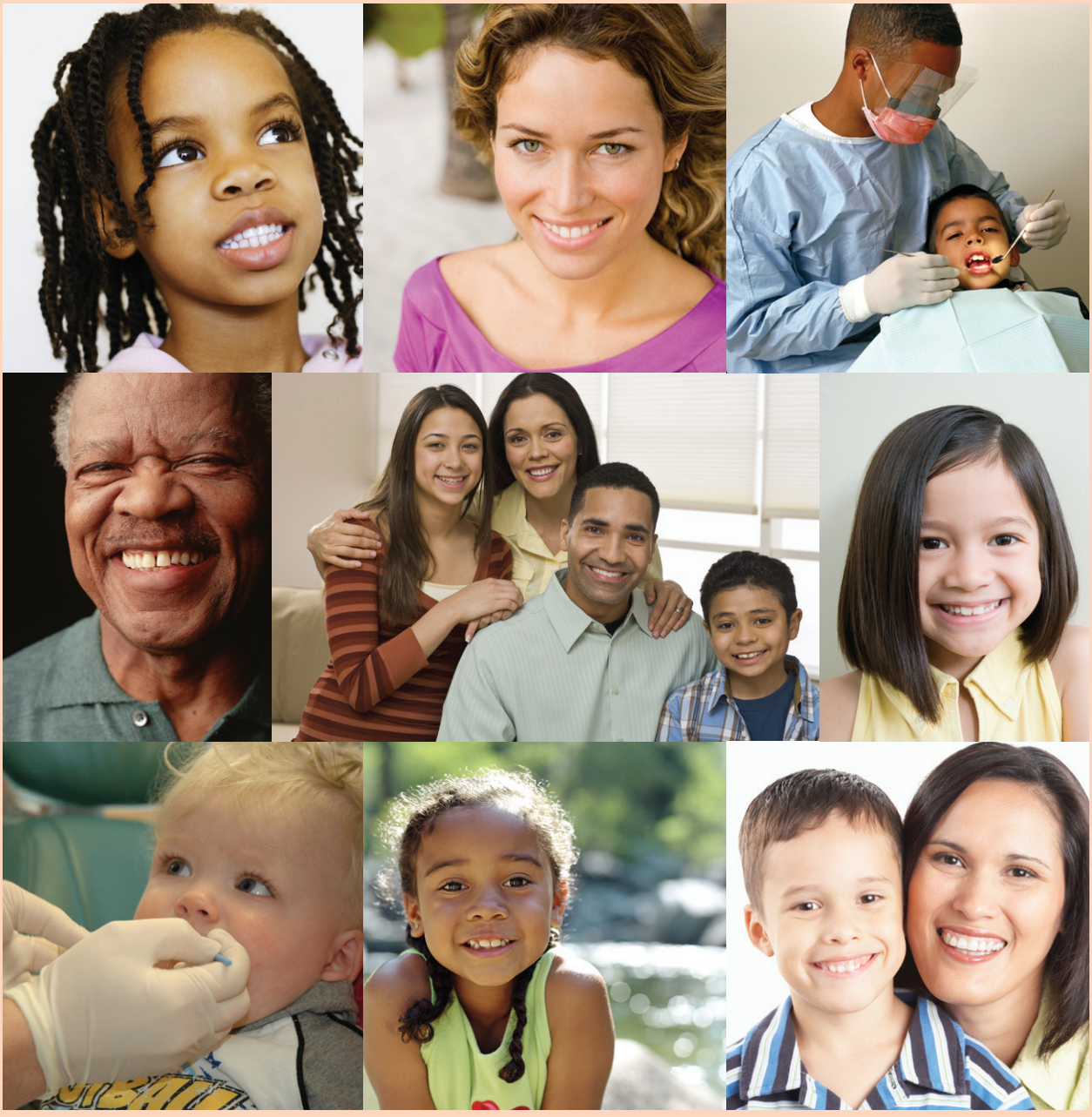
U.S. Department of Health and Human Services

Oral Health Strategic Framework 2014–2017



About the Oral Health Coordinating Committee

The United States Public Health Service (USPHS) Oral Health Coordinating Committee (OHCC) comprises oral health representation from the U.S. Department of Health and Human Services (HHS) operating and staff divisions and other federal agencies. The OHCC is charged with providing direction and coordinating a broad spectrum of oral health policy, research, and programs within the USPHS, across federal agencies, and between the public and private sectors. In response to this charge, the OHCC has developed this document, the *HHS Oral Health Strategic Framework 2014–2017*.

The OHCC would like to acknowledge the following HHS operating and staff divisions that contributed to the *Framework*: Administration for Community Living (ACL), Administration for Children and Families (ACF), Agency for Healthcare Research and Quality (AHRQ), Centers for Disease Control and Prevention (CDC), Centers for Medicare & Medicaid Services (CMS), Food and Drug Administration (FDA), Health Resources and Services Administration (HRSA), Indian Health Service (IHS), National Institutes of Health (NIH), Office of the Assistant Secretary for Health (OASH), Office of the Assistant Secretary for Planning and Evaluation (ASPE), Office for Civil Rights (OCR), Office of Minority Health (OS/OMH), Office on Women's Health (OASH/OWH), and Substance Abuse and Mental Health Services Administration (SAMHSA). Other contributing federal agencies included the Federal Bureau of Prisons (BOP), Coast Guard (USCG), and Immigration and Customs Enforcement Health Services Corps (IHSC).

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Introduction and Background

About the Framework

The U.S. Department of Health and Human Services (HHS) is committed to advancing the oral health and general well-being of all populations across the lifespan. The *HHS Oral Health Strategic Framework 2014–2017 (*the *Framework)* reflects the collective deliberations and next steps proposed by HHS and other federal partners to realize the Department's oral health vision and eliminate oral health disparities. The *Framework* builds upon and outlines a strategic alignment of HHS operating and staff divisions' resources, programs, and leadership commitments to improve oral health with activities of other federal partners.

The USPHS Oral Health Coordinating Committee (OHCC) authored the *Framework* to provide the context for leveraging current and planned oral health priorities and actions across HHS and partner agencies. The *Framework* aligns key activities to five major goals and associated strategies in response to recommendations from two Institute of Medicine (IOM) reports, *Advancing Oral Health in America* and *Improving Access to Oral Health Care for Vulnerable and Underserved Populations*, and reflects discussions with external stakeholders. While the *Framework* does not attempt to inventory all oral health initiatives supported by HHS and other federal partners, it provides a roadmap to prevent oral disease; increase access to services; develop and disseminate oral health information; advance public policy and research and translate policy and research into practice; strengthen the oral health workforce; and eliminate oral health disparities.

The *Framework* is primarily written for oral health, behavioral health, and primary care health professionals and program administrators within and outside of the federal government and other external stakeholder groups interested in oral health. It serves as an essential resource to (1) optimize the implementation of activities planned and those underway, (2) strengthen existing cross-agency collaboration, and (3) identify new avenues for private-public partnerships by creating maximum synergy with other current federal and non-federal oral health initiatives. Appendix 1 is a table that provides a crosswalk of the *Framework's* strategic goals and strategies; the two IOM reports, *Advancing Oral Health in America* and *Improving Access to Oral Health Care for Vulnerable and Underserved Populations;* and the highlighted topics from discussions held with external stakeholders in 2012.

The Challenge

A major health objective of our nation is to place a greater focus on health and not just health care.[1] Total health and wellness are inextricably linked to oral health—it is impossible to have one without the other. The effects of oral disease on overall health are alarming. Oral disease has an impact on physical, psychological, social, and economic health and well-being, often resulting in pain, diminished function, and reduced quality of life. This was underscored in the Surgeon General's report on oral health, *Oral Health in America,* which referred to oral health as a "silent epidemic" of dental and

oral diseases that burden children and adults throughout the United States.[2] Although tooth decay is largely preventable, more than 9 in 10 adults have experienced tooth decay (dental caries). Approximately 1 in 5 people in all age groups has untreated dental caries.[3] The statistics are even worse worldwide, with more than 1 in 3 people living with untreated decay in their permanent teeth.[4] In addition, consequences of poor oral health have a negative influence on children's speech, growth and function, and social development.[2] Missing teeth, pain, and infection from oral diseases can limit food choices and worsen nutrition.[5] Pain caused by tooth decay may result in missed days at school and work and diminished performance.[6,7]

Oral disease has an impact on physical, psychological, social, and economic health and well-being, often resulting in pain, diminished function, and reduced quality of life.

Poor appearance, resulting from dental problems, can contribute to social isolation, lower wages, and loss of self-esteem.[2,8] Furthermore, poor oral health is associated with increased bacterial systemic exposure and increased inflammatory factors that can lead to adverse health outcomes such as uncontrolled diabetes, cardiovascular disease, and respiratory disease.[9,10,11] Biomedical and behavioral research provides knowledge to understand the fundamental causes of diseases and to transform that knowledge into a lifetime of better health for all people. Most dental, oral, and craniofacial conditions arise from complex interactions of biological, behavioral, environmental, and higher system-level factors. Consideration of these interactions is essential to understanding the causes and pathological processes of oral diseases and can greatly enhance more rapid discovery of interventions that will improve their prevention, diagnosis, and treatment.

Barriers to Oral Health Care

The lack of dental services in many regions of the U.S. is the greatest unmet oral health need.[12,13] Many Americans experience poor oral health due to lack of access to care, since oral health is not universally integrated into primary or behavioral health care services. As a result, dental care is usually set apart from other types of health care.

This results in a lack of integration between medical and dental records, a lack of use and acceptance of dental diagnostic codes, and separate insurance coverage and payment systems, treatment delivery, and health care systems. Interprofessional education and collaborative practice present tremendous possibilities for integrating oral and primary health care and improving patient-centered care. While community and clinical approaches have been shown to reduce oral diseases, lessen dental care costs, and improve the quality of individuals' lives, these approaches are not being used to the greatest extent possible.[14,15]

The cost of dental care and lack of dental coverage are often cited as reasons individuals do not seek needed dental care.[16] Publicly-financed reimbursement programs covering the provision of oral health services are often limited in scope or are non-existent for adults. For example, Medicare coverage provides 22 preventive screenings for eligible individuals, but does not include oral health services. Medicare is limited in scope of coverage for dental care and, typically, must be related to a covered medical procedure provided in a hospital setting. While most state Medicaid programs cover emergency dental procedures for low-income adults, only 28 states provide dental benefits to Medicaid-enrolled adults beyond medically necessary care in emergency circumstances.[17]

Emergency room treatment for preventable dental conditions, estimated at 830,000 visits in 2009, is expensive and continues to increase.[18] In addition, there is significant variation in the geographic distribution of dentists. In 2011, the number of dentists per 10,000 population ranged from 4.2 (Arkansas and Mississippi) to 10.8 (District of Columbia).[19]

The lack of oral health literacy also presents a barrier to oral health. Effective communication between oral health and other health care providers and their patients is the foundation for improved oral and general health outcomes. Engaging in meaningful patient-provider interactions, where patients understand their oral health status and treatment options, continues to be a concern. "An individual may have adequate understanding of material with familiar content, but struggle to comprehend information with unfamiliar vocabulary and concepts."[20] A survey of U.S. adults found that more than one-third had limited health literacy.[21] Tools, resources, and training to enhance health literacy are available and offer promise for enhancing oral health and health provider skills. However, many providers have limited knowledge of these tools or are only beginning to explore their potential for providing improved service delivery.

Oral Health Disparities

Suffering as a result of oral health problems is worse among the poor and for members of some racial and ethnic groups where greater percentages of people are affected by nearly all oral diseases and conditions. In addition to observed disparities in health status, inequities exist with regard to the number of dental visits and receipt of clinical and preventive services. For children living at or below 100% of the federal poverty level, untreated dental caries is significantly higher compared with children living above the poverty level.[3] The percentage of adults (age 65 years or older) who reported they did not obtain dental care because they could not afford it doubled from 3.5% in 2001 to 7.0% in 2011.[22] Older adults are more likely than other age groups to have medical conditions that worsen their oral health and vice versa, such as diabetes and cardiovascular disease.[23]

In addition, multiple chronic medical conditions associated with aging, such as arthritis, palsy, and cognitive impairment, can make oral hygiene significantly more difficult or impossible to achieve. Periodontal (gum) disease is present in nearly half of adults over 30 years of age, and in 7 in 10 older adults.[24] Furthermore, less than 30% of adults aged 45–64 years have a full set of teeth, and nearly 1 in 4 adults older than age 65 years has no teeth.[3]

The *Framework* identifies and explores these factors and concludes that solutions lie in collaborative partnerships across federal, state, and local agencies, as well as with public and private organizations.

Related Federal Initiatives

The *Framework* represents the most recent demonstration of the federal government's commitment to oral health. The first-ever Surgeon General's report, *Oral Health in America: A Report of the Surgeon General* (2000),[2] was followed by the *National Call to Action to Promote Oral Health* (2003) and the *HHS 2010 Oral Health Initiative*. While some improvements in oral health have been achieved in response to recommendations outlined in these reports, further action leading to measurable results is still needed.

The *Framework* is also aligned with other major Departmental initiatives such as the *National Action Plan to Improve Health Literacy,* the *HHS Action Plan to Reduce Racial and Ethnic Health Disparities,* and the *HHS National Prevention Strategy.* These efforts support the federal government's commitment to promote healthy communities and empower individuals with the knowledge and skills to assume greater ownership of their own health. Strategies and actions that result from these initiatives can be cross-cutting and incorporated into oral health activities.

Two broad federal initiatives recognize the integral role of oral health: the implementation of the oral health objectives contained in *Healthy People 2020*,[14] and implementation of the Patient Protection and Affordable Care Act (ACA), Public Law 111-148.[25] In the private sector, the U.S. National Oral Health Alliance has launched a parallel effort to address oral health for vulnerable populations. The Alliance has created an action plan, *An Emerging Framework for Action,* which reflects the wisdom and ideas of multiple disciplines and establishes a common platform for working together. Alliance initiatives and the *Framework* provide opportunities for HHS, other federal partners, and external stakeholders to jointly engage in activities to improve oral health and reduce oral health disparities.

Healthy People 2020

Healthy People 2020[14] objectives are science-based, measurable 10-year national objectives for improving the health of all Americans. Oral health is included as one of 12 *Healthy People 2020* Leading Health Indicators (LHI) for the nation. The LHI for oral health is "*persons aged 2 years and older who used the oral health care system in the last 12 months.*" In 2011, among persons aged 2 years and older, 41.8% had a dental visit within the previous 12 months—the *Healthy People 2020* target is 49.0%. There are 17 oral health objectives that focus on the oral health of children, adolescents, and adults, access to preventive services, oral health interventions, monitoring/surveillance systems, and public health infrastructure.

The Affordable Care Act and Oral Health

The Patient Protection and Affordable Care Act (ACA)[25] recognizes the integral role of oral health services. The ACA includes provisions that address important improvements to increase oral health coverage, access, workforce and infrastructure development, surveillance, and public education. One significant provision is the inclusion of pediatric dental coverage as part of the *Essential Health Benefits (EHB)*, which must be included in non-grandfathered individual and small group market insurance plans (inside and outside Marketplaces), and Medicaid Alternative Benefit Plans. In addition, a qualified health plan (QHP) must include pediatric dental benefits unless the QHP is in a Marketplace that offers stand-alone dental plans.[26]

Vision and Commitment

The Vision

HHS and other federal partners are committed to increasing the public's understanding that oral health is integral to overall health.

The Department strives to leverage public and private sector partners to achieve better oral health and overall health for all populations across the lifespan. The *Framework* provides the roadmap for engaging and resolving ongoing disparities in oral health.

Guiding Principles

The *Framework* is grounded in three guiding principles:

1. Oral disease is a health and health care problem and not solely a dental problem;
2. Long-term visibility of oral health in program and policy planning requires a comprehensive, deliberate, and innovative approach; and
3. HHS is a critical part of a larger oral health enterprise poised to implement the *Framework's* goals though collaborative efforts to create collective impact.[27]

The *Framework* is a commitment by HHS and federal partners for a collaborative call for action, with strategic and performance-based goals, strategies, and actions, and defined roles and responsibilities by which federal agencies, programs, and stakeholders can measure success.

The Commitment

The *Framework* serves as the catalyst for moving a national oral health agenda forward. The five major overarching goals, including strategies and select activities, underscore the ability of HHS and other federal partners to collectively address the nation's oral health concerns and disparities. Each plays a unique role in promoting knowledge and awareness, providing treatment and related oral health services, and translating biomedical and behavioral research to both further the science and promote these advances into evidence-based practices.

The *Framework* is a guide for working collaboratively to achieve greater impact. It acknowledges the need to undertake several different approaches concurrently that respect racial and cultural differences, language barriers, behavioral health, and the health literacy levels of diverse individuals in need of oral health services and education. The *Framework* allows agency leadership and entities responsible for implementing oral health initiatives the flexibility to develop creative solutions and respond to new oral health issues. HHS challenges itself, other federal partners, and external stakeholder groups to commit to engaging in concerted efforts to create oral health equity for all populations. By working collaboratively, existing partnerships are strengthened and opportunities for engaging with new partners are identified. Through these collective efforts, HHS, federal partners, and oral health stakeholders have a greater opportunity to realize the vision that oral health is integral to overall health for all populations across the lifespan.

Goals and Strategies

Goals

The goals outlined in the *Framework* are intentionally broad but well-founded in existing literature (see references on pages 30–32 for specific citations). The five overarching goals are:

1. Integrate Oral Health and Primary Health Care
2. Prevent Disease and Promote Oral Health
3. Increase Access to Oral Health Care and Eliminate Disparities
4. Increase the Dissemination of Oral Health Information and Improve Health Literacy
5. Advance Oral Health in Public Policy and Research

These goals provide the foundation for the targeted strategies and the impetus for action.

Strategies and Actions

Examples of activities currently underway and those recently completed or planned are included in the *Framework* and identified by the primary federal partner(s) responsible for implementing the strategy that supports each of the major goals. Examples include training and technical assistance; evaluation, data and policy; service delivery improvements; and opportunities for public and stakeholder engagement.

GOAL 1. Integrate Oral Health and Primary Health Care

The American health system has historically separated oral health care from overall health care in the health professions' education, practice, and payment systems. The lack of interoperability between medical and dental records further adds to segmentation of health care delivery.

Recognizing the value of good oral health as an integral part of overall health, government sector and non-dental primary care professional organizations recently increased their engagement and support for the integration of oral health and primary care at the institutional training and practice levels.[28,29,30] Frontline primary care professionals, specifically nurses, physicians, and physician assistants are members of the medical delivery system who are most likely to see vulnerable and underserved populations with limited or no access to dental services. This group of primary care professionals has the capacity to incorporate oral health information and the provision of preventive oral health services into their existing day-to-day practice. Concurrently, dental professionals can serve as key players in detecting chronic diseases such as diabetes, hypertension, and hypercholesterolemia in dental practices. A recent study entitled, The Effect of Chairside Chronic Disease Screenings by Oral Health Professionals on Health Care Costs, showed the potential savings to the health care system from increased efforts to screen for chronic conditions in dental offices.[31]

In 2012, HRSA's *Integration of Oral Health and Primary Care Practice Initiative* created a set of oral health core clinical competencies and implementation strategies appropriate for primary care clinicians.[32] Most states currently allow the provision of preventive dental services in primary care practice, especially during well child visits. Early detection of oral disease, delivery of preventive interventions, and referral to oral health professionals could improve oral health for all populations, especially for underserved populations that experience significant oral health disparities.[32]

Strategies for Goal 1

A. Advance interprofessional collaborative practice and bidirectional sharing of clinical information to improve overall health outcomes (1-A).

B. Promote education and training to increase knowledge, attitudes, and skills that demonstrate proficiency and competency in oral health among primary care providers (1-B).

C. Support the development of policies and practices to reconnect the mouth and the body and inform decision-making across all HHS programs and activities (1-C).

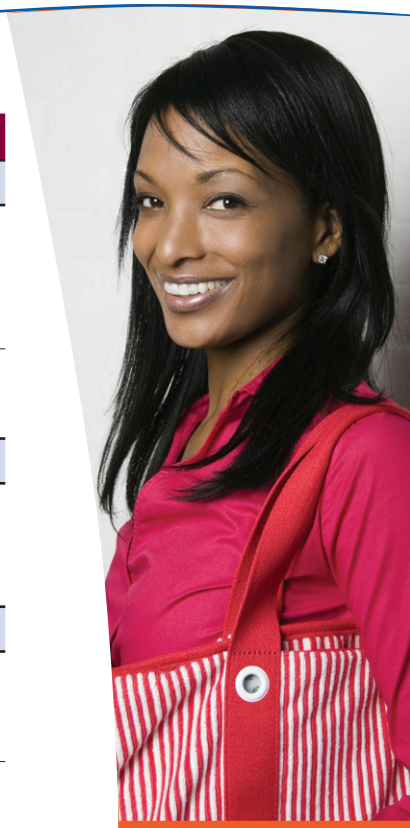
D. Create programs and support innovation using a systems change approach that facilitates a unified patient-centered health home (1-D).

In response to recommendations in two Institute of Medicine reports published in 2011, HRSA released the Integration of Oral Health and Primary Care Practice (IOHPCP) report that outlines strategies and recommendations to facilitate implementation of oral health core clinical competencies for non-dental, primary care clinicians to improve the oral health of vulnerable populations.

Goal 1: Integrate Oral Health and Primary Health Care

Federal Partners	Strategy
Centers for Medicare & Medicaid Services (CMS)	
Support state Medicaid programs and the Children's Health Insurance Program (CHIP) to implement policies that encourage the integration of oral health and primary health care. CMS will provide technical assistance to state Medicaid and CHIP dental programs on reimbursing primary care medical providers for providing oral health services, including through managed care contracting arrangements, on tracking the provision of those services on line 12f of the CMS Form 416 (Annual Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) Participation Report), and on implementing strategies to convert physician visits into referrals to dental providers for follow-up care.	1-C
Health Resources and Services Administration (HRSA)	
Support the *National Center for Interprofessional Practice and Education* to provide sustainable national leadership in transitioning from a focus on care delivery to a focus on health. Promote collaboration, avoid duplication, and create definitions and standards to advance interprofessional practice and education.	1-A
Support the *Integration of Oral Health and Primary Care Practice Initiative* and pilot project. Provide technical assistance and support to community health centers to create system-level change through education of primary care providers, demonstration of oral health competency in practice, and integration of communication, health records information, and workflow processes to support continuity and patient-centered care.	1-A
Develop a set of oral health core clinical competencies for primary care clinicians; delineate the elements that influence the implementation and adoption of competencies; and outline the basis for implementation strategies and translation into primary care practices in safety-net settings.	1-B
Promote oral health education and training among primary care providers by developing and implementing an HIV/AIDS oral health curriculum targeting primary care providers.	1-B
Support and encourage health center organizations to engage in practice transformation and achieve patient-centered medical home (PCMH) certification. Promote patient-centered medical-dental home professional training and practice described in the recommendations from the report issued by the Advisory Committee on Training in Primary Care Medicine and Dentistry to the HHS Secretary and Congress.	1-D
Indian Health Service (IHS)	
Provide oral health assessment and fluoride varnish application training to primary care providers and ancillary staff, including IHS and Tribal physicians, mid-level providers, public health nurses, Head Start staff, pharmacists, and community health workers.	1-B
Engage in interprofessional collaboratives such as the IHS Early Childhood Caries (ECC) Collaborative. Collaborate with non-dental health partners to bring renewed attention to oral health and disease disparities in American Indian/Alaska Native populations.	1-D

Federal Partners	Strategy
National Institutes of Health (NIH)	
Evaluate the effectiveness of training pediatric clinicians to administer fluoride varnish and patient-centered counseling on the reduction and prevention of early childhood caries (ECC) by conducting research to inform decision-making on activities to decrease ECC.	1-C
Evaluate the effect of increased clinician knowledge of ECC and counseling to reduce ECC among children.	1-C
Office of Minority Health (OMH)	
Incorporate oral health screening into primary care providers' practice standards. Convene meetings with partners to begin discussions about incorporating oral health screenings into primary care practice standards.	1-D
Substance Abuse and Mental Health Services Administration (SAMHSA)	
Educate the workforce through continuing education activities on tobacco-cessation and alcohol screening and intervention, as well as mental and substance use disorders.	1-A
Educate dentists on the medical science behind mental and substance use disorders and associated risks to oral health. Disseminate information electronically through webinars and in-person trainings and presentations.	1-A
Increase smoking cessation programs within behavioral health programs by building on existing efforts with SAMHSA grantees, other behavioral health providers, and state behavioral health systems to integrate tobacco cessation efforts into behavioral health programs.	1-A
Bureau of Prisons (BOP)	
Provide preventive dentistry intranet training to BOP non-dental clinicians that highlights oral health in relation to primary care practice.	1-B
Integrate oral health more broadly by incorporating oral health information into the Multidisciplinary Clinical Practice Guidelines.	1-D
Immigration and Customs Enforcement Health Services Corps (IHSC)	
Provide annual preventive oral health training to all medical clinicians by developing a presentation to enhance their basic skills and knowledge of preventive oral health and increase their confidence to address basic preventive oral health issues.	1-B
Multi-Agency Efforts	
Examine primary care physician knowledge, attitudes, and behavior relative to oral health to assess whether physicians look in the mouth, talk to patients about oral health, and/or refer patients to oral health providers for care by conducting and analyzing data from the National Primary Care Providers on Oral Health Survey (OASH/OWH, HRSA).	1-A



GOAL 2: Prevent Disease and Promote Oral Health

Remarkable progress in oral health occurred during the second half of the 20th century in the United States.[33] Since the 1970s, untreated dental caries among children and adolescents age 6–19 years has declined more than 70% from 55% in 1971–74 to 16% in 2007–2010.[19]

Americans are healthier because of preventive efforts such as community water fluoridation[33] and dental sealants, which reduce both the prevalence and severity of tooth decay. Children receiving dental sealants in school programs have 60% fewer cavities on treated surfaces after placement of a sealant.[34] Community water fluoridation is a cost-saving measure; it is estimated that every $1 invested in fluoridation yields about $38 in savings from fewer cavities treated.[35] As a result of preventive efforts and improved oral health care, the generation of baby boomers will be the first generation who largely maintain their natural teeth over an entire lifetime.[36]

Despite these advances, tooth decay affects one in four children ages 3–5 and 6–9 years who live in poverty.[37] Older adults are keeping more teeth than previous generations, yet develop new decay at rates equal to or higher than those in children.[38] Prevention of oral disease can be enhanced through the increased delivery of clinical and community preventive services that remain underutilized. HHS, along with public and private partners at the national, state, tribal, and local levels, can increase the reach of preventive interventions that promote healthy behaviors, such as effective self-management activities to improve health and quality of life.

Strategies for Goal 2

A. Promote delivery of dental sealants in school-based programs and expand community water fluoridation (2-A).

B. Identify reimbursement strategies and funding streams that enhance sustainability of prevention programs (2-B).

C. Coordinate federal efforts focused on strengthening the infrastructure and capacity of local, state, and regional oral health programs (2-C).

D. Explore new clinical and financial models of care for children at high risk for developing caries, such as risk-based preventive and disease management interventions (2-D).

As part of the effort to prevent disease and promote oral health, CDC, CMS, and HRSA will collaborate to support and encourage increased use of dental sealants. Activities include funding state oral health programs, strengthening technical assistance, and setting state-specific goals to increase use of sealants among Medicaid-enrolled children.

Goal 2: Prevent Disease and Promote Oral Health

Federal Partners	Strategy
Administration for Community Living (ACL)	
Encourage the Aging Services Network to engage in oral health promotion and disease prevention interventions for older adults and people with disabilities by utilizing resources available on the Administration on Aging (AoA) oral health webpages.	2-A
Encourage innovative programs and partnerships that improve the oral health status of older adults, and list innovations on the AoA website.	2-C
Centers for Disease Control and Prevention (CDC)	
Promote Community Water Fluoridation (CWF) by supporting state and local water fluoridation efforts through monitoring, training, and technical assistance. Develop and disseminate communication tools about CWF for key audiences.	2-A
Indian Health Service (IHS)	
Increase the number of American Indian/Alaska Native children ages 0–5 years who receive dental sealants by utilizing various provider types and community members in the Early Childhood Caries Collaborative to promote oral health and application of dental sealants.	2-A
Multi-Agency Efforts	
Identify actions to enhance children's access to dental sealants. Utilize cross-agency collaboration to support and encourage increased utilization of sealants such as providing funding to state oral health programs, strengthening technical assistance, and setting state-specific goals to increase use of sealants among Medicaid-enrolled children (CMS, CDC, HRSA).	2-A
Encourage states to incorporate oral health innovations in their efforts to redesign their healthcare delivery systems. Support payers and funders to design and implement payment and funding approaches that favor prevention and better health outcomes. Encourage cooperation between payers and funders to magnify the effects of available dollars (CMS, CDC, HRSA).	2-B
Coordinate program oversight and monitoring of related oral health programs. Increase communication and knowledge sharing between project officers and hold regularly scheduled discussions across agencies (CDC, HRSA).	2-C
Build and/or maintain effective public health capacity for implementation, evaluation, and dissemination of best practices for preventing and improving oral health. Deliver joint webinars and coordinate technical assistance to state grantees (CDC, HRSA, SAMHSA).	2-C
Reduce early childhood caries (ECC)—tooth decay in children younger than 6 years. Invest in projects seeking to demonstrate the feasibility and effectiveness of risk-based prevention and disease management approaches to ECC. Support the dissemination of results from privately and publicly-funded pilot projects on risk-based prevention and chronic disease management approaches to ECC. Identify opportunities to work with state Medicaid and CHIP agencies to create options for new payment methodologies for risk-based prevention and chronic disease management approaches to ECC (CDC, CMS, HRSA).	2-D

GOAL 3. Increase Access to Oral Health Care and Eliminate Disparities

Public health entities engage communities in efforts to increase awareness, prevention, research, and policies that address health disparities and increase access to care. Despite these efforts, oral health disparities persist; these disparities have an impact on self-esteem, employability, productivity, nutrition, ability to learn, and overall wellness. More than 4 million people receive dental services through health center programs, and dentists are working in underserved areas through various federal and state programs. However, the oral health crisis continues to worsen, especially for vulnerable populations. There are more than 47 million individuals living in designated dental shortage areas, and 37% of dentists currently practicing are 55 years of age or older and nearing retirement age.[39]

Oral health disparities result from multiple, complex, interrelated determinants, and disproportionately affect low-income or racial and ethnic minority populations. The prevalence of untreated caries is nearly three times as high for non-Hispanic black adolescents (25%) compared with non-Hispanic white adolescents (9%) aged 13–15 years.[37] The same pattern is found in adult populations with respect to tooth retention. Significantly more non-Hispanic black (32%) older adults had lost all their natural teeth as compared with non-Hispanic white older adults (22%).[3] The use of dental sealants, one of the strongest evidence-based preventive interventions for dental caries, is also significantly lower for children from low-income and some racial and ethnic groups.[3]

Access to dental services is also closely related to insurance coverage. A report by the Government Accountability Office found that during 2010, only 63% of individuals had dental insurance through private coverage, Medicaid, or CHIP.[40] Overall, people without dental insurance (28%) were about half as likely as people with private coverage (57%) to have had a dental visit.[41] Access to dental services is even more limited for older populations. Almost 70% of older adults lack dental coverage and slightly less than 25% of older adults were likely to have a dental visit.[41] Without regular dental care there is an increased likelihood that a preventable problem can result in the need for complicated and expensive care. A recent report from the Pew Charitable Trusts revealed that approximately 830,000 emergency room (ER) visits in 2009 were for the treatment of dental related problems.[42]

Identifying dental providers who accept Medicaid and other public dental insurance can be difficult.[42] Transportation and finding participating providers are significant barriers for populations with low-incomes or living in rural areas.[43] According to the recent report, *In Search of Dental Care: Two Types of Dentist Shortages Limit Children's Access to Care,* data from several states revealed that only 10%–20% of dentists accept patients who are covered through Medicaid. The major reason for this low participation in Medicaid was inadequate reimbursement rates.[42] In addition, lack of understanding and emphasis on the importance of oral health and oral health care by individuals and health professionals can be a significant barrier to access to such care.[44] Supporting individuals to navigate the existing oral health care system for timely and affordable care is critical.

The Centers for Medicare & Medicaid Services supports states to provide accurate and complete information about dentists who participate in Medicaid and CHIP by encouraging use of the dental provider locator tool, Insure Kids Now.

The majority of dental problems are preventable, and the science has grown to preserve essential functions of teeth and other oral structures. To advance the oral health of the nation, the dental public health community should emphasize prevention and greater access to providers who are knowledgeable, sensitive, and responsive to diverse populations.

Strategies for Goal 3

A. Expand the number of health care settings that provide oral health care including diagnostic, preventive, and restorative services in Federally Qualified Health Centers, school-based health centers, Ryan White HIV/AIDS-funded programs, and Indian Health Service-funded health programs (3-A).

B. Strengthen the oral health workforce, expand capabilities of existing providers and promote models that incorporate other clinicians (3-B).

C. Improve the knowledge, skills, and abilities of providers to serve diverse patient populations (3-C).

D. Promote health professionals' training in cultural competency (3-D).

E. Assist individuals and families in obtaining oral health services and connecting with a dental home (3-E).

F. Align dental homes and oral health services for children (3-F).

G. Create local, regional, and state-wide partnerships that bridge the aging population and oral health systems (3-G).

H. Support collection of sex/gender and racial and ethnic stratified data pertaining to oral health (3-H).

Goal 3: Increase Access to Oral Health Care and Eliminate Disparities

Federal Partners	Strategy
Administration for Children and Families (ACF)	
Increase the number of children with a dental home by assisting grantees to identify dental homes for Early Head Start and Head Start (HS) children and families. Utilize dental hygienist liaisons to work with state oral health contacts from the Office of Head Start, National Center on Health, to promote oral health care and improve oral health for pregnant women and children enrolled in HS.	3-F
Head Start regional offices use and analyze data to identify HS grantees to provide technical assistance to identify strategies for establishing dental homes for enrolled children in low performing states. Conduct a pilot project to develop a data-driven model to improve the Office of Head Start National Center on Health and Head Start regional offices use of data to monitor grantee compliance.	3-F
Disseminate materials for programs to share with parents on the importance of establishing a dental home for their children. Share materials and links to resources with HS programs and others to improve consistent messaging on oral health.	3-F
Centers for Medicare & Medicaid Services (CMS)	
Support states to provide accurate and complete information about Medicaid and CHIP participating dentists. Encourage and broadly promote the use of the Insure Kids Now dental provider locator tool.	3-E
Health Resources and Services Administration (HRSA)	
Support the delivery of oral health services through Health Center programs. Monitor dental expansion or renovation projects at community health centers and analyze services data to measure increases in access to oral health services.	3-A
Support the inclusion of oral health activities in school-based health centers. Monitor efforts of nearly 240 grantees funded for construction, renovation, and equipment purchases. Provide grants to demonstrate effective ways to strengthen existing school-based health center capacity for early childhood and elementary/middle-school aged children of greatest need in order to increase oral health access to services.	3-A
Increase oral health care for individuals living with HIV/AIDS. Ryan White HIV/AIDS-funded programs increase oral health care for individuals living with HIV/AIDS by providing oral health care services to individuals living with HIV/AIDS.	3-A
Increase dental workforce training through various HRSA-supported programs. Ryan White HIV/AIDS Dental Reimbursement Program and Community-Based Dental Partnership programs increase dental workforce by training dental students and residents, dental hygiene students, and community-based dentists to provide oral health services to individuals living with HIV/AIDS.	3-B
Increase access to care for populations living in remote settings. Promote Area Health Education Centers' (AHECs) efforts to facilitate and support oral health initiatives in their regions, including support for HRSA State Oral Health Workforce Development grants.	3-B
Increase the dental workforce through various HRSA supported programs. Provide support for dental workforce development including training programs in general dentistry, pediatric dentistry, dental hygiene, and dental public health to increase access to care as well as through State Oral Health Workforce Grants, loan repayment, and scholarship programs.	3-B

Federal Partners	Strategy
Health Resources and Services Administration (HRSA) continued	
The National Health Service Corps (NHSC) helps underserved communities receive critically needed primary medical, oral, and behavioral and mental health care. Through the NHSC, oral health students and clinicians can receive scholarships and loan repayment in return for committing to practice in a dental Health Professional Shortage Area for a defined period of time.	3-B
Expand and sustain state-wide oral health programs for pregnant women and infants to a national level. Expand availability and increase utilization of quality preventive dental care and restorative services for pregnant women and infants through a Perinatal & Infant Oral Health Quality Improvement Initiative with a long-term goal to achieve sustainable improvement in the oral health care status of maternal and child health populations most at risk.	3-B
Support the collection of sex/gender and racial and ethnic stratified data pertaining to oral health. Gender and racial ethnic stratified data pertaining to oral health are collected by Ryan White HIV/AIDS Program data reports.	3-H
Office for Civil Rights (OCR)	
Ensure nondiscriminatory access to HHS-funded programs and services. Continue to accept, investigate, and take action on complaints alleging discrimination by oral health care providers.	3-E
Develop and enforce standards for health information privacy, security, and breach notification. Initiate compliance reviews and investigate complaints alleging violations of the Health Insurance Portability and Accountability Privacy and Security Rules and reports under the HITECH Act Breach Notification Rule.	3-E
Office of Minority Health (OS/OMH)	
Develop a web-based training that addresses the National Standards for Culturally and 3D Linguistically Appropriate Services in Health and Health Care (National CLAS Standards) and health literacy for oral health providers. Offer cultural competency training for oral health professionals on the Think Cultural Health website.	3-D
Substance Abuse and Mental Health Services Administration (SAMHSA)	
Improve access to oral health care for people with behavioral health disorders. Provide a structured, sequential learning experience for Single State Agencies for substance abuse services, discretionary grantees, and other appropriate stakeholders on the correlation between oral health and behavioral health, how to detect oral health problems in behavioral health care settings, and how to effectively link behavioral health clients to oral health care.	3-C

Goal 3: Increase Access to Oral Health Care and Eliminate Disparities

Federal Partners	Strategy
Multi-Agency Efforts	
Increase the ability of oral health providers to identify victims of human trafficking and make referrals for services. Include oral health providers in pilot trainings conducted as part of the *Federal Strategic Action Plan on Services for Victims of Human Trafficking in the United States 2013–2017* (ACF, OASH/OWH).	3-C
Engage the SAMHSA-HRSA *Center for Integrated Health Solutions* to promote oral health. Disseminate oral health care information and resources on the Center's website (HRSA, SAMHSA).	3-F
Implement the *Interagency Memorandum of Understanding for Improving Oral Health for Migrant and Seasonal Head Start Children and their Families* by coordinating resources, aligning policies, fostering stronger working relationships, and ensuring that quality, culturally competent, and comprehensive oral and other primary health care services are available in each state where Migrant and Seasonal Head Start programs and community health centers co-exist (ACF, HRSA).	3-G
Create local, regional, and statewide partnerships that bridge the aging and oral health systems, ultimately increasing access to oral health care for vulnerable older adults. Leverage technology by bringing data together into an interactive, searchable Aging and Dental Services (ADS) Mapping Tool (ACL, CDC, HRSA, OASH/OWH).	3-H
Leverage the *OWH Women Across the Lifespan* priority area to initiate discussions with CMS to improve the availability of treatment, oral health assessment, and surveillance of patients in assisted living and long-term care facilities, particularly for women who comprise the majority of individuals in assisted living and long-term care facilities. Identify and promote oral health training for staff in assisted living and long-term care settings, particularly for individuals with cognitive and physical disabilities (CMS, OASH/OWH).	3-H
Collect and make oral health data publicly available. Maintain oral health datasets for public use and provide analysis on selected datasets related to state and national indicators (CDC, NIH).	3-H

GOAL 4. Increase the Dissemination of Oral Health Information and Improve Health Literacy

According to the Institute of Medicine (IOM) Report, *Advancing Oral Health Care in America*, many patients and health care professionals are unaware of the risk factors and preventive methodologies for oral diseases. Moreover, many do not clearly understand the relationship between oral health and overall health and well-being. Improving the communication and understanding of essential oral health messages is the key to behavior change.[15]

Given the multifaceted nature of oral health problems, treatment is often complex and requires clear and concise communication. Messaging must overcome cultural barriers to be easily understood by all stakeholders, including patients and providers. At the core of messaging is health literacy, defined as the "capacity to obtain, process and use basic health information and services needed to make appropriate health decisions."[20]

A focus on health literacy is critical, especially since the U.S. population is becoming increasingly diverse. One common barrier to effective communication is health education materials that are not prepared at appropriate literacy levels for the target populations. For example, some racial and ethnic populations may have limited English language proficiency because English is not their primary language. Problems with limited health literacy can be even greater for older adults, for those individuals with limited education, and the poor.[45,46,47] The IOM report noted that adults with limited health literacy report less knowledge about their medical condition and treatment, poorer health status, less understanding and use of preventive services, and a higher rate of hospitalization.[15]

Plain writing and simple verbal communication are essential when initiating individual and community-wide strategies.[48] Oral health literacy is pivotal for effective communication and building sustained collaborative relationships for addressing and eliminating barriers to oral health. Plain writing concepts, principles, policies, and practices should be infused at all levels of health management and service delivery to create oral health literate organizations. At the same time, all health professionals are encouraged to participate in training opportunities to learn skills, strategies, and tools to communicate effectively with patients; share information about oral health issues with other health professionals; and develop health messages and patient education materials.

Federal agencies strive to use plain language in all documents and communications to increase understanding by the public.

Oral health information should be integrated into the health record and be readily available to health providers. To this end, *Healthy People 2020* has added a new objective: "use health communication strategies and health information technology (IT) to improve population health outcomes and health care quality, and to achieve health equity."[14,49]

Health IT will play a critical role in addressing the *HHS Strategic Plan's* objective to improve health care and population health through meaningful use of health information technology.[50] As part of the ACA, the *Health Information Technology for Economic and Clinical Health (HITECH) Act* was enacted to "promote the adoption and meaningful use of health information technology."[51,52]

The benefits of combining health IT tools and effective health communication are expected to influence quality and safety in many health care areas including the efficiency and delivery of health care, improved public health information infrastructure, facilitation of clinical and consumer decision-making, and the improvement of health skills and knowledge.[51]

Strategies for Goal 4

A. Enhance data value by making data easier to access and use for public health decision-making through the development of standardized oral health measures and advancement of surveillance (4-A).

B. Improve the oral health literacy of health professionals through use of evidence-based methods (4-B).

C. Improve the oral health literacy of patients and families by developing and promoting clear and consistent oral health messaging to health care providers and the public (4-C).

D. Assess the health literacy environment of patient care settings (4-D).

E. Integrate dental, medical, and behavioral health information into electronic health records (4-E).

Goal 4: Increase the Dissemination of Oral Health Information and Improve Health Literacy

Federal Partners	Strategy
Administration for Children and Families (ACF)	
Present oral health information including parent engagement in oral health and oral health literacy at national, state, and regional meetings.	4-D
Administration for Community Living (ACL)	
Undertake oral health literacy and education efforts to help older adults, caregivers, communities, and health care professionals more successfully navigate the oral health care system.	4-B
Centers for Disease Control and Prevention (CDC)	
Build public awareness of the immediate health damage caused by smoking and exposure to second-hand smoke and encourage smokers to quit through CDC's Tips From Former Smokers Campaign. Link individuals and healthcare providers, including dental professionals, with resources to help patients quit.	4-C
Centers for Medicare & Medicaid Services (CMS)	
Improve the collection and analysis of data and quality measures related to the delivery of Medicaid and CHIP oral health services. Report annually on state progress on the oral health quality measures in the child core set of health care quality measures.	4-A
Implement a mandatory quality assurance process applied to the annual submission by states of CMS-416 dental data. Upgrade the CMS Form-416 instructions to be more specific to support more uniform reporting across states.	4-A
Support the validation of two dental measures (sealants, continuity of care) for inclusion in the Meaningful Use Phase 3 (MU3) for Electronic Health Records.	4-A
Support the enhancement of the dental treatment quality measure in the child core set of quality measure through the Pediatric Quality Measures Program.	4-A
Develop and promote free oral health education materials, in both English and Spanish, targeted to parents and pregnant women.	4-C
Food and Drug Administration (FDA)	
Ensure the public has science-based information on drugs, devices, and foods to improve oral health. Utilize multi-media consumer information to provide timely updates to the general public and to specific audiences such as seniors, women, patients and patient advocates, parents and caregivers, health educators, students, and children.	4-C
Educate the public about the health risks of tobacco through the Center for Tobacco Products.	4-C
Reduce youth smoking through the national youth tobacco prevention campaign, The Real Cost, targeted to at-risk youth aged 12–17 years who are open to smoking or already experimenting with cigarettes.	4-C

Federal Partners	Strategy
Health Resources and Services Administration (HRSA)	
Help states and communities address public oral health issues. Develop, update, and disseminate tools, materials, and resources to promote oral health for the public and health professionals.	4-C
Indian Health Service (IHS)	
Establish and promote future initiatives on oral health literacy and the integration of oral health into primary care.	4-B
Provide through the *IHS Electronic Dental Record (EDR) Project* all the necessary clinical and dental practice management functionality needed by Indian Health Service/Tribal/Urban (I/T/U) dental programs. Continue the deployment of the EDR to new sites beyond the 134 sites that already have IHS certified, accredited, and implemented EDRs.	4-E
Support the *HHS National Action Plan to Improve Health Literacy* by promoting oral health literacy in the IHS through the development of a continuing education series and promotional flyers for dental providers.	4-B
National Institutes of Health (NIH)	
Evaluate the effectiveness of approaches to improve health literacy. Support studies to understand the basis of health disparities and inequalities. Develop and test interventions tailored and targeted to underserved populations. Support basic research to understand both the mechanisms of behavior change and the influence of behavioral and social factors on oral health. Disseminate study findings. Develop culturally appropriate materials.	4-D
Office of the Assistant Secretary for Health and Office on Women's Health (OASH/OWH)	
Share oral health resources and raise awareness through the OWH website and other social media. Link the *Oral Health Fact Sheet* available online to other federal agencies that have oral health resources for the public. Develop additional fact sheets on the impact of oral health and ACA preventive benefits for adults (OASH/OWH).	4-C

Federal Partners	Strategy
Office of Minority Health (OS/OMH)	
Improve awareness of the benefits of electronic health records (EHRs) for providers serving underserved and at-risk communities. Use websites and trainings to fully promote functional and exchangeable EHRs to improve quality and convenience of patient care; increase patient participation in their care; improve accuracy of diagnoses and health outcomes; improve care coordination; and increase practice efficiencies and cost savings.	4-B
Promote the adoption of patient-provider communication tools and resources available through the *Cultural Competency Program for Oral Health Professionals* to enhance oral health providers' awareness and sensitivity to cultural and linguistic needs of racially and ethnically diverse patient populations. The tools are designed to assist professionals to improve communication with their patients in areas ranging from scheduling of future appointments, to discussion of diagnosis and treatment and follow-up appointments.	4-B
Incorporate information about enrollment in state and federal Health Insurance Marketplaces, options for policies that can be purchased on the Marketplaces, and information about children's oral health coverage into broader health education and promotion activities.	4-C
Bureau of Prisons (BOP)	
Develop and promote virtual Web-based trainings and other electronic messages focused on the importance of health literacy. Trainings will offer tools and techniques to assist providers in communicating verbal and written oral health information to patients based on plain writing and speaking.	4-B
Provide oral health training to health care professionals who transition inmates from incarceration into the community.	4-B
Assess patients' comprehension of health messages. Develop metrics or use established metrics to survey the patient population.	4-D
Standardize and improve the usability of electronic dental records. Refine electronic dental records for greater interoperability and establish a uniform dental diagnostic code set.	4-E

Federal Partners	Strategy
Immigration and Customs Enforcement Health Services Corps (IHSC)	
Develop oral health surveillance to quantify the prevalence of complex dental needs within the IHSC immigration population by collecting and applying data from electronic medical records, *eClinical Works.*	4-A
Initiate actions to overcome cultural, racial/ethnic, and language barriers. Develop and provide oral health education materials in the patient's primary language, including illustrations of oral health prevention instructions for patients with low literacy.	4-C
Utilize patient questionnaire to assess and evaluate patient comprehension and oral health literacy.	4-D
Maintain and track IHSC electronic medical record and electronic dental record software programs, and develop initiatives to standardize dental diagnosis codes, templates, and forms. Monitor the medical and dental records software interfaces for easy access to the patient's complete dental/medical information.	4-E
Coast Guard (USCG)	
Integrate electronic dental and medical records. Implement and monitor the use of *EPIC*, an electronic medical record software used in clinics.	4-E
Multi-Agency Efforts	
Promote professional evidence-based verbal communication methods, such as those contained in the *AHRQ Universal Precautions Toolkit,* to improve oral communication skills of health professionals (All).	4-B

GOAL 5. Advance Oral Health in Public Policy and Research

HHS agencies are collaborating to foster public-private partnerships that enhance science dissemination and translation into practice on early childhood caries.

Biomedical and behavioral research provides knowledge to support the ever-evolving practice of health care. This scientific base requires a broad array of research strategies to understand the fundamental causes of diseases and to transform that knowledge into a lifetime of better health for people everywhere. Most dental, oral, and craniofacial conditions arise from complex interactions of biological, behavioral, environmental, and higher system-level factors. Thus, oral health-related research must involve a number of approaches, including basic research, interventional studies, behavioral science and public health research, population-health studies, clinical trials, and community-based studies.

Research efforts are needed to support an array of methods to address clinical questions, and increased efforts are needed for the development of technologies for clinical risk assessment and diagnosis. Collaborative public-private partnerships are essential to understanding the causes and pathological processes of oral diseases and to enhance more rapid discovery of interventions. Communities and organizations must be able to benefit from scientific advances, which may contribute to changes in the reimbursement and delivery of services as well as enhance knowledge of risk factors.[53] Dissemination of oral health advances is critical to the effective transfer of research findings to the public, providers, and policy makers.[15,54]

Given the broad reach of the federal government's oral health efforts and the increasing integration of oral health core clinical competencies across disciplines, the opportunity to develop and disseminate policies supportive of change is substantial. Highly visible issues include protecting and expanding the optimal fluoridation of public water systems; increasing children's access to dental sealants; expanding the use of electronic dental records; increasing the use of integrated biological data; designing and deploying pay-for-performance reimbursement methodologies; expanding and diversifying the dental workforce; reducing the racial and ethnic disparities that persist in oral health; and implementing the *Affordable Care Act*. Other areas that are receiving greater visibility are the training of oral health professionals to provide language-appropriate and culturally competent care for diverse populations, and trauma-informed care for abused or trafficked populations. Collaboration between government and private sector partners can leverage the resources needed to address these important policy issues.

Strategies for Goal 5

A. Expand applied research approaches, including behavioral, clinical, and population-based studies, practice-based research, and health services research to improve oral health (5-A).

B. Support research and activities that examine the influence of health care system organization, reimbursement, and policies on the provision of oral health care, including fostering government and private sector collaboration (5-B).

C. Address disparities in oral health through research that fosters engagement of individuals, families, and communities in developing and sharing solutions and behaviors to meet their unique needs (5-C).

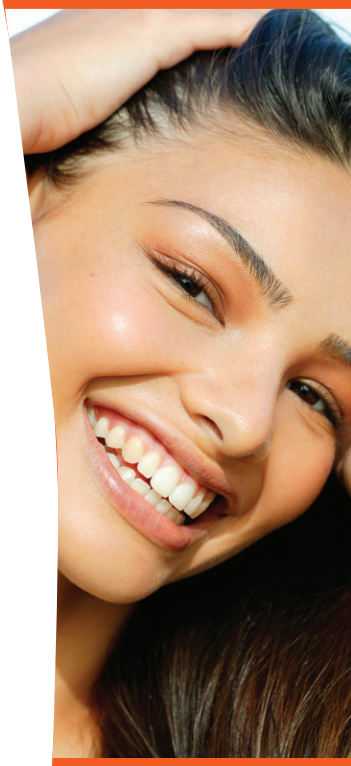
D. Promote the translation of research findings into practice and use (5-D).

E. Develop policy approaches that support state Medicaid and CHIP programs to move from paying for volume to purchasing value, and from treating disease to preventing disease (5-E).

F. Evaluate the impact of policy on access to care, oral health services, and quality (5-F).

Goal 5: Advance Oral Health in Public Policy and Research

Federal Partners	Strategy
Agency for Healthcare Research and Quality (AHRQ)	
Encourage and support intramural and extramural research and disseminate innovations in health care delivery. Collect information on oral health care needs, access, and expenditures; make data available to researchers external to the federal government; and fund extramural research on oral health care expenditures, insurance coverage, and access to care.	5-A
Improve the quality, safety, efficiency, and effectiveness of health care for all Americans. Improve health care outcomes by encouraging the use of evidence to make informed health care decisions.	5-D
Centers for Disease Control and Prevention (CDC)	
Enhance national oral health surveillance efforts. Develop measures for use in surveillance of periodontal disease at the state and local levels. Enhance surveillance of dental caries, periodontal disease, dental fluorosis, and fluoride intake. Support the oral health components of the National Health and Nutrition Examination Survey (NHANES).	5-A
Enhance state oral health surveillance efforts. Provide funding to states through grants, and work with partners to assess and expand the capacity of state health departments to implement oral health surveillance. Enhance the National Oral Health Surveillance System (NOHSS) used for state oral health surveillance, including implementation of new indicators and transition to a new NOHSS platform that provides enhanced capabilities and ease of use.	5-A
Promote best practices and establish guidelines for clinicians and public health practitioners on sealant programs, infection control, and community water fluoridation.	5-D
Centers for Medicare & Medicaid Services (CMS)	
Align agency actions on dental care in Medicaid and CHIP with overall efforts to improve health, improve health care, and lower costs. Identify opportunities to work with state Medicaid and CHIP agencies to promote and reimburse for risk assessment, evidence-based prevention, and chronic disease management approaches to address early childhood caries.	5-E
Food and Drug Administration (FDA)	
Reduce the time to bring safe and effective medical devices to the U.S. market through the establishment of a commitment (the *Medical Device User Fee Amendments)* between the U.S. medical device industry and FDA. Facilitate the approval of safe and effective innovations that make drugs and devices that diagnose, treat, prevent, or mitigate oral disease. Improve communication and transparency between drug applicant and review team. Expedite FDA review of promising new drugs for serious and life-threatening conditions through the implementation of the *FDA Safety and Innovation Act of 2012.*	5-A
Reduce the public health burden from tobacco-related disease and death by regulating the manufacturing, marketing, and distribution of tobacco products.	5-D



Federal Partners	Strategy
Health Resources and Services Administration (HRSA)	
Foster an increase in oral health competency of primary care clinicians and evaluate the impact for improving the oral health of populations in need. Engage associations, professional organizations, and accrediting bodies to increase oral health competency of non-dental primary care clinicians through changes in licensure exams, policies related to reimbursement, and evaluation of pilot and demonstration projects.	5-B
Disseminate oral health research findings to advance the provision of oral health care for persons living with HIV/AIDS.	5-D
Indian Health Service (IHS)	
Increase access and sharing of data and support for epidemiology programs at the state, local, and Tribal government-levels, and partner with urban Indian organizations to resolve oral health disparities. Improve surveillance and epidemiological capacity, enhance the ability to detect emerging threats, and monitor ongoing health issues and risk factors.	5-C
National Institutes of Health (NIH)	
Expand intervention studies aimed at preventing and managing oral infections and complex diseases. Improve oral health through clinical trials and practice-based research, and studies that provide scientific evidence to establish or change standards of care or change health care policy.	5-A
Leverage research to develop effective and personalized disease management strategies, enhance patient-provider communication, and partner with public and private organizations.	5-A
Enable precise and personalized oral health care through research.	5-A
Support oral health disparities research to better understand health disparities and inequalities.	5-C
Support basic research to understand both the mechanisms of behavior change and the influence of behavioral and social factors on oral health. Develop and test interventions designed to facilitate behavior change among families, communities, and providers serving underserved populations. Disseminate findings that can be used to translate the research into practice and action for these communities.	5-C

Federal Partners	Strategy
Multi-Agency Efforts	
Enhance surveillance and research activities related to monitoring the effects of the final national community water fluoridation recommendation. Evaluate the effects through detailed assessments of dental caries and dental fluorosis and monitoring fluoride content levels of home tap water (CDC, NIH).	5-A
Foster public/private partnerships that enhance science dissemination and translation into practice. Co-sponsor a scientific meeting, *Innovations in the Prevention and Treatment of Early Childhood Caries,* to advance the research and disseminate current and emerging approaches for prevention, treatment, and the impact on the prevalence of early childhood caries (NIH, HRSA).	5-A
Inform and advance policy on the importance of evidence-based oral health as part of healthy aging. Use the Healthy Aging Initiative, *Oral Health and Women*, to inform and advance policy (OASH/OWH, ACL).	5-B
Advance policy on the interdisciplinary approach to violence and abuse as part of a women's health curriculum in dental training institutions on screening and referral using principles of trauma-informed care. Focus on the intimate partner violence (IPV) screening and counseling preventive benefit under the ACA and opportunities to train emerging dentists (OASH/OWH, HRSA).	5-B
Capitalize on opportunities for improving oral health and preventing disease through oral health behavioral changes at the patient and provider level. Continue efforts to collaborate across behavioral health programs to assure that comprehensive information on the science of behavioral disorders is disseminated to dentists (SAMHSA, HRSA, NIH).	5-D
Collaborate to improve the dissemination of evidence-based oral health care information to health care providers and the public. Engage others to help develop and implement solutions to improve overall health and well-being (HRSA, NIH, CDC).	5-D

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Appendix 1

Goals and Strategies Aligned with the Recommendations of the Institute of Medicine Reports and OHCC Stakeholder Meeting (2012) Discussion Topics

- *IOM 1: Advancing Oral Health in America (2011)* (Appendix 2)
- *IOM 2: Improving Access to Oral Health Care for Vulnerable and Underserved Populations (2011)* (Appendix 2)
- Oral Health Coordinating Committee Stakeholders Meeting (2012): Discussion Topics (Appendix 3)

Oral Health Framework Goals and Strategies	Crosswalk with IOM Recommendations		OHCC Stakeholders Meeting: Discussion Topics
	IOM 1	IOM 2	
Goal 1. Integrate Oral Health and Primary Health Care			
Advance interprofessional collaborative practice and bidirectional sharing of clinical information to improve overall health outcomes (1-A). Promote education and training to increase knowledge, attitudes, and skills that demonstrate proficiency and competency in oral health among primary care providers (1-B). Support the development of policies and practices to reconnect the mouth and the body and inform decision making across all HHS programs and activities (1-C). Create programs and support innovation using a systems change approach that facilitates a unified patient-centered health home (1-D).	2, 3, 4, 6	1A, 8, 10	3, 4
Goal 2. Prevent Disease and Promote Oral Health			
Promote delivery of dental sealants in school-based programs and expand community water fluoridation (2-A). Identify reimbursement strategies and funding streams that enhance sustainability of prevention programs (2-B). Coordinate federal efforts focused on strengthening the infrastructure and capacity of local, state, and regional oral health programs (2-C). Explore new clinical and financial models of care for children at high risk for developing caries, such as risk-based preventive and disease management interventions (2-D).	2, 3, 5	6, 7, 8, 9, 10	1, 4

Oral Health Framework Goals and Strategies	Crosswalk with IOM Recommendations		OHCC Stakeholders Meeting: Discussion Topics
	IOM 1	IOM 2	
Goal 3. Increase Access to Oral Health Care and Eliminate Disparities			
Expand the number of health care settings that provide oral health care including diagnostic, preventive, and restorative services in Federally Qualified Health Centers, school-based health centers, Ryan White HIV/AIDS-funded programs, and Indian Health Service-funded health programs (3-A).	2, 3, 4, 5, 6	1a, 3, 4, 5, 6, 7, 8, 10	3, 6
Strengthen the oral health workforce, expand capabilities of existing providers, and promote models that incorporate other clinicians (3-B).			
Improve the knowledge, skills, and abilities of providers to serve diverse patient populations (3-C).			
Promote health professionals' training in cultural competency (3-D).			
Assist individuals and families in obtaining oral health services and connecting with a dental home (3-E).			
Align dental homes and oral health services for children (3-F).			
Create local, regional, and state-wide partnerships that bridge the aging population and oral health systems (3-G).			
Support the collection of sex/gender and racial and ethnic stratified data pertaining to oral health (3-H).			
Goal 4. Increase the Dissemination of Oral Health Information and Improve Health Literacy			
Enhance data value by making it easier to access and use to make public health decisions through development of standardized oral health measures and advancement of surveillance (4-A).	3, 5 ,6	8	2, 4, 5
Improve the oral health literacy of health professionals through use of evidence-based methods (4-B).			
Improve the oral health literacy of patients and families by developing and promoting clear and consistent oral health messages to health care providers and the public (4-C).			
Assess the health literacy environment of patient care settings (4-D).			
Integrate dental, medical and behavioral health information into electronic health records (4-E).			

Oral Health Framework Goals and Strategies	Crosswalk with IOM Recommendations		OHCC Stakeholders Meeting: Discussion Topics
	IOM 1	IOM 2	
Goal 5. Advance Oral Health in Public Policy and Research			
Expand applied research approaches, including behavioral, clinical, and population-based studies, practice-based research, and health services research, to improve oral health (5-A).	2, 5, 6	7, 8	4, 5
Support research and activities that examine the influence of healthcare system organization, reimbursement, and policies on the provision of oral health care, including fostering government and private sector collaboration (5-B).			
Address disparities in oral health through research that fosters engagement of individuals, families, and communities in developing and sharing solutions and behaviors to meet their unique needs (5-C).			
Promote the translation of research findings into practice and use (5-D).			
Develop policy approaches that support state Medicaid and CHIP programs to move from paying for volume, to purchasing value, and from treating disease to preventing disease (5-E).			
Evaluate the impact of policy on access to care, oral health services delivery, and quality (5-F).			

Appendix 2

Institute of Medicine Report Recommendations

Advancing Oral Health in America (2011) (IOM Report 1)

1. The Secretary of HHS should give the leader(s) of the *New Oral Health Initiative (NOHI)* the authority and resources needed to successfully integrate oral health into the planning, programming, policies, and research that occur across all HHS programs and agencies.
    a. Each agency within HHS that has a role in oral health should provide an annual plan for how it will integrate oral health into existing programs within the first year.
    b. Each agency should identify specific opportunities for public-private partnerships and collaborating with other agencies inside and outside HHS.
    c. The leader(s) of the NOHI should coordinate, review, and implement these plans.
    d. The leaders(s) of the NOHI should incorporate patient and consumer input into the design and implementation of the NOHI.
2. All relevant HHS agencies should promote and monitor the use of evidence-based preventive services in oral health (both clinical and community based) and counseling across the lifespan by:
    a. Consulting with the U.S. Preventive Services Task Force and the Task Force on Community Preventive Services to give priority to evidentiary reviews of preventive services in oral health.
    b. Ensuring that HHS-administered health care systems (e.g., Federally Qualified Health Centers, Indian Health Service) provide recommended preventive services and counseling to improve oral health.
    c. Providing guidance and assistance to state and local health systems to implement these same approaches.
    d. Communicating with other federally administered health care systems to share best practices.
3. All relevant HHS agencies should undertake oral health literacy and education efforts aimed at individuals, communities, and health care professionals. These efforts should include, but not be limited to:
    a. Community-wide public education on the causes and implications of oral diseases and the effectiveness of preventive interventions.
        i. Focus areas should include:
            1. The infectious nature of dental caries,
            2. The effectiveness of fluorides and sealants,
            3. The role of diet and nutrition in oral health, and
            4. How oral diseases affect other health conditions.

b. Community-wide guidance on how to access oral health care.

   i. Focus areas should include using and promoting websites such as the *National Oral Health Information Clearinghouse* and www.healthcare.gov.

c. Professional education on best practices in patient-provider communication skills that result in improved oral health behaviors.

   i. Focus areas should include how to communicate to an increasingly diverse population about prevention of oral cancers, dental caries, and periodontal disease.

4. HHS should invest in workforce innovations to improve oral health that focus on:

   a. Core competency development, education, and training to allow for the use of all health care professionals in oral health care.

   b. Interprofessional, team-based approaches to the prevention and treatment of oral diseases.

   c. Best use of new and existing oral health care professionals.

   d. Increasing the diversity and improving the cultural competence of the workforce providing oral health care.

5. CMS should explore new delivery and payment models for Medicare, Medicaid, and CHIP to improve access, quality, and coverage of oral health care across the lifespan.

6. HHS should place a high priority on efforts to improve open, actionable, and timely information to advance science and improve oral health through research by:

   a. Leveraging resources for research to promote a more robust evidence base specific to oral health care, including but not limited to

      i. oral health disparities, and

      ii. best practices in oral health care and oral health behavior change.

   b. Working across HHS agencies, in collaboration with other federal departments (e.g., Department of Defense, Veterans Administration) involved in the collection of oral health data, to integrate, standardize, and promote public availability of relevant data bases.

   c. Promoting the creation and implementation of new, useful, and appropriate measures of quality oral health care practices, cost and efficiency, and oral health outcomes.

7. To evaluate the NOHI, the leader(s) of the NOHI should convene an annual public meeting of the agency heads to report on the progress of the NOHI, including:

   a. Progress of each agency in reaching goals;

   b. New innovations and data;

   c. Dissemination of best practices and data into the community; and

   d. Improvement in health outcomes of populations served by HHS programs, especially as they relate to *Healthy People 2020* goals and specific objectives.

***Improving Access to Oral Health Care for Vulnerable and Underserved Populations* (2011) (IOM Report 2)**

1. (1a) The Health Resources and Services Administration (HRSA) should convene key stakeholders from both the public and private sectors to develop a core set of oral health competencies for non-dental health care professionals.

   (1b) Following the development of a core set of oral health competencies:

   a. Accrediting bodies for undergraduate and graduate-level non-dental health professions education programs should integrate these core competencies into their requirements for accreditation.

   b. All certification and maintenance of certification for health care professionals should include demonstration of competence in oral health care as a criterion.

2. State legislatures should amend existing state laws, including practice acts, to maximize access to oral health care.

   a. At a minimum, state dental practice acts should:

      i. Allow allied dental professionals to practice to the full extent of their education and training.

      ii. Allow allied dental professionals to work in a variety of settings under evidence-supported supervision levels.

      iii. Allow technology-supported remote collaboration and supervision.

3. Dental professional education programs should:

   a. Increase recruitment and support for enrollment of students from underrepresented minority, lower income, and rural populations.

   b. Require all students to participate in community-based education rotations with opportunities to work with interprofessional teams.

   c. Recruit and retain faculty with experience and expertise in caring for underserved and vulnerable populations.

4. HRSA should dedicate Title VII funding to:

   a. Support the development, implementation, and maintenance of substantial community-based education rotations.

   b. Increase funding for recruitment and scholarships for underrepresented minorities, lower income, and rural populations to attend dental professional schools.

5. HRSA should dedicate Title VII funding to support and expand opportunities for dental residencies in community-based settings. Subsequently, state legislatures should require a minimum of one year of dental residency before a dentist can be licensed to practice.

6. The Centers for Medicare & Medicaid Services (CMS) should fund and evaluate state-based demonstration projects that cover essential oral health benefits for Medicaid beneficiaries.

7. To increase provider participation in publicly funded programs, states should:
    a. Set Medicaid and CHIP reimbursement rates so that beneficiaries have equitable access to essential oral health services, as required by law.
    b. Provide case-management services.
    c. Streamline administrative processes.
8. Congress, the U.S. Department of Health and Human Services (HHS), federal agencies, and private foundations should fund oral health research and evaluation related to underserved and vulnerable populations, including:
    a. New methods and technologies (e.g., nontraditional settings, non-dental professionals, new types of dental professionals, and telehealth);
    b. Measures of access, quality, and outcomes;
    c. Payment and regulatory systems.
9. The Centers for Disease Control and Prevention (CDC) and the Maternal and Child Health Bureau (MCHB) should collaborate with states to ensure that each state has the infrastructure and support necessary to perform core dental public health functions (e.g., assessment, policy development, and assurance).
10. To expand the capacity of Federally Qualified Health Centers (FQHCs) to deliver essential oral health services, HRSA should:
    a. Support the use of a variety of oral health care professionals.
    b. Enhance financial incentives to attract and retain more oral health care professionals.
    c. Provide guidance to implement best practices in management, operation, and efficiency.
    d. Assist FQHCs in all states to operate programs outside their physical facilities and take advantage of new systems to improve the oral health of the population they serve.

Appendix 3

Discussion Topics from the Oral Health Coordinating Committee Stakeholders Meeting (2012)

1. Prevention

- Effective preventive practices are known (fluoride and sealants) and should be reflected in federal agencies' plans and activities.
- Benchmarking is needed to demonstrate success.
- Partners should support fluoridation campaigns and share best practices.
- Messaging on the value of fluoridation should be specific, targeted, and tailored to different racial and ethnic demographic groups.

2. Health Literacy

- Health literacy is included in several national plans but it may not be clear whether progress is being made.
- Literacy should reflect the perspective of the user, medical and dental providers, and policy makers.
- Addressing health literacy has demonstrated improved health outcomes; however, poor oral health literacy continues to be a major issue.

3. Access to Care and Workforce

- The IOM made specific recommendations in the most recent two studies on oral health, which should be acted upon where possible.
- There is a need to expand the number of safety-net dental providers.
- There is a need to expand primary care clinicians' role in oral health and raise oral health awareness for older adults.
- Focus is needed on the characteristics and quantity of future oral health workforce.

4. Financing Models

- Incentives are needed for providers to promote care coordination.
- Data are needed to demonstrate the value of wellness, treatment, and prevention.
- An integrated payment system is needed to support integration of oral health and primary care.
- Development is needed of oral health quality measures that are meaningful from a financial and quality perspective.
- Dental diagnostic codes and integrated dental and medical "health" records are necessary.

5. Data and Research

- Several datasets are available but lack coordination, accessibility, and utility.
- There is a lack of research and measures related to access, underrepresented populations, prevention, cost effectiveness, workforce models, and definitive studies on fluoride modalities.
- Use of and access to electronic health records is important.
- Packaging of information for different audiences is needed for clear messages.
- The inadequacy of research methods, workforce, and analytical capacity continue to be barriers to oral health.

6. Health Disparities

- The *HHS Action Plan to Reduce Racial and Ethnic Health Disparities* provides the opportunity to address oral health disparities.
- Workforce models are needed including pipeline, alternative dental providers, promotoras, state workforce development activities, and faculty development.
- School-based health programs need to address oral health disparities and consider race and ethnicity, income levels, and geographical factors. These programs should focus on targeted preventive interventions, such as sealants.

Appendix 4

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Appendix 5

List of Acronyms

ACA	Affordable Care Act
ACF	Administration for Children and Families
ACL	Administration for Community Living
ADS	Aging and Dental Services
AHEC	Area Health Education Centers
AHRQ	Agency for Healthcare Research and Quality
AI/AN	American Indian and Alaska Native
AOA	Administration on Aging
ASPE	Office of the Assistant Secretary for Planning and Evaluation
BOP	Federal Bureau of Prisons
CDC	Centers for Disease Control and Prevention
CHIP	Children's Health Insurance Program
CLAS	National Standards for Culturally and Linguistically Appropriate Services
CMS	Centers for Medicare & Medicaid Services
CWF	Community Water Fluoridation
DHL	Dental Hygienist Liaisons
eCW	Electronic Clinical Works
EDR	Electronic Dental Records
ECC	Early Childhood Caries
EHB	Essential Health Benefits
EHR	Electronic Health Records
ER	Emergency Room
FDA	Food and Drug Administration
FOA	Funding Opportunity Announcement
FQHC	Federally Qualified Health Centers
HHS	U.S. Department of Health and Human Services
HITECH	Health Information Technology for Economic and Clinical Health
HRSA	Health Resources and Services Administration
HS	Head Start
IHSC	Immigration and Customs Enforcement Health Service Corps
IHS	Indian Health Service
IOHPCP	Integration of Oral Health and Primary Care Practice
IOM	Institutes of Medicine
IPV	Intimate Partner Violence
IT	Information Technology
I/T/U	Indian Health Service, Tribal, Urban
LHI	*Healthy People 2020* Leading Health Indicators
MCHB	Maternal and Child Health Bureau
MU3	Meaningful Use Phase 3
NOHI	New Oral Health Initiative
NIH	National Institutes of Health
NOHSS	National Oral Health Surveillance System
OASH	Office of the Assistant Secretary for Health
OCR	Office for Civil Rights
OHCC	Oral Health Coordinating Committee
OMH	Office of Minority Health
OS	Office of the Secretary
OWH	Office on Women's Health
PCMH	Patient-Centered Medical Home
PIR	Program Information Report
QHP	Qualified Health Plan
SAMHSA	Substance Abuse and Mental Health Services Administration
USCG	U.S. Coast Guard