Integration of Oral Health and Primary Care Practice

U.S. Department of Health and Human Services
Health Resources and Services Administration
February 2014

Executive Summary

Lack of access to oral health care contributes to profound and enduring oral health disparities in the United States. Millions of Americans lack access to basic oral health care. In 2008, 4.6 million children – one out of every 16 children in the United States did not receive needed dental care because their families could not afford it. Children are only one of the many vulnerable and underserved populations that face persistent, systemic barriers to accessing oral health care.

The United States health care system is able to provide acute care but continues to struggle to address the need for ongoing care, especially for vulnerable populations such as the elderly, disabled, mentally ill, and special needs populations. Safety net organizations that provide health services to uninsured, low-income, and vulnerable persons continue to look for ways to coordinate services among providers to improve access to quality care.

The 2011 Institute of Medicine (IOM) reports, *Advancing Oral Health in America* and *Improving Access for Oral Health for the Vulnerable and Underserved,* recommended that the Health Resources and Services Administration (HRSA) address the need for improved access to oral health care through the development of oral health core competencies for health care professionals. In response, HRSA developed the Integration of Oral Health and Primary Care Practice (IOHPCP) initiative with three inter-related components. The first component was the creation of a HRSA prepared draft set of oral health core clinical competencies appropriate for primary care clinicians. The second component was the presentation of a systems approach to delineate the interdependent elements that would influence the implementation and adoption of the core competencies into primary care practice. Finally, the third was the characterization and outline of the basis for implementation strategies and translation into primary care practice in safety net settings.

The IOHPCP initiative strives to improve access for early detection and preventive interventions by expanding oral health clinical competency of primary care clinicians, leading to improved oral health. Three meetings were convened in 2012, corresponding to the three components of the initiative. HRSA invited subject matter experts and professionals from the public and private sectors to join HRSA staff and provide input through facilitated discussions of the IOHPCP initiative components. The diverse cross section of individuals with extensive expertise and experience from multiple healthcare arenas, including representatives from primary care, community health, education, payers (both governmental and non-governmental), and information technology systems, participated alongside HRSA staff in the three meetings. There was no effort to seek consensus from the participants of any of the meetings.

IOHPCP is distinguished from other interprofessional efforts by facilitating change in the clinical practice of primary care practitioners in the safety net community. It focuses on frontline primary care health professionals, specifically nurse practitioners, nurse midwives, physicians and physician assistants. These primary care practitioners are members of the existing delivery system who could incorporate oral health core clinical competencies into their existing scope of practice. The aforementioned safety net practitioners are most likely to see vulnerable and underserved populations without, or with limited access to dental services. The IOHPCP initiative seeks to create a shared vision leading to fundamental system change.

This IOHPCP report describes the structured approach, processes and outcomes addressed in the three components of the IOHPCP initiative. Concomitantly, HRSA synthesized the following recommendations:

1. Apply oral health core clinical competencies within primary care practices to increase oral health care access for safety net populations in the United States.
2. Develop infrastructure that is interoperable, accessible across clinical settings, and enhances adoption of the oral health core clinical competencies. The defined, essential elements of the oral health core clinical competencies should be used to inform decision-making and measure health outcomes.
3. Modify payment policies to efficiently address costs of implementing oral health competencies and provide incentives to health care systems and practitioners.
4. Execute programs to develop and evaluate implementation strategies of the oral health core clinical competencies into primary care practice.

More detailed information related to these recommendations and implementation strategies are provided in the full report. The strategies identified may also be applicable to populations and settings beyond the safety net or wherever a need is recognized. In addition, appendices in the report include the identification of five oral health core clinical competency domains and their associated competencies, identification of twelve major systems essential for implementation of the core clinical oral health competencies, meeting agendas, and participant lists.

It is anticipated that the report and its recommendations serve as guiding principles and provide a framework for the design of a competency-based, interprofessional practice model to integrate oral health and primary care.

Table of Contents

Background

Lack of access to basic dental services contributes to profound and enduring oral health disparities in the United States. Millions of children and adults do not receive needed clinical and preventive dental services. In 2011, 6.1 percent of children and 16.4 percent of adults under the age of 65, did not receive needed dental care because their families could not afford it.[1] Children are only one of the many vulnerable and underserved populations that face persistent, systemic barriers to accessing oral health care.[2]

The United States (U.S.) health care system is able to provide acute care but continues to struggle to provide continuous patient-centered care. "High out-of-pocket costs, lack of dental coverage, and limited financial means create barriers to receiving oral health care."[3] Safety net organizations that provide health services to uninsured, low-income, and vulnerable populations continue to look for ways to coordinate services among providers to improve access to quality care.[4]

The first Surgeon General's Report to focus on oral health in the United States was released in 2000 and titled, *Oral Health in America: A Report of the Surgeon General.* The report critically reviewed oral health and its relationship to general health and well-being. It called for the development of a National Oral Health Plan that would improve quality of life and eliminate health disparities by facilitating collaboration among individuals, health care providers, communities, and policymakers at multiple levels of society. The report promoted action to take advantage of existing initiatives and was guided by the following charge: "To define, describe, and evaluate the interaction between oral health and general health and well-being (quality of life), through the life span, in the context of changes in society."[5]

"The issues of oral health and the underserved have been addressed in a policy paper, *Oral Health for All: Policy for Available, Accessible and Acceptable Care*.[6] The paper makes recommendations regarding financial barriers to care, integration of oral health services into health care delivery, capacity to meet oral health needs, cultural competency of health care providers, and education and oral professional practice requirements to meet the oral health care needs of underserved populations."[7] The report states that "the public health infrastructure for oral health is insufficient to address the needs of disadvantaged groups, and the integration of oral and general health programs is lacking."[8]

Although the Surgeon General's 2000 Report[8] and the 2003 *National Call to Action to Promote Oral Health*[9] recommended integrating oral health into overall health care, oral health is still treated as a separate entity in health professions' education, service delivery, and financing of health care. In late 2009, the Assistant Secretary of Health for the U.S. Department of Health and Human Services (HHS) called for the implementation of an HHS-wide effort to realign HHS resources to focus on improving oral health in the nation. In response, HHS rolled out the *HHS Oral Health Initiative 2010* that highlighted nine new initiatives reflecting HHS' commitment to improving oral health with the key message that *"Oral Health is Integral to Overall Health".* Included in the initiatives were two Institute of Medicine (IOM) reports that were published in 2011.

The first IOM report assessed the current oral health care delivery system and explored ways to promote use of preventive oral health interventions and improve oral health literacy. The second report focused on issues of access to oral health care for underserved and vulnerable populations. Both reports contained recommendations for action and addressed the development of core competencies for health care professionals in oral health care. Specifically, the IOM recommended:

> "*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 nondental health care professionals;*"[3]
>
> *"Following the development of a core set of oral health competencies accrediting bodies for undergraduate and graduate-level nondental health care professional education programs should integrate these core competencies into their requirements for accreditation; and*
>
> *All certification and maintenance of certification for health care professionals should include demonstration of competence in oral health care as a criterion.*"[3]

In addition, the IOM recommended:

> *"HHS should invest in workforce innovations to improve oral health that focuses on:*
>
> - *Core competency development, education, and training, to allow for the use of all health care professionals in oral health care;*
> - *Interprofessional, team-based approaches to the prevention and treatment of oral diseases;*
> - *Best use of new and existing oral health care professionals; and*
> - *Increasing the diversity and improving the cultural competence of the workforce providing oral health care."*[2]

In response to the IOM recommendations, HRSA developed the Integration of Oral Health into Primary Care Practice (IOHPCP) initiative with three interrelated components. HRSA then invited subject matter experts and professionals from the public and private sectors to join HRSA staff and provide input through facilitated discussions of each component at three meetings during 2012:

1. HRSA-prepared "starter set" of oral health core clinical competencies appropriate for primary care clinicians.
2. Presentation of a systems approach process to outline interdependent elements of the health systems that would influence the implementation and adoption of the core competencies.
3. Perspectives of three critical systems and outline for implementation strategies resulting in translation into primary care practice.

The IOHPCP initiative is distinguished from other interprofessional efforts because it facilitates change in the clinical practice of primary care practitioners in the safety net setting. The initiative focuses on frontline primary care health professionals, specifically nurse practitioners, nurse midwives, physicians, and physician assistants. The aforementioned primary care practitioners are

members of the existing care delivery system and are able to incorporate oral health core clinical competencies into their existing scope of practice. These practitioners are most likely to see vulnerable and underserved populations without, or with limited, access to dental services. This initiative strives to improve access to early detection and preventive intervention, leading to improved oral health by expanding oral health clinical competency of primary care clinicians.

This report describes the structured approach, processes and outcomes of the three components of this initiative that support HRSA's development of oral health core clinical competencies for nondental providers, an assessment of the interdependent systems that are critical for oral health core clinical competency demonstration by primary care clinicians, and the specific considerations necessary for a successful implementation and translation into practice. The IOM reports provided additional recommendations that would benefit from further exploration including increasing the diversity and cultural competence of the oral health care workforce.

Components of the Initiative

Component I

Develop a core set of oral health clinical competencies for primary care providers who practice in safety net settings.

Oral health core clinical competencies were developed for safety net primary care practitioners who are in a position to integrate these competencies to provide comprehensive physical exams, emphasize the oral health-systemic connection and refer to oral health care professionals for definitive care. This HRSA effort focused on a core set of clinical competencies to support and enhance interprofessional practice and oral-systemic connections.

"Oral health indicates much more than simply healthy teeth, as the mouth can be both a cause and a window to individual and population health and well-being."[5] Oral health and systemic health are interrelated. The emphasis in meeting Objective I was to attain improved access to oral health services that can only be achieved through a collaborative effort among professionals. This project uses a model of collaborative practice among primary care providers to promote access to oral health care and patient-centered provision of care.

A literature review served as the basis for the development of a "starter set" of domains, which included published core competencies for a variety of clinical specialties. The first meeting built upon earlier activities related to oral health competency development both within and outside of HRSA by engaging subject matter experts, nurse midwives, nurse practitioners, physician assistants, and primary care physicians, with experience in serving safety net populations and with national perspectives in oral health. For the purpose of this project the term "core" refers to that which is essential. The term "competency" as used for this project, describes a set of knowledge, abilities and actions to be used with all populations.

HRSA notes the following fundamental assumptions:

1. Oral health and systemic health are interrelated in that overall health includes oral health.
2. Competencies require focus on the individual as well as the population, which considers the behavioral, social, nutritional, economic, environmental, and health care system factors that impact oral health.
3. The health care system supports primary care providers and oral health providers to successfully meet the competencies.
4. The core competencies for interprofessional collaborative practice provide a foundation for the oral health core clinical competencies.
5. The oral health core clinical competencies will be implemented within the scope of practice for each profession.

HRSA provided the following five domains as part of a starter set. Each domain contains a core set of clinical competencies:

- Risk Assessment
- Oral Health Evaluation
- Preventive Interventions
- Communication and Education
- Interprofessional Collaborative Practice

For maximum impact, the core clinical competencies listed below should be incorporated into existing accreditation and certifications standards to facilitate adoption in primary care education and practice. The process entails education and training, including continuing education and incorporation into practice.

Interprofessional Oral Health Core Clinical Domains and Competencies

Domain: Risk Assessment

Identifies factors that impact oral health and overall health.

Competencies: Primary care providers

- Conduct patient-specific, oral health risk assessments on all patients.
- Identify patient-specific conditions and medical treatments that impact oral health.
- Identify patient-specific, oral conditions and diseases that impact overall health.
- Integrate epidemiology of caries, periodontal diseases, oral cancer, and common oral trauma into the risk assessment.

Domain: Oral Health Evaluation

Integrates subjective and objective findings based on completion of a focused oral health history, risk assessment, and performance of clinical oral screening.

Competencies: Primary care providers

- Perform oral health evaluations linking patient history, risk assessment, and clinical presentation.
- Identify and prioritize strategies to prevent or mitigate risk impact for oral and systemic diseases.
- Stratify interventions in accordance with evaluation findings.

Domain: Preventive Intervention

Recognizes options and strategies to address oral health needs identified by a comprehensive risk assessment and health evaluation.

Competencies: Primary care providers

- Implement appropriate patient-centered preventive oral health interventions and strategies.
- Introduce strategies to mitigate risk factors when identified.

Domain: Communication and Education

Targets individuals and groups regarding the relationship between oral and systemic health, risk factors for oral health disorders, effect of nutrition on oral health, and preventive measures appropriate to mitigate risk on both individual and population levels.

Competencies: Primary care providers

- Provide targeted patient education about importance of oral health and how to maintain good oral health, which considers oral health literacy, nutrition, and patient's perceived oral health barriers.

Domain: Interprofessional Collaborative Practice
Shares responsibility and collaboration among health care professionals in the care of patients and populations with, or at risk of, oral disorders to assure optimal health outcomes.
Competencies: Primary care providers

- Exchange meaningful information among health care providers to identify and implement appropriate, high quality care for patients, based on comprehensive evaluations and options available within the local health delivery and referral system.
- Apply interprofessional practice principles that lead to safe, timely, efficient, effective, equitable planning and delivery of patient and population-centered oral health care.
- Facilitate patient navigation in the oral health care delivery system through collaboration and communication with oral health care providers, and provide appropriate referrals.

Component II
Identify the appropriate entities necessary to implement the core oral health clinical competencies using a systems approach with consideration of a coordinated effort to disseminate, educate and implement the resulting competencies.

Two assumptions served as the framework for addressing Component II:

1. There is a need to increase the supply of oral health care services to improve oral health access in safety net populations.
2. Oral health and overall health are inter-related.

In order to analyze the systems that influence the ability of primary care providers to deliver oral health services within the primary care environment, input was solicited from a diverse cross section of individuals with extensive expertise and experience in health care arenas including clinical, community health, education and information technology, although consensus was not sought.

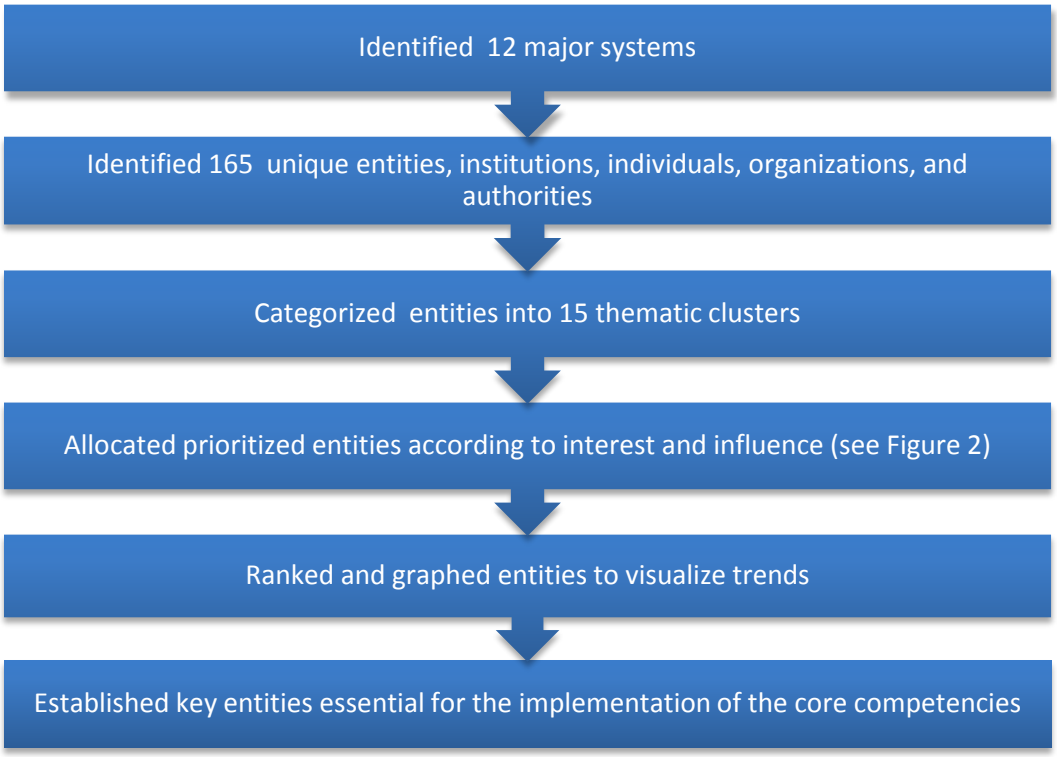
HRSA used a modified, goal-oriented approach to conduct structured discussions regarding the entities and the relationships necessary for primary care providers to implement the oral health competencies. Twelve major systems were identified that would need to be addressed:

- Health care systems
- Financing system
- Technology systems
- Educational system
- Employers
- Professional associations
- Health Care Providers
- Economic systems (Eco-system)
- Social systems
- Communication systems

- Biological systems
- Industry systems (cross-cutting)

The approach that identified key stakeholders and entities that can be engaged in dialogue on strategies for implementing the core competencies is described below (Figures 1 and 2).

Figure 1. Systems analysis



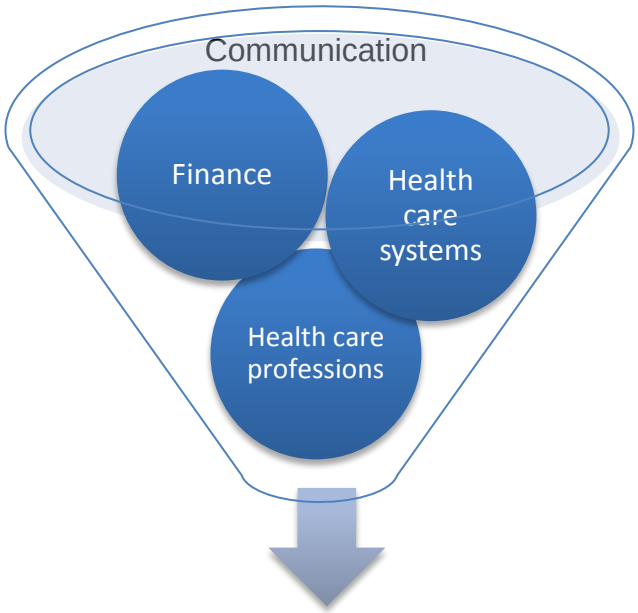
Facilitated discussions confirmed the identification and prioritization of entities essential to implement the core competencies and achieve the final project objective presented in the next section. These key entities were mapped into four quadrants as shown in Figure 2. The quadrants represent strong vs. weak influence and strong vs. weak interest in the implementation of the core competencies. Each established key entity was assigned to a quadrant based on the perception of the discussants. No entities were mapped to the weak interest/weak influence quadrant.

Figure 2. Entity ranking according to interest and influence[10]

	Weak Influence	Strong Influence
Strong Interest	Stakeholders in this segment may prove helpful if they become supporters of the project	Stakeholders in this segment must be accommodated
Weak Interest	Stakeholders in this segment will have little or no effect on the project	Stakeholders in this segment may prove dangerous or very supportive to project if they become interested

The three critical systems necessary for implementation of core oral health clinical competencies and primary care practice are **health care professions, health care systems** and **finance**. In addition, an overarching and encompassing factor is communication (Figure 3).

Figure 3. Critical systems for successful implementation of competencies



Discussions about the strategies for implementing IOHPCP were framed around the importance of communication and the three systems described below.

Health care professions

A transformation of the current health care profession paradigm will require profound multi-faceted change. Stakeholders and advocates agree that interprofessional education and collaboration is key for this change to occur. Health care providers and their respective professional organizations are the essential vehicles for health service delivery. The current context of the professions of dentistry, medicine, nursing, and physician assistant are historically rooted in sociological and academic differences in roles which have resulted in isolation of the fields and lack of communication. There is a growing need to have

systematic change that includes policy, payment, education, practice, licensure and accreditation to break down the barriers to integrating oral health and overall health.

Health care systems

Health care systems are complex operational structures that include access to care, provision of clinical services, and the underlying foundation that supports implementation of the oral health core clinical competencies. An organized and multi-faceted infrastructure needs to be in place for the efficient and effective implementation of the oral health competencies. Infrastructure includes interoperable information technologies (e.g. electronic health records), communication pathways, and business processes. The infrastructure could enable systems to optimize care coordination across medical and dental care environments to improve patient outcomes.

Financing

Financial issues have been shown to be significant barriers to accessing dental care. Currently, Medicaid coverage and payment policies vary greatly from state to state. Furthermore, most state Medicaid programs do not provide direct payment for dental services for adults. As a result of these policy decisions, the current system drives the use of more costly alternatives such as emergency department visits. Severe cases often lead to hospitalization, which could have otherwise been managed less expensively in an outpatient setting. In addition, increased reimbursement payment rates would incentivize more dental providers to treat Medicaid patients resulting in increased availability/access to services. Addressing the public and private sectors for payment options will significantly impact access to oral health services.

The above-identified systems are essential to successful implementation of the core clinical competencies within the context of overarching and central communication.

Component III

Identify strategies to implement the core competencies with emphasis on the three identified systems: health care professions, health care systems, and financial aspects, by employing outcomes of prior meeting recommendations.

Prior meeting topics were used as the conceptual framework to dialogue with a group of nationally recognized participants who have knowledge and expertise in the areas of professional education and practice, interprofessional collaboration, finance and health system change. HRSA arranged expert panel presentations that focused on these areas. HRSA facilitated group discussions to provide a forum for discussion of implementation strategies for the oral health competencies.

The charge for the discussions was defined by the following assumptions based on the three recurring systems for consideration: health care professions, health care systems and finance.

- Health care professions: The inclusion of the clinical competencies would be within the existing scopes of practice for the health professionals, while explicitly using collaborative practice.

- Health care system: The participants represent a variety of interdependent resources and systems necessary for the proposed implementation strategy.
- Finance: No additional funds would be available for implementation of the core clinical competencies, therefore encouraging the use of innovative concepts.

These three critical systems were individually described to create a model that facilitates understanding. It is important to recognize that in reality, these systems overlap and are interdependent and do not exist in isolation from one another. In planning programs to incorporate oral health clinical competencies, full consideration of these interdependent systems can have a positive impact on the overall goal to improve access to oral health care. Communication among all involved parties is a key element underlying successful engagement and implementation.

Within the parameters of the above assumptions, with focus on the health care safety net setting, the approach allowed the participants to identify aspects of health systems that may be included in order to execute a plan. Several themes emerged that informed the basis of the HRSA recommendations for implementing the core competencies. These themes include: a readiness for action, impatience with the status quo, and the critical timing afforded by multiple changes in the health care system. Another theme is the emergence of interprofessional education and practice among professions and professional organizations in order to reap benefits from each profession and create a more seamless approach to health care. Access to care, particularly for the underserved, has surfaced as a priority that needs to be addressed in order to assure better health care outcomes. Finally, sustainability is a consideration that underlies all of the implementation strategies and is dependent on financial viability.

Risks and challenges involved in the implementation of the oral health core clinical competencies were considered. Examples of overarching implementation issues include: time constraints, organizational leadership support, cross-cutting communication and relationships, and turning knowledge into practice. HRSA developed recommendations that provide a foundation for reproducible strategies to improve health. Progress in implementing the competencies will likely be an incremental process that addresses a number of aspects simultaneously, with a vision and goal of improving our population's overall health. This approach emphasizes interrelated care, with competencies not as an "add-on" but seamlessly incorporated into existing practice supported by educational efforts.

The IOHPCP effort highlights the need for a unified approach to address oral health conditions and implement appropriate interventions to improve health outcomes for the most vulnerable populations. The effort will be used to stimulate ongoing communication and collaborations among primary health care and dental providers within the health and financial systems to achieve the goal of improving access to oral health care for vulnerable and underserved populations in the U.S.

The IOHPCP implementation strategies may be applicable to any population where the need is identified. Clinicians applying the competencies should consider both the clinical standards of their profession and the communities they serve.

HRSA synthesized recommendations and considered expert and professional opinions expressed during the IOHPCP meetings. The following recommendations serve as guiding principles and provide a framework for the design of a competency-based, interprofessional practice model to integrate oral health and primary care.

Recommendations

1. **Apply oral health core clinical competencies within primary care practices to increase oral health care access for safety net populations in the United States.**
    a. Clinicians should incorporate the oral health core clinical competencies in patient care.
    b. Health care professional education and training, as well as continuing education curricula, should incorporate the oral health core clinical competencies.
    c. Accreditation and certification bodies should integrate the oral health core clinical competencies into primary care practitioner standards.
2. **Develop infrastructure that is interoperable, accessible across clinical settings, and enhances adoption of the oral health core clinical competencies. The defined, essential elements of the oral health core clinical competencies should be used to inform decision-making and measure health outcomes.** Health care systems should:
    a. Establish technological infrastructure to support and facilitate referrals, knowledge exchange, and a follow up with clinicians to improve health outcomes.
    b. Identify and support executive level champions to enhance communications and prioritize incorporation of the oral health core clinical competencies into primary care practice.
    c. Engage and educate consumers about oral health in primary care as an expected standard of interprofessional practice.
    d. Evaluate effectiveness of the application of the oral health core clinical competencies by assessing patient satisfaction and health outcomes.
    e. Use common language, interoperable electronic health records, and interprofessional collaboration in patient-centered medical and health homes to facilitate high quality accessible oral health care.
3. **Modify payment policies to efficiently address costs of implementing oral health competencies and provide incentives to health care systems and practitioners.**
    a. Include or enhance public and private health care payment for oral health care throughout the lifespan.
    b. Utilize safety net settings to pilot payment methodologies that lower dental care costs.
    c. Build partnerships and coalitions that educate policy makers and the public about the benefit of integrating oral health care and primary care.
4. **Execute programs to develop and evaluate implementation strategies of the oral health core clinical competencies into primary care practice.**
    a. Implement pilot projects to identify innovative and promising practices that inform and support the broader implementation of the oral health core clinical competencies.
    b. Develop demonstration projects to validate and replicate the oral health core clinical competencies implementation.
    c. Evaluate implementation of the oral health core clinical competencies by clinicians and the systems in which they practice.
    d. Assess the cost-effectiveness and efficiency of implementing the oral health core clinical competencies in primary care practice.

References

1. National Center for Health Statistics. Health, United States, 2012: With Special Feature on Emergency Care. Hyattsville, MD. 2013. . Accessed February 5, 2013.
2. U.S. Department of Health and Human Services. Summary of Health Statistics for U.S. Children: National Health Interview Survey, 2010. Available at: http://www.cdc.gov/nchs/data/series/sr_10/sr10_250.pdf. Accessed March 25, 2013.
3. Institute of Medicine of the National Academies. Improving Access to Oral Health Care for Vulnerable and Underserved Populations. Available at: http:www.iom.edu/Reports/2011/Improving-Access-to-Oral-Health-Care-for-Vulnerable-and-Underserved-Populations.aspx. Accessed December 10, 2012.
4. Institute of Medicine of the National Academies. Advancing Oral Health in America. Available at: http://www.iom.edu/Reports/2011/Advancing-Oral-Health-in-America.aspx. Accessed December 10, 2012.
5. U.S. Department of Health and Human Services. *Oral Health in America: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial. Research, National Institutes of Health, 2000. Available at: http://www.nidcr.nih.gov/DataStatistics/SurgeonGeneral/sgr/. Accessed December 10, 2012.
6. Warren RC. Oral health for all: policy for available, accessible, and acceptable care. Washington: Center for Policy Alternatives.1999; September; 33.
7. U.S. Department of Health and Human Services. *Oral Health in America: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial. Research, National Institutes of Health;2000:239.
8. U.S. Department of Health and Human Services. *Oral Health in America: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial. Research, National Institutes of Health; 2000:240.
9. U.S. Department of Health and Human Services. *A National Call to Action to Promote Oral Health.* Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institutes of Health, National Institute of Dental and Craniofacial Research. NIH Publication 03-5303. May 2003.
10. Massachusetts Institute of Technology. Upgrading Urban Communities. Available at: http://web.mit.edu/urbanupgrading/upgradig/issues-tools/tools/worksheet-stakeholders-2.html. Accessed March 25, 2013.

Appendix 1
Meetings Participants

Neil Abernathy, Assistant Professor, Department of Biomedical Informatics and Medical Education, University of Washington
Penny Anderson, Executive Director, Maryland Dental Action Coalition
Howard Bailit, Professor Emeritus, University of Connecticut Health Center
Ellen Beck, Clinical Professor, Director UCSD Student-Run Free Clinic Project and Fellowship in Underserved Health Care, Department of Family and Preventive Medicine, University of California San Diego
Jonathan Bowser, Program Director, University of Colorado Physician Assistant Program
James Bramson, Chief Dental Officer, United Concordia Companies, Inc.
Lynn Bramwell, Administrator, Family Health Services, Solano County Department of Health and Social Services
Jay Breines, Executive Director, Holyoke Health Center
Michael Cangemi, Director, General Practice Residency, Penobscot Community Health Center
Frank Catalanotto, Professor and Chair, Department of Community Dentistry and Behavioral Science, University of Florida College of Dentistry
Kelly Caverzagie, Associate Vice Chair for Quality and Physician Competence, Department of Internal Medicine, University of Nebraska Medical Center
Kathryn Christiansen, Associate Dean for Practice, Policy and Partnerships and Executive Director, Institute for Health Care Innovation, University of Illinois at Chicago, College of Nursing
Tyler Cymet, Associate Vice President for Medical Education, American Association of Colleges of Osteopathic Medicine
Amos Deinard, Associate Professor, University of Minnesota
Mark Deutchman, Professor, Schools of Medicine, Dental Medicine and Public Health, University of Colorado
Bruce Donoff, Dean and Walter C. Guralnick Distinguished Professor, Harvard School of Dental Medicine
Margaret Drozdowski Maule, Chief Dental Officer, Community Health Center, Inc.
Andy Elliott, Former American Dental Association Vice-President, General Dentist, Martin, KY
Alison Essary, Director of Student Affairs, College of Health Solutions, Associate Professor, School for Science of Health Care Delivery, Arizona State University
Michael Estrada, Associate Professor, Moreno Valley College Physician Assistant Program
Caswell Evans, Associate Dean, University of Illinois College of Dentistry
Mary Foley, Executive Director, Medicaid CHIP State Dental Association
Allan Formicola, Dean Emeritus, Professor Emeritus, Columbia University College of Dental Medicine
Raul Garcia, Professor and Chair, Department of Health Policy and Health Services Research, Boston University Henry M. Goldman School of Dental Medicine
Tracy Garland, Program Director, National Interprofessional Initiative on Oral Health
Shelly Gehshan, Director of Pew Children's Dental Campaign, The Pew Charitable Trusts
Steven Geiermann, Senior Manager, Access, Community Oral Health Infrastructure and Capacity, American Dental Association
Paul Glassman, Professor of Dental Practice, University of the Pacific School of Dentistry
Anita Duhl Glicken, President/CEO, National Commission on Certification of Physician Assistants Health Foundation

Harry Goodman, Director, Office of Oral Health, Maryland Department of Health and Mental Hygiene
Sharon Gordon, Associate Professor, Director Graduate Research Education and Training, University of Maryland, Baltimore
Judith Haber, Associate Dean of Graduate Programs, New York University College of Nursing
Irene Hilton, Dental Consultant, National Network for Oral Health Access
Sarah Holland, Executive Director, Virginia Oral Health Coalition
Mitsuko Ikeda, Project Director, National Network for Oral Health Access
Robert Johnson, Director of Dental Service, Community Health of South Florida, Inc.; Doris Ison South Dade Community Health Center
Linda Juszczak, President, National Assembly on School-Based Health Care
Sunnah Kim, Director, Division of Pediatric Practice, American Academy of Pediatrics
Rebecca King, Section Chief, Oral Health Section, North Carolina Division of Public Health
David Krol, Senior Program Officer, Robert Wood Johnson Foundation
Colleen Lampron, Senior Program Officer, Delta Dental of Colorado Foundation
Huong Le, Dental Director, Asian Health Services
Katherine Libby, Program Manager, Virginia Oral Health Coalition
Martin Lieberman, Dental Director, Neighborcare Health
Diane Limbo, Director of Health Integration, Healthy Smiles For Kids of Orange County
Scott Litch, Chief Operating Officer and General Counsel, American Academy of Pediatric Dentistry
Cyntha Booth Lord, Physician Assistant, The American Academy of Physician Assistants
Gary Martin, Military Consultant to Air Force Surgeon General for Dental Public Health, Air Force
Jenny Mattern, Vice President of Operations, Clinica Family Health Services
Greg McClure, Dental Director, Delaware Health and Social Services
Mike Milner, Professor and Dean, School of Physician Assistant Studies, Massachusetts College of Pharmacy and Health Sciences
Mary Northridge, Assistant Professor, New York University College of Dentistry
J. Nwando Olayiwola, Chief Medical Officer, Community Health Center, Inc.
Susan Pharr, Early Child Oral Health Coordinator, Virginia Department of Health
Carole Pratt, Health Policy Fellow, Robert Wood Johnson Foundation
Tracy Rodgers, Community Health Consultant, Iowa Department of Public Health
Bob Russell, Public Health Dental Director, Iowa Department of Public Health
Julie Bodën Schmidt, Associate Vice President, National Association of Community Health Centers
Jeanne Sinkford, Senior Scholar-in-Residence, Office of the Executive Director, American Dental Education Association
Pamela Steinbach, Director, Education & Research, American Dental Hygienists' Association
Bernard Tolpin, Vice-President, Department of Dental Medicine, Lutheran Family Health Centers Education Association
Sarah Wachtel, Senior Associate, Government Relations/Pew Children's Dental Campaign, The Pew Charitable Trusts
Kathryn Werner, Executive Director, National Organization of Nurse Practitioner Faculties

Appendix 2

Federal Attendees

Anthony Anyanwu, Public Health Analyst Health Resources and Services Administration
Marcia Brand, Deputy Administrator, Health Resources and Services Administration
Alexis Bakos, Deputy Director, Division of Nursing, Bureau of Health Professions, Health Resources and Services Administration
Shannon Bolon, Chief, Primary Care Medical Education Branch, Division of Medicine and Dentistry, Bureau of Health Professions, Health Resources and Services Administration
Mary Cieslicki, Technical Director, Division of Reimbursement and State Financing, Financial Management Group**,** Centers for Medicare & Medicaid Services
Steven Cohen, Director, Center for Financing, Access and Cost Trends, Agency for Health care Research and Quality
Christopher Dykton, Project Officer, Health Resources and Service Administration, Maternal and Child Health Bureau, Health Resources and Services Administration
Darci Eswein, Special Assistant, Health Resources and Services Administration, Office of the Administrator
Cindy Eugene, Health Resources and Services Administration, Bureau of Health Professions,
Martha Evans, Program Officer, Primary Care Medical Education Branch, Division of Medicine and Dentistry, Bureau of Health Professions, Health Resources and Services Administration
Jerilyn Glass, Medical Officer, Division of Medicine and Dentistry, Bureau of Health Professions, Health Resources and Services Administration
Seiji Hayashi, Chief Medical Officer, Bureau of Primary Health Care, Health Resources and Services Administration
Juliette Jenkins, Deputy Director, Division of Medicine and Dentistry, Bureau of Health Professions, Health Resources and Services Administration
Ayah Johnson, Chief, Children's Hospitals Graduate Medical Education, Training Branch, Bureau of Health Professionals, Division of Medicine and Dentistry, Health Resources and Services Administration, Centers for Medicare & Medicaid Services
Renée Joskow, Senior Advisor for Oral Health, Office of Strategic Priorities, Office of Special Health Affairs, Health Resources and Services Administration
Laura Kavanagh, Director, Maternal and Child Health, Workforce Development, Health Resources and Services Administration
Kathleen Klink, Director, Division of Medicine and Dentistry, Bureau of Health Professions, Health Resources and Services Administration
Hyewon Lee, Dental Consultant, Office of Strategic Priorities, Office of Special Health Affairs, Health Resources and Services Administration
Richard Manski, Senior Scholar, Center for Financing, Access and Cost Trends, Agency for Health care Research and Quality
Patti Mitchell, Senior Program Analyst, United States Food and Drug Administration, Food and Nutrition Service
Lynn Mouden, Chief Dental Officer, Centers for Medicare and Medicaid Services
Laurie Norris, Senior Policy Advisor, Centers for Medicare and Medicaid Service**s**
Anne Patterson, Program Officer, Primary Care Medical Education Branch, Division of Medicine and Dentistry, Health Resources and Services Administration

Fatima Ravat, Public Health Analyst, Oral Health Branch, Division of Medicine and Dentistry, Bureau of Health Professions, Health Resources and Services Administration

Angel Rodriguez-Espada, Chief Dental Officer, Office of Quality & Data, Bureau of Primary Health Care, Health Resources and Services Administration

Shane Rogers, Acting Chief, Oral Health Branch, Division of Medicine and Dentistry, Bureau of Health Professions, Health Resources and Services Administration

Julie Sadovich, Deputy Director, Office of Special Health Affairs, Health Resources and Services Administration

Gina Thornton-Evans, Dental Officer, Division of Oral Health, Centers for Disease Control and Prevention

Thomas Vallin, Acting Branch Chief, Oral Health Branch, Division of Medicine and Dentistry, Bureau of Health Professions, Health Resources and Services Administration

Pamella Vodicka, Senior Public Health Analyst, Division of Child, Adolescent and Family Health, Maternal and Child Health Bureau, Health Resources and Services Administration