
Background

A project enlisting advice from advocacy and provider groups on the ways data can help improve the nation's oral health has resulted in recommendations specifying the kinds of oral health data that should be collected on the U.S. population. The better the data collected, the better the reasoning goes, the better program managers and policymakers at local, state and national levels can develop and refine health policies and programs – and in so doing make optimal use of limited funds and resources.

“Surgeon General David Satcher stated that people with oral health problems and inadequate access to care...represent a silent epidemic. Therefore, it is important to get the right people to care about this issue, notably policymakers and public officials. The dental profession needs to know too, as does the general public.....We may have different perspectives about what is ‘optimal’ [in oral health]. Our task is to begin to build a framework that identifies metrics that will help drive change and measure progress in assuring optimal health for all.”

– William R. Maas, DDS, MPH
U.S. National Oral Health Alliance Leadership Colloquium, “Metrics for Improving Oral Health”

The challenge posed by Dr. Maas in the DentaQuest Foundation-funded convening remains timely. During the November 2012 Colloquium, more than 100 participants gathered “to examine the role of metrics in driving progress for optimal oral health for all people by sharing their experiences, insights, and questions about how to develop and use metrics most effectively.” They further worked “to develop a shared understanding about the complexity of issues and significant opportunities surrounding metrics for improving oral health.”

Attendees concluded that the current oral health measurement system “can be difficult to navigate and summarize. This creates a barrier to telling a succinct and clear story of the status of our nation’s oral health, and of the effectiveness of publicly financed interventions or efforts to prevent or reverse disease among the most affected.”

It is clear that the availability of timely and relevant data, collected through national and state surveillance and survey mechanisms, is crucial to informing strategies to improve Americans’ oral health, and especially health equity. Further, there is evidence that the oral health measurement “system” – which includes national and state-level definitions, reporting requirements, human resource capacities and funding sources – can be difficult to navigate and summarize.
This creates a barrier to telling a succinct and clear story of the status of our nation’s oral health, and of the effectiveness of publicly financed interventions or efforts to achieve gains in health equity. As Dr. Maas explained, the first and primary task in this work is using data to help people understand the disparities and opportunities in oral health.

That motivation brought together the Washington DC-based non-profit Children’s Dental Health Project (CDHP), the Association of State and Territorial Dental Directors (ASTDD) and the DentaQuest Foundation to form a partnership and a plan. Noteworthy in the plan was the intent to learn from stakeholders: to ask the agencies and organizations who are the prime users of oral health data what additions or changes in data gathering they would find most useful toward the goal of improving the nation’s oral health. With DentaQuest Foundation support, CDHP, working in consultation with its partners, managed the project, designing and analyzing the surveys and subsequent meetings.

The DentaQuest Foundation was already on board to address measurement issues, when in 2010 it launched Oral Health 2020, an ambitious decade-long campaign for improving the nation’s oral health across the lifespan. It includes as one of its now six goals: By 2020, a comprehensive national and state oral health measurement system is in place.

Prior to pursuing this plan, the organizations sought to develop a compendium of available oral health data sources, data collection efforts, and measures. This effort not only resulted in a resource that itself illustrated the disparate and uncoordinated oral health measurement mechanisms in place at the state and federal levels but also provided insight into new and promising efforts underway. For example, the Dental Quality Alliance, has been quickly developing measures aimed at better capturing oral health care beyond simple utilization which can be used by private and public payors alike. Still, while efforts to better align care and outcomes are underway, the various federal, state, and local entities responsible for oral health surveillance, public health interventions, and care delivery lack alignment in both aim and data collection.

The Process

Accordingly, the Oral Health Measurement Systems Project that evolved from discussions in recent years was directed toward overcoming the barriers to understanding by initially creating a common and comprehensive understanding of existing oral health measures. Then, online questionnaires were used to gather and analyze what individual stakeholders from two different groups – provider-focused organizations as well as representatives from the policy, advocacy, and research community – had to say about priorities and challenges in the current system. Relevant federal agencies also received the questionnaire.

The questionnaire process employed a technique to aid decision-making called the Delphi method. In CDHP’s adaptation, participants received an initial questionnaire (called Round One) in which they answered a series of questions. Their replies were
compiled to produce a list of responses to core questions and presented as feedback to participants in Round Two of the questionnaire. Participants were then asked to reflect on the collective responses and rank their top choices from the lists of answers to specific questions. The intent is to inform individuals of what their group had said, producing a more circumscribed range of answers to guide decision-making toward consensus.

The final step entailed bringing each group together and presenting them with the results of the Round Two rankings. These meetings were “virtual” convenings because they were conducted online. A facilitator reviewed the input and led discussions aimed at arriving at a consensus of what each group’s highest priority recommendations for data collection to improve oral health would be.

The final priorities were then presented to federal agency stakeholders at an in-person convening in Washington, D.C. during which federal agency officials discussed the feasibility of improving and coordinating oral health measurement efforts. The end product of this in-person convening was a “measurement matrix” which provides a framework for establishing a set of high-priority, aligned oral health measures that can be applied across agencies and utilized by both public surveillance initiatives as well as more direct service and coverage programs such as Medicaid and Medicare.

What the Stakeholders Said

Themes in Survey Responses

Participants from the policy and advocacy community were geographically diverse and represented a range of organizations including some state oral health coalitions, several academic institutions, a state health policy organization, a foundation, a dental professional group and an organization dedicated to improving oral health through measurement. The provider-focused feedback represented dental research, education, and practitioner groups as well pediatric-oriented associations.

Most advocates indicated that they used oral health data for program and policy analysis/development or writing policy or research briefs; one indicated using data to compare access to care through Medicaid, the Children’s Health insurance Program (CHIP) or private insurance, another mentioned preparing legal briefs. The data sources they used ranged widely with multiple mentions of NHANES and CMS-416. In answer to the question on areas of measurement most important in their work, advocates frequently mentioned access to care, oral health status and outcomes for the general population and subgroups. Dental expenditures, cost of care, dental insurance and workforce issues were also cited.

As for the provider-focused organizations, these respondents used a wide range of sources to track access and outcomes of services in relation to selected populations (e.g., Medicaid enrolled children and adults). They also wanted information on who provided services (e.g. dentists, pediatricians, allied dental professionals). Similar to
advocates, they saw problems with timeliness and consistency of data across agencies and lamented the lack of state data and even the lack of dental directors in some states.

There was concern over the incompatibility of electronic health records systems, the lack of coordination between medical and dental health records (or between medical and dental “homes”) as well as a complaint that EDRs use treatment rather than diagnostic codes. Because of the pediatric interests of the group, there was greater emphasis on data measuring children’s dental health and caries rates, but there was also concern over periodontal disease and the oral health status of seniors and those in residential care facilities.

Stakeholders’ Visions of the Future
In addition to being asked what data sources they used, the areas of measurement they saw as most important, and the gaps they saw in the current system, participants were asked to describe their ideal oral health measurement system. Not everyone answered this question but many of those who did were indeed visionary:

- “A system that can tell you meaningful things at...the state level (and preferably more granular than that) about individuals’ source of coverage, utilization of services, and oral health status, over time, for all age groups and coverage types ...”
- “I would envision a...system that captured existing and evolving practices and status in terms of public health, oral health, dental delivery system transformation, dental education and provider activity, service utilization, network and service access, and effectiveness of care delivery. Yes, everything! Yearly, at the county level, clinical and self reported.”
- “… a prescriptive measurement system which feeds into a national entity”
- “Uniform national electronic record system that records baseline health status and updates status at each health care encounter, tracks patient care and cost, categorized by insurance status ...”
- “Health status that is representative of the population on a timely periodic basis... [including] service use and costs of care for populations within defined geographic regions...measures of outcomes of care...for geographically relevant populations and across care delivery sites.”
- “A standard electronic record with tick boxes for health assessment and care delivered. A national electronic registry/record with unique identifier to track people longitudinally.”
- “A system that is vertically integrated with a core set of standardized assessments to facilitate local-state-national comparisons ... identifies a couple of health measures that are considered ‘essential’ across various aspects of the life span to monitor oral health status across the life span
- “… leverage existing data collection methods, and facilitate increased data sharing amongst players, associations, federal agencies and states...also monitor the surveillance of core measures to assess and track the most essential vital signs for oral health in the United
states, and also the impact of oral health policies. The system would report valuable, usable and relevant information and measures that can be used to improve the oral health of communities and the nation.”

• “Non-duplicative aligned measurement system that accounts for both the public health system and the private care delivery system.”

• “One where data collection is easily understood and readily available.”

• “A system...that tracked how often [non-dental providers] are providing these services, coordinating and referring to the dental home, and if they are having any effect on caries/disease rates...what parents think about preventive oral health care services in the medical home and if it helps them to do more about oral health...I would like to see more attention paid to care coordination, treatment planning, prevention, family satisfaction, and the social and emotional aspects of oral health care.”

• “The ideal health oral health measurement system would obtain health status data that is representative of the population on a timely periodic basis. Data would also be available on a timely periodic basis on service use and costs of care for populations within defined geographic regions. An ideal system would also include measures of outcome of care (e.g., changes in health status and satisfaction with the care experience) for geographically relevant populations and across care delivery systems.”

Common features that emerged from these and other descriptions of an ideal system include:

• **Standardization**: Some type of uniform national electronic record system regularly updated with each health care encounter;

• **Granularity**: Data should be available at national, state and county level for the efficient implementation of policies and programs;

• **Timeliness**: Health status data representative of the population should be available on a timely periodic basis; and,

• **Oral health status**: Data should be representative of populations in defined geographic regions and subpopulations.

• **Health outcomes and patient satisfaction**: Data should attempt to identify the impacts on oral health status as well as the social and emotional effects of interventions by various providers.
The Virtual Convenings

Two hour-long online meetings were held on September 18, 2015, one for each group. Attendees from each group were joined by CDHP and ASTDD staff and consultants, with discussion led by a facilitator who could see virtual actions (chat box conversations and raised hands) of all participants. Attendees could offer comments orally but also communicate via a chat board visible on one section of the screen. The main part of the screen was used to review input and record recommendations. The facilitator introduced leaders from CDHP and ASTDD, reviewed the process to date and emphasized that the goal of the meeting was to identify actionable priorities to move toward a comprehensive oral health measurement system that supports efforts to improve oral health.

The real work of the each group began with the display of the results of the surveys, beginning with descriptions of what an ideal measurement system would look like (quoted above). The facilitator then showed the group their top choices on questions of what measurements were most useful in improving oral health, and on the various strengths, weaknesses, gaps and barriers in relation to current measures. She urged the group to think globally and concentrate on what was feasible and actionable. Much of the discussion focused on their selection of the 6 measures that had been ranked as most useful in improving oral health.

Before making final priority recommendations the facilitator invited comments on the group’s concerns with regard to weaknesses and barriers. Among advocates, the question was raised as to whether oral health status was a proxy for outcomes. The group agreed that that would work but were still concerned about the problem of linking utilization or claims data to outcomes and how to measure changes in health status over time: they saw a need to make explicit whether services led to improved oral health or not.

Among provider-focused groups, coding was clearly an issue since health care providers are tasked with supplying codes in health records and insurance forms. In addition, one of the major problems mentioned was the incompatibility (and competition) among different electronic health record system developers and hence their non-interoperability, the differences in coding systems used in medicine and dentistry, the lack of diagnostic codes in dentistry, and the sheer complexity and time needed to execute forms. The result is that a system that could yield abundant information on the medical and oral health of an individual over a lifetime is buried in disparate, uncoordinated databases that are not shared and often use inconsistent definitions of terms.
As the end of each hour was approaching, the facilitator called for a vote. A show of hands indicated that consensus had been reached on the priorities recommendations as amended:

**The Advocates’ Measurement Priorities**

1. **Detailed utilization of oral health services for all populations.** These data should reflect:
   - a. Access to oral health services by sub-populations, and
   - b. Dental expenditures by program and per capita

2. **Oral health status by populations.** These data should indicate:
   - a. Prevalence of all oral diseases, and
   - b. Changes or improvement in oral health status, and ensure that the data can be interpreted appropriately to measure impact on subpopulations, such as quality of life or morbidity.

**The Providers’ Measurement Priorities**

1. Oral health status and improvement of status of all populations (or, prevalence of oral diseases over the life span).
2. Oral health services provided for all age groups with identification of type of provider.
3. Number or percent of population(s) with a regular source of oral health care.
4. Databases and electronic health records that can be shared by medical and dental providers.
5. An accessible national clearinghouse for oral health data.
6. A national all-payer claims database supplied by integrated medical and dental electronic health records, which share a common coding system.

**Response from Federal Agency Officials**

Survey responses from the federal agencies queried resonated well with the themes and issues that emerged from the questionnaires and virtual convenings of the advocate and provider groups. This degree of compatibility encouraged the project partners to consider combining the priority recommendations that emerged from the convenings of the two stakeholder groups. While their recommendations reflected each group’s professional interests, there was enough overlap and mutual agreement on weaknesses and gaps in the current systems to yield a unified set of recommendations to present to federal representatives – the next step in the Metrics Project.

Four of the federal respondents described their concept of an ideal oral health measurement system:

- “The ideal would be to have child level data on Head Start children to help us drive services and policy. In addition we would be able to capture oral health outcome data and be able to correlate with our more robust school readiness data to be able tell if our service provision is having an impact; if [we had] child data we would be able to track the children.”
It is difficult to describe and create something new when so many measurements are available. My suggestion instead would be to create some test data, measure across existing systems and check for reliability, validity and usefulness, convene focus groups, and determine best tools available or start over if none pan out.”

“Flexible, scalable, timely and easily accessible. Developed with full input from data collectors, disseminators and end users. System should be evaluated for validity and usefulness.”

“An ideal oral health measurement system would be based on oral health outcomes, as measured by diagnosis codes and changes in diagnosis over time.”

**Combined Advocate and Provider Group Priorities**

1. **Oral Health Status**: Measure the prevalence of oral diseases (at a minimum, dental caries, periodontal diseases, oral cancer) over the lifespan in the U.S. population, noting degree of morbidity/effects on the quality of life as appropriate, and with sufficient demographic data (age, sex, race, ethnicity, geographic location, socio-economic status, insurance coverage) to define prevalence for sub-populations. Data should be collected at regular intervals to allow for trend analysis over time.

2. **Utilization of Oral Health Services**: Measure oral health services utilization of the U.S. population and sub-populations (as defined in Rec 1) annually, noting the following indicators:
   a. Nature and frequency of services provided
   b. Type of health professional providing oral health care
   c. Percent of patients receiving continuity of care (having of a regular source or dental “home”)
   d. Cost of care (out-of-pocket, insurance, government program)

3. **Electronic Dental Records & compatibility with Medical Health Records**: Design and implement the use of a diagnostic-code-based electronic dental record that can be coordinated with electronic health (medical) records. The present situation of incompatibility and interoperability across electronic health (medical) records and in turn, their incompatibility with dental records however coded is intolerable and needs to be resolved.

4. **An Accessible National Oral Health Data Clearinghouse**: The creation of an easily accessible central depository for the quantities of oral health data sets now regularly compiled would expedite research analyses enabling the evaluation and refinement of oral health policies and programs. It might also help to streamline data collection by eliminating duplications of efforts, agreeing on standard definitions of terms, and in other ways resolving issues that have prevented comparing or combining various data sets.
<table>
<thead>
<tr>
<th>CSTE Indicator Domain</th>
<th>Advocates' Measurement Priorities</th>
<th>Providers' Measurement Choices</th>
<th>Unified Priority Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral health outcomes</td>
<td>Oral health status by populations</td>
<td>Oral health status and improvement of status of all populations (or, prevalence of oral diseases over the lifespan)</td>
<td>An ideal oral health measurement system should include information on the prevalence and severity of the major oral diseases over the lifespan for the general population at the national, state, and possibly county levels and for specific sub-populations. Data should be collected in a consistent manner across time and populations.</td>
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<tr>
<td></td>
<td>Prevalence of all oral diseases</td>
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<td></td>
<td>Changes or improvement in oral health status (ensure that the data can be interpreted appropriately to measure impact on subpopulations)</td>
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</tr>
<tr>
<td>Access to care</td>
<td>Detailed utilization of oral health services for all populations</td>
<td>Oral health services provided for all age groups with identification of type of provider</td>
<td>An ideal oral health measurement system should include information on the type and frequency of dental services provided to the general population and specific sub-populations. Data should include receipt of any dental service (utilization), specific services, provider type and expenditures, and other factors related to oral health care access.</td>
</tr>
<tr>
<td></td>
<td>Access to oral health services by sub-populations</td>
<td>Number or percent of population(s) with a regular source of oral health care</td>
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<tr>
<td></td>
<td>Dental expenditures by program and per capita</td>
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</table>
(Cont. from page 9) Unified Priority Statements based on Advocates’ and Providers’ Priority Lists

<table>
<thead>
<tr>
<th>CSTE Indicator Domain</th>
<th>Advocates’ Measurement Priorities</th>
<th>Providers’ Measurement Choices</th>
<th>Unified Priority Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workforce/ infrastructure/policy</td>
<td>None</td>
<td>Databases and electronic health records that can be shared by medical and dental providers&lt;br&gt;A national all-payer claims database supplied by integrated medical and dental electronic health records, which share a common coding system</td>
<td>An ideal oral health measurement system should include information from electronic dental records that use a common <strong>diagnostic</strong> coding system and are coordinated with electronic health records.</td>
</tr>
<tr>
<td>Risk factors</td>
<td>None</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Intervention strategies</td>
<td>None</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>An accessible national clearinghouse for oral health data</td>
<td>An ideal oral health measurement system should include an easily accessible, centralized data repository and dissemination system (national clearinghouse).</td>
</tr>
</tbody>
</table>
The Federal Convening

On November 19, 2015 representatives of the chief federal agencies that generate and use oral health data met with CDHP, ASTDD and DentaQuest staff and other interested parties at the Washington DC headquarters of the Pew Charitable trusts to review findings and discuss how best to move the metrics project forward. Representatives from the Centers for Disease Control and Prevention in Atlanta joined the group via conference call.

After introductions and background were provided by leaders from CDHP and the DentaQuest Foundation, participants reviewed survey and convening feedback from the other two stakeholder groups as well as themes from their initial round of questionnaires, the primary focus of which was the unified priorities table (above). The group discussed the need for data that addresses public health surveillance needs as well as the need to measure the oral status of specific populations and the outcomes of individual federal and state programs. Bruce Dye, from the National Institute of Dental and Craniofacial Research and an experienced NHANES analyst, proposed that the group focus down on a discrete set of data elements as outcomes, a “small basket,” as he described it, and determine to what extent each agency could supply the data elements to fill the basket for the populations they represent. The group returned to this model again and again over the course of the meeting as they continued to weigh the pros and cons of existing data sources to address the priorities of an ideal oral health measurement system.

The discussion tracked similar themes to that of the first two convenings and the group spent a significant portion of time discussing how to bridge the gap between collecting data on the delivery of oral health care and measuring the oral health status of patients and populations. It was clear from the discussion that data-collecting systems are evolving, becoming more oral-health-conscious. For example, a number of state oral health programs are beginning to collect tooth-specific data on treated vs. untreated decay and certain HRSA block grants now include an oral health measure that states can elect to report on. But, as one participant noted, there are “glitches.” HRSA’s Clinical Health Centers can detail which dental treatments were provided in a grantee’s program, but the information is not available for individual sites within the program—making it hard to determine which sites might benefit from additional resources. Capturing workforce data on whether care was provided by a dental or a non-dental professional is also problematic.

The Matrix

Returning to the idea of developing discrete sets of data elements, the “small baskets,” across the life span, the group began to sketch a matrix on a poster board with columns representing a set of age ranges from infancy to old age and rows representing the oral health indicator domains as presented in appendix A.

Not surprisingly, the group, having voiced concerns about the difficulties relating utilization to outcomes, now discussed what access to care means and why it is not the same as utilization. The point was made that you may have access to
care but not utilize it because from a personal or cultural point of view you do not value dental care. On the other hand, you might want to utilize dental services but live in an area where dentists are in short supply. A further issue noted with regard to access to care is that it does not address the need for care and lacks the diagnostic codes to annotate the need.

The group debated how to divide the matrix columns across the life span, noting that some existing data sources split age groups differently which confounds an effort to unify measures. Among other items discussed was the need to add some measure of quality of life to the matrix, particularly for older adult populations.

While the group was not able to complete the matrix during this convening, all were enthusiastic and gave every indication that they thought this was a useful exercise they would be willing to pursue and attendees agreed to complete the matrix electronically for their agencies, drawing on resources currently available.

**Barriers**

The differences in age ranges for which agencies currently collect data was used as yet another example of barriers that inhibit comparing or combining information from different data sets. Participants were asked for their thoughts on other barriers that inhibit the development of an ideal oral health measurement system. The list was extensive:

- Differing age groups
- Lack of diagnostic codes
- Problems with electronic health records (lack of interoperability; incompatibility between medical and dental records)
- Lack of standardization (especially at the state level)
- Big data issues
- No interest in data translation (an attitude of “so what”)
- Lack of energy (inertia)
- Lack of funding
- Lack of granularity (state, local, county, urban vs. rural)
- Lack of sufficient data by age, language, race, ethnicity, socio-economic status, migrant status (These are all risk indicators)

In contrast, it was evident that there were no barriers in the group to continuing the work to improve oral health measurement systems. In addition to agreeing to collaboratively complete the matrix, participants were asked to report any efforts underway in their agencies to improve data collection and indicate what opportunities they saw for long-term implementation. To keep the momentum going to drive the development of an ideal oral health measurement system the group proposed that the Department of Health and Human Services’ Oral Health Coordinating Committee could charge a working group to continue the effort.
Feedback

Participants were sent an evaluation survey, asking them to rate the overall process (both surveys and the convenings as well as the priorities developed) and provide additional feedback for improving the process moving forward.

All participants seemed to think that stakeholder participation during the convenings could have been better, with 100% of respondents rating participation as moderate. With regard to the pre-convening surveys, 100% of respondents were somewhat satisfied or very satisfied that the surveys yielded useful information.

Most respondents rated the facilitation and discussion of priorities as fair or good but almost everyone agreed that the convenings were too short and did not allow enough time for discussion. When asked to provide comment on the convenings, multiple respondents felt that there was not enough discussion of either specific data sources or the final votes on each priority.

When asked about the priorities developed during the convenings, over 80% of participants indicated that they were somewhat satisfied or very satisfied with the results. However, one respondent noted that the discussion of priorities was not detailed enough compared to the initial survey responses.

While the general consensus among participants seems to have been that the process yielded useful results in terms of information collected and priorities established, there is a clear need for further discussion among stakeholders in order to establish true buy-in before moving forward.
Next Steps for Improving Oral Health Measurement Systems

1. **Maintain engagement with stakeholders and federal agency officials**: While participants in this process were enthusiastic in providing feedback and making recommendations, much work is yet to be done in terms of developing action plans to address these recommendations. Furthermore, the engagement of federal agency officials is paramount to any meaningful changes to oral health measurement systems. Therefore, any continuation of this project must focus on:
   a. Developing a complete first draft of the oral health measurement matrix initiated by federal agency officials; and
   b. Vetting the matrix with both the original stakeholder groups and the broader oral health advocacy network.

2. **Identify the primary policy barriers to instituting the matrix**: Consensus on what measures should be applied across all domains of oral health is critical but the implementation of such a significant change requires policy changes at various levels of government. Such an undertaking will require a coordinated effort of various stakeholders to:
   a. Revisit the DentaQuest Oral Health 2020 goal based on revisions submitted during 2015 network convenings and once again, confirm consensus and buy-in;
   b. Work with experts and academics to publish the matrix and outcomes of the stakeholder convenings on measurement;
   c. Collaborate with federal and state agency officials to identify the resources necessary to reconfigure measurement priorities and develop a decision tree outlining a process or framework by which such changes would need to be made;
   d. Develop network-specific strategies for addressing this objective at all levels of the network, including draft policies, regulatory changes, legislation, etc.;
   e. Develop messaging for use by network members in meetings with local, state, and federal advocates and policymakers; and
   f. Convene regular working groups to check in on network progress towards strategic priorities.
### Appendix A

#### Key Oral Health Measures Across the Lifespan

<table>
<thead>
<tr>
<th>Age</th>
<th>0–5</th>
<th>6–9</th>
<th>9–15</th>
<th>16–25</th>
<th>26–34</th>
<th>35–64</th>
<th>65+</th>
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<tbody>
<tr>
<td><strong>Status</strong></td>
<td>Treated/untreated caries (dft)</td>
<td>Treated/untreated caries (dft)</td>
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<tr>
<td><strong>Utilization</strong></td>
<td>Annual use of dental/oral health services</td>
<td>Annual use of dental/oral health services</td>
<td>Annual use of dental/oral health services</td>
<td>Annual use of dental/oral health services</td>
<td>Annual use of dental/oral health services</td>
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<tr>
<td></td>
<td>Dental treatment under general anesthesia</td>
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<tr>
<td><strong>Access</strong></td>
<td>Usual source of care</td>
<td>Usual source of care</td>
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<td><strong>Prevention</strong></td>
<td>Receipt of OH risk assessment</td>
<td>Receipt of OH risk assessment</td>
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<td><strong>Quality of life</strong></td>
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<tr>
<td><strong>Other</strong></td>
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Appendix B

Participating Organizations

Policy, Advocacy, & Research Organizations

• America’s Tooth Fairy
• American Dental Association Health Policy Institute
• American Network of Oral Health Coalitions
• American Public Health Association, Oral Health Section
• Association of State and Territorial Dental Directors
• Council of State and Territorial Epidemiologists
• Georgetown Center for Children and Families
• Medicaid-CHIP State Dental Association
• National Academy for State Health Policy
• National Maternal and Child Oral Health Resource Center
• NYU College of Dentistry
• Oral Health America
• Pew Children’s Dental Campaign
• QUEST
• University of Pacific Dugoni School of Dentistry

Provider-focused Organizations

• American Academy of Pediatrics
• American Academy of Pediatric Dentistry
• American Association of Public Health Dentistry
• American Dental Association
• American Dental Education Association
• American Dental Hygienists’ Association
• Association of State and Territorial Dental Directors
• Hispanic Dental Association
• National Dental Association
• National Network for Oral Health Access

Federal Agencies and Research

• Administration for Children and Families, Office of Head Start
• American Association for Dental Research
• Centers for Disease Control and Prevention, Division of Oral Health
• Centers for Medicare and Medicaid Services, Center for Medicaid and CHIP Services
• Indian Health Service
• National Institute of Dental and Craniofacial Research