People 2030⁷:

- OH-01: Reduce the proportion of children and adolescents with lifetime tooth decay (baseline is 48.4 percent and the target is 42.9 percent by 2030).
- OH-02: Reduce the proportion of children and adolescents with active and untreated tooth decay (baseline is 13.4 percent and the target is 10.2 percent).

- OH-03: Reduce the proportion of adults with active or untreated tooth decay (baseline is 22.8 percent and the target is 17.3 percent).
- OH-04: Reduce the proportion of older adults with untreated root surface decay (baseline is 29.1 percent and the target is 20.1 percent).
- OH-05: Reduce the proportion of adults aged 45 years and over who have lost all their teeth (baseline is 7.9 percent and the target is 5.4 percent).
- OH-06: Reduce the proportion of adults aged 45 years and over with moderate and severe periodontitis (baseline is 44.5 percent and the target is 39.3 percent).
- OH-07: Increase the proportion of oral and pharyngeal cancers detected at the earliest stage (baseline is 29.5 percent and the target is 34.2 percent).
- OH-08: Increase use of the oral health system (baseline is 46.2 percent and the target is 45.0 percent).
- OH-09: Increase the proportion of low-income youth who have a preventive visit (baseline is 75.8 percent and the target is 79.9 percent).
- OH-10: Increase the proportion of children and adolescents who have dental sealants on one or more molars (baseline is 37.0 percent and the target is 42.5 percent).
- OH-11: Increase the proportion of people whose water systems have the recommended amount of fluoride (baseline is 72.8 percent and the target is 77.1 percent).

As with Healthy People 2020, Healthy People 2030 has prioritized specific objectives as Leading Health Indicators, naming 23 specific objectives that "impact major causes of death and disease in the United States."⁸ Oral Health objective (OH-8) "increase use of the oral health care system" is one of the Healthy People 2030 Leading Health Indicators.

What is Your Role in Healthy People 2030?

One of Healthy People 2030's overarching goals is to engage leadership, key constituents, and the public across multiple sectors. This overarching goal recognizes the imperative of enlisting and engaging diverse users across sectors to achieve the Healthy People 2030 targets. With the continued multidirectional integration of oral health and overall health across multiple disciplines, many professionals affect the outcome of the Healthy People 2030 oral health objectives. Healthcare professionals and others can advocate for policies that enhance access to dental care, especially for underserved and vulnerable populations. Public health professionals can promote evidence-based prevention strategies, such as early access to dental care, improving oral health literacy of patients and the public, dental sealants, topical fluorides, and community water fluoridation. Private practitioners can do their part by becoming knowledgeable about the oral health objectives and adopting evidence-based policies and practices to promote access to care for those at high risk for dental caries or periodontal disease, including historically marginalized communities, people living in poverty, and people living in geographically isolated areas (i.e., dental health professional shortage areas). Finally, medical providers and community partners can promote oral health through education and referral to oral health professionals.

The Healthy People 2030 Federal Oral Health Workgroup – comprised of representatives from the Centers for Disease Control and Prevention (CDC), Health Resources and Services Administration (HRSA), National Institute of Dental and Craniofacial Research, and the Indian Health Service – has developed several specific strategies that oral health professionals can adopt to help the nation reach its 2030 targets on the oral health objectives. These strategies include:

- 1. Promote and use evidence-based prevention practices;
- 2. Improve skills and comfort of oral health professionals to provide care to children as soon as the first tooth erupts or by age 1;
- 3. Embrace oral health workforce delivery models that improve access to care for underserved and vulnerable populations;
- 4. Use an integrated approach to improve access to care, working collaboratively with medical and community partners; and
- 5. Work with state and local agencies and other advocates to educate decision makers about the benefits of community water fluoridation.

Healthy People offers an array of evidence-based resources related to oral conditions listed in the oral health objectives. These can be found at <u>https://health.gov/healthypeople/objectives-and-data/browse-objectives/oral-conditions/evidence-based-resources</u> and include:

- Treatment of periodontitis for glycemic control in people with diabetes mellitus
- Pit and fissure sealants versus fluoride varnishes for preventing dental decay in the permanent teeth of children and adolescents
- Fluoride varnishes for preventing dental caries in children and adolescents
- Oral Health in America: Advances and Challenges
- Pit and Fissure Sealants for Preventing Dental Decay in Permanent Teeth
- Micro-Invasive Interventions for Managing Proximal Dental Decay in Primary and Permanent Teeth
- Fluoride Toothpastes of Different Concentrations for Preventing Dental Caries
- Interventions with Pregnant Women, New Mothers and Other Primary Caregivers for Preventing Early Childhood Caries
- Fluoride Mouth Rinses for Preventing Dental Caries in Children and Adolescents
- Fluoride Gels for Preventing Dental Caries in Children and Adolescents
- Community Water Fluoridation
- Implementation of Evidence-Based Preventive Interventions
- Preventing Tooth Decay
- Dental Caries (Cavities): Community Water Fluoridation
- Dental Caries (Cavities): School-Based Dental Sealant Delivery Programs
- Prevention of Dental Caries in Children Younger Than 5 Years: Screening and Interventions

Healthy People 2030 is our opportunity to collectively improve the oral health of the nation. Each of us – oral health professionals, other healthcare professionals, communities, dental and public health organizations, government agencies, etc. – can do our part by learning about the eleven oral health objectives and using or promoting evidence-based strategies to address them.

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References

- 1. U.S. Department of Health, Education, and Welfare. (1979). Healthy people: The surgeon general's report on health promotion and disease prevention. https://files.eric.ed.gov/fulltext/ED186357.pdf
- 2. National Institutes of Health. (2021). Oral Health in America: Advances and challenges. Bethesda, MD: US Department of Health and Human Services, National Institutes of Health, National Institute of Dental and Craniofacial Research, 1, 5-6. https://www.nidcr.nih.gov/research/oralhealthinamerica
- 3. Public Health Service (DHHS). (n.d.). The 1990 health objectives for the nation: A midcourse review. Public Health Service (DHHS), Rockville, MD. Office of Disease Prevention and Health Promotion. https://eric.ed.gov/?id=ED296989
- HealthyPeople.gov. (n.d.). Healthy people 2020, topics & objectives. Office of Disease Prevention and Health Promotion, Department of Health and Human Services, Washington, D.C. https://wayback.archiveit.org/5774/20220413162703/https://www.healthypeople.gov/2020/topics-objectives
- 5. Office of the Assistant Secretary for Health. (n.d.). Healthy people 2020: an end of decade snapshot. Office of Disease Prevention and Health Promotion, Department of Health and Human Services, Washington, D.C. https://health.gov/sites/default/files/2021-03/21%20HP2020EndofDecadeSnapshot2.pdf
- 6. Office of Disease Prevention and Health Promotion. (n.d.). Healthy people 2030 framework. Department of Health and Human Services, Washington, D.C. https://health.gov/healthypeople/about/healthy-people-2030-framework
- 7. Office of Disease Prevention and Health Promotion. (n.d.). Oral conditions. Department of Health and Human Services, Washington, D.C. https://health.gov/healthypeople/objectives-and-data/browse-objectives/oral-conditions
- 8. Office of Disease Prevention and Health Promotion. (n.d.). Leading health indicators. Department of Health and Human Services, Washington, D.C. https://health.gov/healthypeople/objectives-and-data/leading-health-indicators

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