

# TRENDNOTES

May 2012



## ABOUT TRENDNOTES

**TRENDNOTES**, published semi-annually by The National Maternal and Child Oral Health Policy Center, is designed to highlight emerging trends in children's oral health and promote policies and programmatic solutions that are grounded in evidence-based research and practice. It focuses policymakers' attention on the trends, opportunities and options to improve oral health for all children at lower cost through the best use of prevention, disease management, care coordination, and maximized resources.

This issue of **TRENDNOTES** provides an overview of current opportunities to address quality measurement and accountability in the dental care delivery system with the goal of improving health outcomes of children and families. These strategies are critical components of the changes being made in the broader health care system to improve care, improve health, and reduce costs.

## Future TRENDNOTES:

Because TrendNotes is a publication that strives to be relevant to current policy issues, we welcome your comments, feedback, and suggestions for future issues.

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## Quality Improvement in Children's Oral Health: Moving from Volume to Value

### Trend

State policymakers are faced with making decisions about how to improve the health of their constituents and access to care while dealing with diminishing state budgets. Over the last decade the health care system has shifted to a focus on the "Triple Aim" to improve care, improve health, and reduce costs, with the greatest developments being in the area of quality measurement and improvement. Although dental care lags behind the innovations of the medical care system in addressing quality measurement to improve health outcomes, it is facing similar pressures and reforms.

Several factors are likely to place greater attention on quality measurement and health outcomes in the dental care delivery system. These include the use of evidence-based dentistry, new payment models that are aligned with improved quality and health outcomes, the use of information technology, and the training of a wider array of health care providers in oral health care. Such innovations are essential to move the dental care system from "paying for volume" to "paying for value." Many of these strategies are being tested in specific settings but have not been implemented on a broader scale. Policymakers can play a key role in promoting greater accountability in the health care system by taking advantage of opportunities in health care reform to expand these innovations and provide better care that focuses on the health outcomes of children and families.

### Policy Solutions

1. Create payment incentives for dental providers to report oral health quality measures and quality improvement efforts in public programs (e.g., Medicaid and the Children's Health Insurance Program) that focus on the health outcomes of children.
2. Integrate oral health into state and local healthcare quality improvement initiatives.
3. Integrate oral health information within electronic health records and ensure that dental providers are included in health information exchanges to facilitate coordination and efficiencies across the medical and dental care systems.
4. Strengthen the capacity of state oral health programs to create, collect, monitor and report data on the oral health status of children over time to contribute to tracking health outcomes of children and families.
5. Align state policy to take advantage of federal programs that encourage and evaluate alternative strategies to address the oral health of populations at highest-risk for dental diseases.
6. Encourage dental education programs to promote interdisciplinary teams and new models that emphasize health outcomes for children and families.
7. Integrate oral health information within electronic health records and ensure that dental providers are included in health information exchanges.
8. Leverage dental training programs at all levels to promote interdisciplinary, holistic health care that includes oral health services.

## Systems Progress toward High-Value Dental Care

The U.S. healthcare system is undergoing profound and fundamental changes, the most visible of which were created by the Patient Protection and Affordable Care Act (ACA) of 2010. The debate and impetus for reform has been primarily driven by a concern to improve health care quality, affordability and access for all Americans.

The ACA seeks to provide affordable comprehensive insurance coverage to 32 million uninsured Americans by instituting sweeping reforms to the insurance industry and making unprecedented investments in public health and prevention. Notably for children, ACA addressed the entire health of a child by mandating pediatric dental coverage as part of a set of comprehensive pediatric services in the Essential Health Benefits (EHB) package.<sup>1</sup> The inclusion of pediatric dental benefits in the expansion of coverage and private insurance market reforms is also reflective of recent trends in public coverage. Pediatric dental benefits were also included in the Children's Health Insurance Program Reauthorization Act (CHIPRA) of 2009.

There is an abundance of evidence that demonstrates the association between good oral health and overall health, describing the “costs of neglect” of oral diseases. The high costs of dental care and the focus in the ACA on quality provide a prime opportunity to use quality measurement to improve health outcomes and the value received from dental care spending. Although improving access to high quality insurance coverage is a focus of this document and the ACA, it is only one critical component of maintaining and improving health and is insufficient without changing the overall system through which coverage is provided. Other critical factors that influence health status such as income, education, and community must be addressed concurrent to health and dental care coverage.

Previous issues of *TrendNotes* have addressed the need to realign payment to improve the oral health of children. This issue covers the opportunities presented by the ACA and other national initiatives to use quality measurement to improve health outcomes and more efficiently distribute limited resources.

## Key Factors Impacting Dental Quality Efforts

The momentum to invest in the use of quality measures to improve health and lower health care costs has accelerated considerably during the last decade and that momentum was bolstered in key provisions of the ACA. For example, the National Quality Strategy is aimed at assessing the impact of local, state and national quality improvement efforts to improve care, improve health, and reduce costs.<sup>2</sup> It is grounded in the “Triple Aim” developed over a decade ago by the Institute for Healthcare Improvement and widely promoted by the former Administrator for the Centers for Medicare and Medicaid Services, Dr. Donald Berwick.<sup>3</sup> This initiative follows decades of work by the medical care delivery system to move towards value-based care. The ability to systematically assess quality in dental care, however, has been described as being “in a relatively primitive state.”<sup>4</sup>

Multiple factors are likely to encourage greater attention to quality measurement efforts in the dental care system. There are significant pressures on the dental care delivery system to control costs while providing care that improves the health outcomes of all children and families, especially underserved populations such as racial and ethnic minorities, low-income and rural populations, and people with complex health conditions. These pressures include overcoming the lack of meaningful data to assess the appropriateness, timeliness, or effectiveness of care, and to determine whether that care had any impact on oral health or overall health status. While the factors affecting improved accountability in the dental care delivery system are interrelated, two fundamental issues are at the core of this change effort: how dental care is currently measured and whether financial incentives for oral health quality improvement are available and used by dental care systems.

The complexities of oral health quality measurement and improvement in the dental care system are further compounded when there is a desire to examine the impact of dental care services on the overall health status of children.

## What is Quality in Health Care?

### Definitions of Quality

In 1990, the Institute of Medicine defined quality in health care as “the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.” Earlier, in 1980, Donabedian had suggested that quality can be evaluated based on structure, process, and outcomes where structural quality evaluates health system capacities, process quality assesses interactions between clinicians and patients, and outcomes offer evidence about changes in patients’ health status.,

### Quality Assurance vs. Quality Improvement

*Quality Assurance* (QA) programs use data to compare results from health care activities against a pre-defined set of standards or quality indicators. The aim of QA is to bring those activities in line with those standards.

*Quality Improvement* (QI) is a cyclical set of activities designed to make continuous improvement in health care structure, process or outcomes. These activities have been referred to as programs of Continuous Quality Improvement (CQI) or Total Quality Management (TQM). The cycle progresses through a set of steps that involves setting goals, collecting data, analyzing results, and then setting new goals.

Source: The Institute for Healthcare Improvement. How to Improve. <http://www.ihl.org/knowledge/Pages/HowtoImprove/default.aspx>.

In order to fully understand the impact of dental care on overall health status, dental and medical care measurement must be widely available and used by the dental and health care systems and then incorporated into quality improvement efforts in each system. Yet, the dental and medical care systems are separate systems each with their own method for documenting procedures. In the dental system, treatment codes which measure the volume of treatment are used. While treatment codes provide an accurate account of what dental procedures have been completed, they are not correlated with nor provide information on disease such as dental caries, trauma, or identifying a new condition. This results in an inability to determine if a treatment was appropriate or effective. This is

in contrast to the medical care system which uses diagnostic codes that measure against a specific disease diagnosis. While there are challenges within each system to accurately measure quality, the lack of widespread adoption of diagnostic codes in dentistry is a key barrier to quality improvement efforts unique to this system.

As such, new payment, monitoring, and incentive mechanisms that “pay for value” rather than “pay for volume” need to be developed and used. The current typical dental fee-for-service model only allows payment when a treatment procedure is completed and does not provide payment if no treatment is needed. This dependency in dentistry on treatment codes has created financial incentives to provide a high volume of treatment with little financial incentive to prevent disease or monitor the health status of the patient or population.

Recent efforts to develop and use measures of oral health outcomes may drive development and use of diagnostic coding systems and data collection in the dental care system. Additionally, new payment methods that are aligned with these diagnostic codes may allow for a focus on oral health outcomes of specific populations. Changes in payment and data collection may also occur with the advent of accountable care systems that encourage innovation in oral health care delivery models. Such efforts could include an emphasis on using chronic disease management strategies, integrated health homes, and prevention and early intervention activities. These new types of systems focus on prevention, disease management and coordination among medical and dental providers with the goal of improving health outcomes at lower costs.

In addition, more widespread use of electronic dental records (EDRs) and interoperable electronic health records (EHRs) promises to make collection and analysis of data easier, especially among different types of providers. Incentives for ‘meaningful use’ may drive and facilitate analysis of these data.<sup>5</sup> These technology advances will further place pressure on the dental care system to adopt dental diagnostic codes and quality measurement efforts in order manage the health of a child with the assistance of EHRs.

## Framework for Improving Quality

Although there has been a persistent theme during the last decade regarding the alignment of payment incentives with health care quality, outcomes, and value for patients, much of the momentum to address policy change was described in the 2001 Institute of Medicine (IOM) report, *Crossing the Quality Chasm: A New Health System for the 21st Century*.<sup>6,7</sup> The IOM report addresses improving the quality of the U.S. health care system with a specific focus on fostering innovation to improve the delivery of care. The report provides a framework for redesigning the health care delivery system to support quality improvement through innovation in four areas: 1) evidence, 2) health care payment, 3) information technology, and 4) workforce. The implications of implementing this framework for quality improvement efforts in the dental care system are deserving of additional attention as policymakers examine their opportunities for driving change and innovation.

### **Apply evidence to health care delivery:**

While decades of clinical research and best practices have clearly articulated that dental caries, the disease that causes cavities, is a transmissible and progressive chronic disease that is preventable, it remains the most prevalent chronic condition among children. National guidelines from pediatric medical and dental organizations recommend that young children should be assessed for dental caries risk factors no later than one year of age so that future dental visits can be tailored to a child's level of risk. However, most dental providers continue to advise all children to return for preventive visits every six months, resulting in less frequent oversight than is needed for those children at highest risk for caries and possibly unnecessary visits for those children at low risk.

Limited evidence for most procedures performed in oral health care has raised questions about unexplained variations in clinical decisions among dentists, even when differences in patients are accounted for.<sup>8,9,10</sup> The current financing, training, and dental delivery systems disproportionately support and reward dental repair of the end stage

of the disease (cavities) rather than managing the disease (caries) as a bio-behavioral disease with a focus on prevention. Public and newly developing private coverage through the ACA is positioned to create opportunities to change how evidence-based dentistry is applied in practice.

### **Comprehensive Pediatric Dentistry of New Jersey**

has been providing dental care for children for the past 25 years based on the concept of the Caries Management by Risk Assessment (CAMBRA) clinical guidelines developed by the University of California at San Francisco School of Dentistry and supported by the California Dental Association.<sup>11</sup> The format has been updated periodically for children and adults as new scientific evidence of predictors of risk become available and new methods and materials that prevent and limit the disease process are developed. CAMBRA has a focus on assessing the risk for caries of all children at every visit to establish the timing of examinations and preventive visits based on that child's risk of tooth decay, regardless of insurance coverage.<sup>12</sup> Caries is managed following age- and risk-specific "care paths" that take into consideration expected compliance with the preventive regime, the child's behavioral cooperation with the treatment required and the family situation.<sup>13</sup> The goal is to deliver treatment in the least invasive form possible, while ensuring the child's oral health is restored or maintained and to encourage the establishment of healthier lifestyle routines. Parents of all high-risk children receive counseling in the form of motivational interviewing during a restorative visit. During these sessions, the specific factors that place their child at risk are reviewed, and parents are encouraged to establish attainable goals for their child's health that can be realistically incorporated into their family routines. Strategies include tips and substitutes for "risky" dietary and oral hygiene practices in addition to scientifically-based preventive measures such as dental sealants and supplemental fluoride treatments. For more information on the implementation of CAMBRA guidelines, contact Dr. Yasmi Crystal at [yasmioc@aol.com](mailto:yasmioc@aol.com).



## Align payment policies with quality improvement

Dental care expenditures are projected to almost triple between 2000 and 2020, going from \$62 billion in 2000 to \$167.9 billion in 2020, a 271 percent increase which significantly surpasses the increase in the Consumer Price Index (CPI).<sup>14</sup> These rising costs, however, have not translated into healthier children. Although improvements in oral health have been achieved in the past century due to well-established public health strategies that include community water fluoridation, dental sealant programs, and public education and awareness campaigns, tooth decay is on the rise among our nation's youngest children.<sup>15</sup>

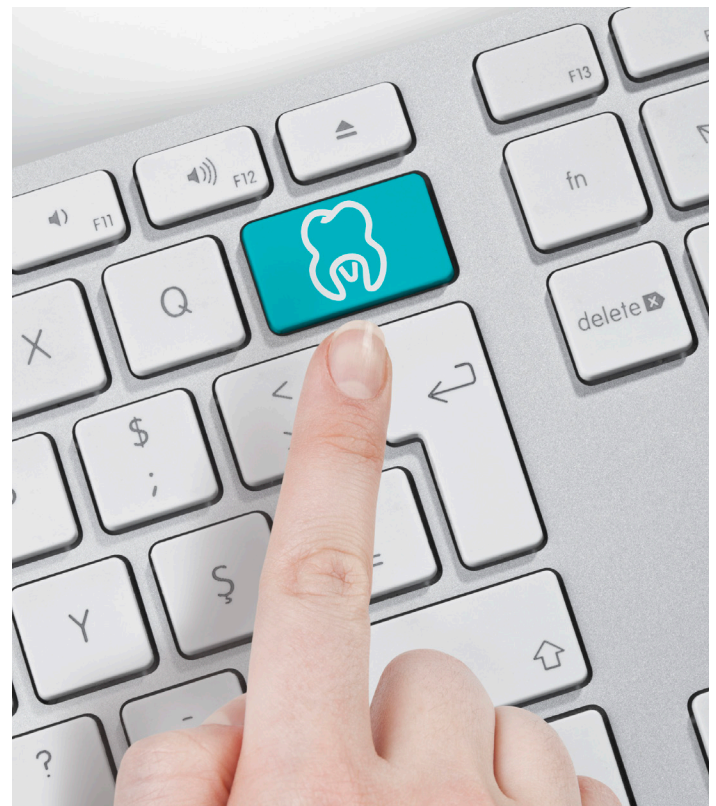
Using quality measure to align payment with evidence-based clinical care and health outcomes of individuals and/or populations has great potential to contribute to delivery system innovation and improvement in patient health outcomes. Public dental coverage, Medicaid and CHIP, provides state agencies the flexibility to establish benefits and align payments that support evidence-based guidelines and the health outcomes of enrollees. In addition, ACA has significantly altered pediatric dental coverage in the small group and individual insurance markets by changing the traditional structure of dental insurance through the elimination of dental benefit companies' ability to place annual or lifetime financial caps on dental benefits. Both public and private payers have the ability to alter the payment structure for dental care through the use of quality improvement methods.

**Advantage Dental**, through its contract with the Oregon Health Authority (OHA), is paid a capitated rate for 17 different categories of Medicaid recipients for oral health services. Advantage Dental is a cooperative company, owned by a group of dentists with a shared vision. Dentists and other providers within Advantage Dental agree to be paid on an "at risk" basis, not by procedure (traditional fee-for-service), to produce specific health outcomes of patients. Data are reported through existing encounter data and includes standard fee reporting, which is compared to track outcomes. The incentives for specific outcomes are made clear to all Advantage providers. This is specifically done because the company has experienced a change in how dentists practice when the desired outcomes and incentives are clearly articulated and implemented. Missed appointments, emergency after hour calls, number of specific procedures, and patient satisfaction are tracked by Advantage. In addition, specific details related to patient complaints about quality of care, access, and

interpersonal relationships are tracked. These data are compared and shared with the Advantage providers, quality improvement/utilization review (QI/UR) team, management, Board of Directors, and OHA. Advantage Dental is also currently developing relationships with medical and behavioral health providers to track hospital emergency department and operating room usage as well as medication prescriptions related to a dental diagnosis. This data sharing and analysis is intended to lead to the development of protocols and formularies for the appropriate use of medications in dentistry. For more information about Advantage Dental contact Dr. Mike Shirtcliff at [mikes@advantagedental.com](mailto:mikes@advantagedental.com).

## Utilize information technology:

Health information technology (HIT) holds great potential for rapid changes in the oral health care delivery system. The American Recovery and Reinvestment Act of 2009 (ARRA) established the Health Information Technology for Economic Clinical Health Act (HITECH) as means for the development and implementation of a nationwide interoperable health information system. This movement to establish EHRs stands to facilitate change in oral health information systems.<sup>16</sup> The movement toward EHRs provides a unique opportunity to integrate information between medical and dental care delivery systems that have traditionally been separate.



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Incentives are now available for health care providers, including dentists, to adopt and implement “meaningful use” of EHRs.<sup>17,18</sup> The substantial investments by governmental and private industry in HIT recognizes that the betterment of health information systems is consistent with efforts to improve the health of populations, quality care, safety and the efficiency of health care systems. In addition to EHRs, the ability to coordinate care through technology-based strategies such as tele-dentistry holds great potential for reaching more people, such as those in remote locations or institutional settings, by highly qualified professionals and specialists, without the added cost and delay in treatment associated with having a dentist or medical professional on-site.

**HealthPartners of Minnesota** is a consumer-governed, nonprofit health care organization that has the Triple Aim mission of improving the health of the population, enhancing the patient’s experience, and making health care affordable. Their well developed EHR system allows them to focus their quality measurement activities for medical and dental services on this Triple Aim. HealthPartners currently bases quality measurement on the completion of a risk assessment on patients and adherence to clinical guidelines based on the patient’s level of risk. Their publicly available clinical guidelines are evidence-based interventions for patients who have been identified as low, moderate or high risk for dental caries, periodontal disease and/or oral cancer. Their EHR allows HealthPartners to track and measure the evidence-based interventions that were completed and compare that to the standards in place for that patient’s risk level. In addition, patients are regularly surveyed to measure customer satisfaction. HealthPartners also measures their cost position against other large networks in the state and has found their costs regularly run 20 – 30 percent less than those of their competitors. For more information about HealthPartners’ quality dental initiative, contact Dr. David Gesko at [David.S.Gesko@HealthPartners.com](mailto:David.S.Gesko@HealthPartners.com).

## Preparing the workforce:

Ensuring a strong workforce that is competent and coordinated is central to improving oral health of currently underserved populations. Training medical and dental providers who are able to help drive shifts in the delivery system is a critical component of

sustainable quality improvement efforts in oral health care. The lack of dental provider skills in behavioral counseling, inexperience with young children, limited time, and low or no levels of reimbursement for counseling and risk-based management are significant barriers that traditionally have limited the ability of dental providers to manage dental caries as a chronic disease.<sup>19</sup> Teaching both medical and dental students evidence-based dental caries prevention and disease management and providing experiential learning opportunities in interdisciplinary settings are possible and being accomplished in some institutions. In addition, training, allowing, and incentivizing a greater variety of professionals to address the prevention, management and treatment of children’s dental disease outside a traditional dental office has been supported by IOM reports and ACA with specific language authorizing demonstration projects that could be explored further.<sup>20,21</sup>





# Status of Quality Activities in Oral Health Care

There are tremendous opportunities and numerous national, state and community ventures to improve the development and use of quality measurement in oral health care. However, overall efforts in oral health systems lag behind those in medical care because of a limited, systematic and organized quality improvement agenda. Among the many reasons for this lag is the traditional methods of dentistry emphasizing “quality measurement” on assessment of the technical excellence of restorations (how smooth is a filling), which is not necessarily associated with long-term oral health outcomes. Too often the dental profession has regarded quality assessment as an evaluation of the clinician, rather than of the effects of clinicians’ efforts on patients’ health.<sup>22</sup> Although efforts to institute quality improvement systems in oral health care fall behind those in general health care, they do exist and are increasing.

Glassman, describes a pathway to move oral health care from the current emphasis on volume to an emphasis on value.<sup>23</sup> (See Figure 1.) Each of the steps has policy opportunities to make improvements in the quality of the oral health care delivery system. The framework underscores the importance of increased use of electronic health records (EHRs) and other data sources, the establishment of accountability in the move from volume to value, and ultimately the evolution of delivery systems.

Oral health quality improvement activities extend to all levels of practice and implementation -- from federal programs to the dental safety-net in the community, the dental benefits industry, large group or hospital dental practices, and state and national professional dental associations. The following section highlights current efforts to address the measurement and improvement of dental care in the United States.

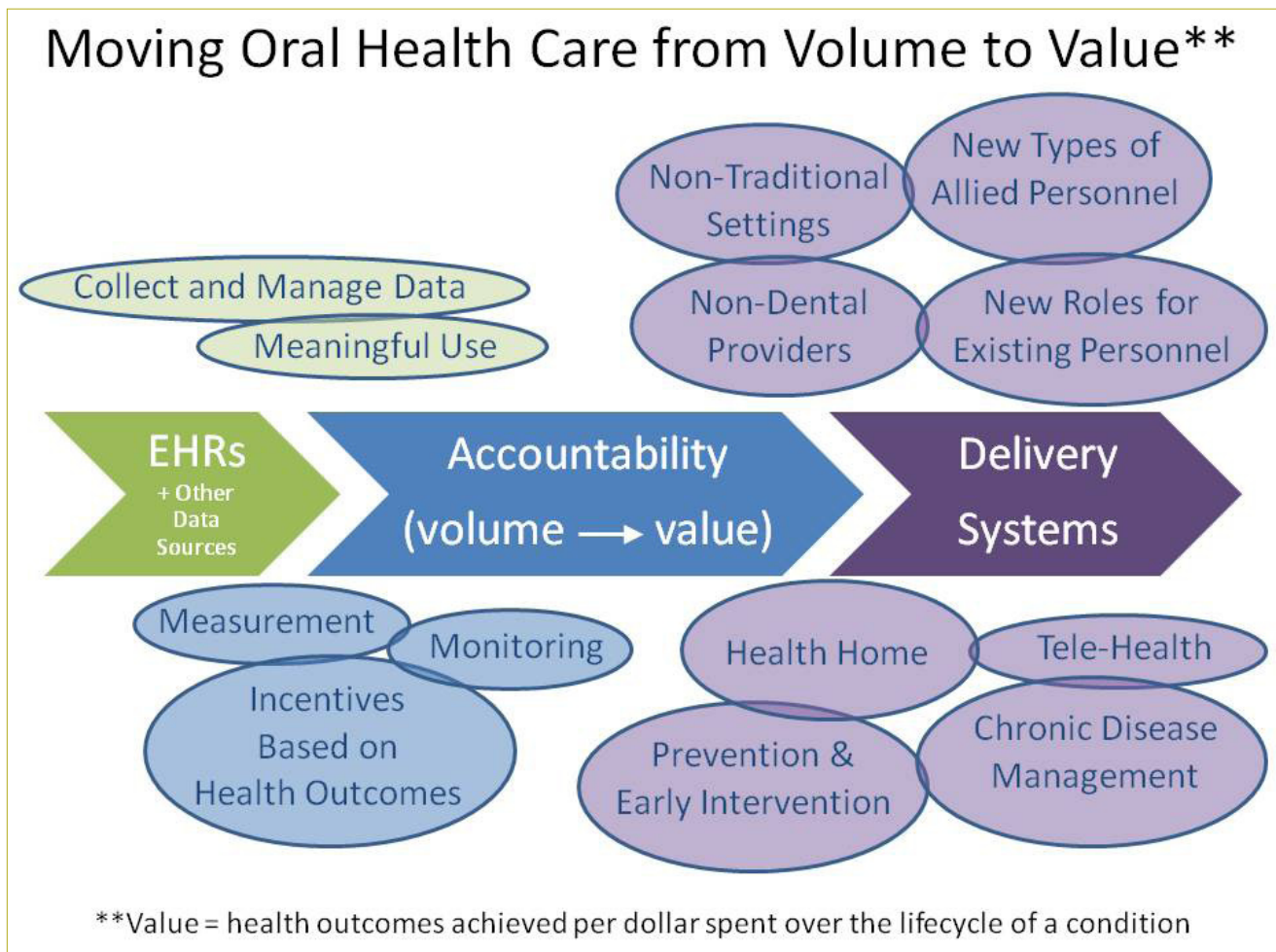


Figure 1: Moving Oral Health Care from Volume to Value<sup>24</sup>

## National Opportunities and Initiatives to Advance Quality of Dental Care for Children

Oral health quality improvement activities extend to all levels of practice and implementation -- from federal programs to the dental safety-net in the community, the dental benefits industry, large group or hospital dental practices, and state and national professional dental associations. The following section highlights current efforts to address the measurement and improvement of dental care in the United States.

### Federal Government:

Federal agencies are beginning to use the certification process of the National Quality Forum (NQF) to validate oral health quality measures. In 2012, NQF named an Oral Health Expert Panel to address the need for oral health performance measures that are applicable to publicly supported dental coverage (Medicaid and CHIP) and for use by others in the oral health field. Building upon the work of the American Dental Association-facilitated Dental Quality Alliance and others outside the federal government, the Panel has provided recommendations on measures for future development and testing. Prior to the Expert Panel on Oral Health, NQF, through their Child Health Outcomes Project and National Priorities Partnership (NPP) projects, released numerous oral health quality measures.<sup>25,26</sup> Appendix A highlights other federal dental measures including *Healthy People 2020* (HP 2020). HP 2020 is the set of national health objectives published by the U.S. Department of Health and Human Services (HHS), which contains a section on oral health with 17 objectives and 26 sub-objectives; oral health was recently named one of the HP 2020 *Leading Health Indicators*.<sup>27,28</sup> The Agency for Healthcare Research and Quality (AHRQ) produces a *National Healthcare Disparities* report, maintains a National Quality Measures Clearinghouse (NQMC) and a *Consumer Assessment of Healthcare Providers and Systems* (CAHPS) Dental Plan Survey, all of which contain oral health quality measures.<sup>29,30,31,32,33</sup> Data on oral health activities within the Medicaid and CHIP programs are collected by the Centers for Medicare and Medicaid Services (CMS) including the partnership with AHRQ for the new Pediatric

Quality Measures Program (PQMP) and their Centers of Excellence included in CHIPRA.<sup>34,35,36</sup> The Indian Health Service, military dental services, the Veterans Administration, and the Health Resources and Services Administration (HRSA) funded community health centers all additionally have ongoing quality improvement efforts.<sup>37,38,39,40</sup> The ACA added new requirements and incentives for insurance carriers participating in the Health Insurance Exchanges to address quality improvement. Specifically, as part of the minimum federal standards for the certification of a qualified health plan (QHP) to participate in an Exchange, health insurers are required to implement and report quality improvement strategies.<sup>41</sup> While details of these quality reporting standards will be released in future guidance from HHS, it is reasonable to assume that dental benefit plans will be included under this requirement provided the rule also clarifies that stand-alone dental plans are required to meet the same certification standards as QHPs (unless the plan cannot meet the standard due to only providing dental benefits). In addition, the ACA established incentives for improving health outcomes. The new payment structure provides increased reimbursement and other incentives for activities such as improving health outcomes through chronic disease management, effective case management and care coordination including the use of the medical home model; preventing hospital readmissions; implementing health promotion activities; and implementing activities to reduce health disparities. While these activities await further guidance and do not outline dental specific strategies, all are applicable to preventing and managing dental disease in children, especially incentives for chronic disease management and care coordination, preventing hospital readmissions (for children who need dental treatment in an operating room) and reducing health disparities.



## Private Practice, Benefits and Organizations:

Non-government efforts to systematically measure and improve oral health services include, but are not limited to, efforts by large group dental practices.<sup>42,43</sup> The oral health dental benefits industry is active in developing “profiling” systems for oral health providers and other methods to measure and improve quality of services.<sup>44</sup> The American Dental Association (ADA) has facilitated the Dental Quality Alliance (DQA), a multi-stakeholder consensus group formed to develop dental quality measures.<sup>45</sup> Other efforts are taking place in hospital dental departments, dental practice-based research networks, and through philanthropy.<sup>46,47</sup>

**American Dental Partners (ADPI)** assists the business management, leadership development and quality assurance of multi-disciplinary affiliated dental groups in 21 states across the U.S. ADPI believes that quality care and service is the result of the pursuit of excellence in oral health care every day with every patient. They recognize the importance of having organizations measure themselves against tangible standards and continuously assess their compliance with organizational structures in order to ensure quality outcomes. In lieu of developing their own quality metrics and because of the current lack of standardized national quality standards for dental practices, the company has as a strategic goal that each of their affiliated practices pursues accreditation by the Accreditation Association for Ambulatory Health Care (AAAHC). AAAHC is a private, non-profit organization formed to advance and promote patient safety, quality and value for ambulatory health care through peer-based accreditation processes, education and research.<sup>48</sup> AAAHC accreditation is a quality assurance (QA) process, measuring governance, quality management and improvement, clinical records, facilities and operation in pre-determined set of “standards.” (cite) For more information on American Dental Partners, contact Dr. Jesley Ruff at [JRuff@amdpi.com](mailto:JRuff@amdpi.com).



## Implications for Policy and Practice

Efforts to move toward a more accountable system of delivering and paying for dental care will take concerted efforts by many individuals and groups if quality improvement is to become reality. These include policymakers at the federal, state and local levels; health professionals; the dental and health benefits industry; private philanthropy; and consumers and consumer groups. State and community policymakers, program administrators, children's advocates, and other key groups can promote the use of quality measurement and improvement activities in oral health care delivery systems to improve children's overall health status, create greater accountability, and to use limited resources more wisely. Most of these strategies are critical components of a comprehensive system to promote children's optimal health.

- **Create payment incentives for dental providers to report oral health quality measures and quality improvement efforts in public programs (Medicaid and CHIP) that focus on the health outcomes of children.** State Medicaid and CHIP agencies have significant flexibility to measure quality of dental care and to track outcomes of individuals enrolled in the programs. While current data reporting provides a snapshot of information, Medicaid/CHIP agencies establish relationships with providers and settings that allow for additional and more specific quality focused data collection. Medicaid encourages prevention of disease and developmental delays through the Early and Periodic Screening Diagnosis and Treatment (EPSDT) program, which includes a child's oral health. Medicaid agencies have the opportunity to provide greater incentives for prevention and improvement of oral health in children, moving from paying for the volume of care to paying for the value of care based on health outcomes. These incentives could drive the delivery system to use more cost-effective, evidence-based care appropriate for an individual child's risk for disease. Similar to what is being done in ACA to incentivize the focus on prevention and health outcomes, Medicaid programs have the ability to create payment incentives for health outcomes and may consider mirroring the activities in ACA to create a seamless system for families transitioning between Medicaid, CHIP and ACA coverage.
- **Integrate oral health into state and local healthcare quality improvement initiatives.** Numerous activities are currently taking place within state and local systems to improve the quality of healthcare that may or may not consider the implications for the oral health care systems. Many states are making decisions about health care delivery systems due to the pending deadlines in the ACA to create Health Insurance Exchanges and relevant reforms that impact individuals covered by public and private insurance and will receive care in both public and private health care settings.
- **Integrate oral health information within electronic health records and ensure that dental providers are included in health information exchanges to facilitate coordination and efficiencies across the medical and dental care systems.** Ongoing decisions are being made about meeting federal standards for the creation of electronic health records. The typical arrangement of separate medical and dental settings and records creates challenges to implementing quality initiatives that require comprehensive patient records. Inclusion of oral health information and professionals in ongoing discussions in the public and private sector is critical to establishing a system that takes all health information into consideration. As highlighted in previous *TrendNotes*, places such as the Marshfield Clinic in Wisconsin were early adopters of health information technology.<sup>49</sup> By adopting comprehensive health information technology, Marshfield has been able to integrate their medical and dental services. This adoption has provided them the ability to address complex issues such as health literacy (medical and dental) for pregnant women and to coordinate medical and dental appointments to increase convenience for patients and reduce the no-show rate.<sup>50</sup>
- **Strengthen the capacity of state oral health programs to create, collect, monitor and report data on the oral health status of children over time to contribute to tracking health outcomes of children and families.** While national measures of dental quality are currently being collected few include state or local measurement. The ability to track changes in a defined population is dependent on the system used to collect and analyze the data



## Implications for Policy and Practice, Continued

over time. State and local health departments are critical partners with public and private providers and payers to establish systems to monitor progress.

- **Align state policy to take advantage of federal programs that encourage and evaluate alternative strategies to address the oral health of populations at highest-risk for dental diseases.** The ACA created new funding sources to assist state and community leaders to identify more efficient systems of care. The Institute of Medicine also addressed the need for new methods for delivering care by calling for evaluation and research of oral health services of underserved populations that include new methods and technologies (e.g., non-traditional settings, non-dental professionals, new types of dental professionals, and tele-health). The ACA included support for the demonstration of cost-effective improvements to the Medicaid program through the new Center for Medicare and Medicaid Innovation (CMMI), the new Medicaid Health Home initiative and incentives for Accountable Care Organizations. In addition, the ACA included authorized Alternative Dental Health Care Provider demonstration grants to experiment in new dental workforce models in states that have modified their state dental practice acts to allow testing new provider models.
- **Encourage dental education programs to promote interdisciplinary teams and new models that emphasize health outcomes for children and families.** Dental training programs supported with federal funding are preparing dentists and dental hygienists to care for underserved populations with the greatest disease experience through pre-doctoral and continuing dental education programs; financial aid to students; incentives to integrate dental with medical care; and technical assistance to focus programs on highest risk children. This emphasis on integrating medical and dental care to improve the health of children at high risk for dental and other health problems provides an opportunity to identify partnerships with these new professionals as they begin careers in public and private settings to move toward a more accountable system of dental care.





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## SAMPLE: Federal Children's Oral Health Measures<sup>1</sup>

Agency	Program	Measure	Source
National Quality Forum	Child Health Quality Measures 2010	<p><b>1388: Annual dental visit</b> – The percentage of members 2-21 years of age who had at least one dental visit during the measurement year.</p> <p><b>1334: Children who received preventive dental care</b> – Assesses how many preventive dental visits occurred during the previous 12 months.</p> <p><b>1335: Children who have dental decay or cavities</b> – Assesses if children age 1-17 years have had tooth decay or cavities in the past 6 months.</p> <p><b>*1419: Primary caries prevention intervention as part of well/ill child care as offered by primary care medical providers</b> – The measure will a) track the extent to which the PCMP or clinic (determined by the provider number used for billing) applies fluoride varnish (FV) as part of the Early Periodic Screening, Diagnosis, and Treatment (EPSDT) examination and b) track the degree to which each billing entity's use of the EPSDT with FV codes increases from year to year (more children varnished and more children receiving FV four times a year according to American Dental Association recommendations for high-risk children).</p>	<a href="http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifyr=id&amp;ItemID=69647">http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifyr=id&amp;ItemID=69647</a>
NCQA	2012 HEDIS	<p><i>*Recommended for time-limited endorsement.</i></p> <p>Annual Dental Visit (Medicaid)</p>	<a href="http://www.ncqa.org/tabid/59/default.aspx">http://www.ncqa.org/tabid/59/default.aspx</a>
Department of Health and Human Services (DHHS)	Healthy People 2020	<p>OH-1: Reduce the proportion of children and adolescents who have dental caries experience in their primary or permanent teeth</p> <ul style="list-style-type: none"> <li>OH-1.1: Reduce the proportion of young children aged 3 to 5 years with dental caries experience in their primary teeth</li> <li>OH-1.2: Reduce the proportion of children aged 6 to 9 years with dental caries experience in their primary and permanent teeth</li> <li>OH-1.3: Reduce the proportion of adolescents aged 13 to 15 years with dental caries experience in their permanent teeth</li> </ul> <p>OH-2: Reduce the proportion of children and adolescents with untreated dental decay</p> <ul style="list-style-type: none"> <li>OH-2.1: Reduce the proportion of young children aged 3 to 5 years with untreated dental decay in their primary teeth</li> <li>OH-2.2: Reduce the proportion of children aged 6 to 9 years with untreated dental decay in their primary and permanent teeth</li> <li>OH-2.3: Reduce the proportion of adolescents aged 13 to 15 years with untreated dental decay in their permanent teeth</li> </ul> <p>OH-7: Increase the proportion of children, adolescents, and adults who used the oral health care system in the past 12 months</p> <p>OH-8: Increase the proportion of low-income children and adolescents who received any preventive dental service during the past year</p>	<a href="http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=32">http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=32</a>

<sup>1</sup>This document contains a sample of national pediatric dental measures but is not intended to be an exhaustive list of all pediatric dental measures available.

Agency	Program	Measure	Source
Department of Health and Human Services (DHHS)	Healthy People 2020	<p>OH-9: Increase the proportion of school-based health centers with an oral health component</p> <ul style="list-style-type: none"> <li>OH-9.1: Increase the proportion of school-based health centers with an oral health component that includes dental sealants</li> <li>OH-9.2: Increase the proportion of school-based health centers with an oral health component that includes dental care</li> <li>OH-9.3: Increase the proportion of school-based health centers with an oral health component that includes topical fluoride</li> </ul> <p>OH-11: Increase the proportion of patients who receive oral health services at Federally Qualified Health Centers each year</p> <p>OH-12: Increase the proportion of children and adolescents who have received dental sealants on their molar teeth</p> <ul style="list-style-type: none"> <li>OH-12.1: Increase the proportion of children aged 3 to 5 years who have received dental sealants on one or more of their primary molar teeth</li> <li>OH-12.2: Increase the proportion of children aged 6 to 9 years who have received dental sealants on one or more of their permanent first molar teeth</li> <li>OH-12.3: Increase the proportion of adolescents aged 13 to 15 years who have received dental sealants on one or more of their permanent molar teeth</li> </ul> <p>OH-13: Increase the proportion of the U.S. population served by community water systems with optimally fluoridated water</p>	
DHHS Agency for Healthcare Research and Quality (AHRQ)	2010 National Health Care Disparities Report	<p>Children ages 2-17 who had a dental visit in the calendar year</p> <p>People who were unable to get or delayed in getting needed medical care, dental care, or prescription medicines in the last 12 months</p>	<a href="http://www.ahrq.gov/qual/nhdr10/nhdr10.pdf">http://www.ahrq.gov/qual/nhdr10/nhdr10.pdf</a>
	U.S. Department of Health & Human Services (HHS) Measure Inventory	<p>Proportion of children and adolescents who have dental caries experience in their permanent teeth.</p> <p>Proportion of children and adolescents who have dental caries experience in their primary and permanent teeth.</p> <p>Proportion of children and adolescents who have dental caries experience in their primary teeth.</p> <p>Proportion of children, adolescents, and adults with untreated dental decay.</p> <p>Children age 2-17 who received a dental visit in the calendar year.</p> <p>Proportion of children who have received dental sealants on their molar teeth.</p> <p>Proportion of low-income and adolescents who received any preventive dental service during the past year.</p>	<a href="http://www.qualitymeasures.ahrq.gov/hhs-measure-inventory/search.aspx">http://www.qualitymeasures.ahrq.gov/hhs-measure-inventory/search.aspx</a>

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Agency	Program	Measure	Source
DHHS Agency for Healthcare Research and Quality (AHRQ)	U.S. Department of Health & Human Services (HHS) Measure Inventory	Percent of third grade children who have received protective sealants on at least one permanent molar tooth.  Proportion of children and adults who use the oral health care system each year.  Proportion of the U.S. population served by community water systems with optimally fluoridated water.	<a href="http://www.qualitymeasures.ahrq.gov/hhs-measure-inventory/search.aspx">http://www.qualitymeasures.ahrq.gov/hhs-measure-inventory/search.aspx</a>
	Dental Plan Survey	Care from Dentists and Staff Access to Dental Care Dental Plan Information and Services Overall Rating of the Dentist Overall Rating of Dental Care Overall Rating of Ease of Finding a Dentist Overall Rating of the Dental Plan	<a href="https://www.cahps.ahrq.gov/content/products/Dental/PROD_Dental_Intro.asp">https://www.cahps.ahrq.gov/content/products/Dental/PROD_Dental_Intro.asp</a>
	CHIPRA Pediatric Quality Measures Program: Initial Core Set of Children's Health Care Quality Measures	The total unduplicated number of children receiving a preventive dental service defined by HCPC codes D1000-D1999 (ADA codes D1000-D1999)  The total unduplicated number of children receiving dental treatment services defined by HCPC codes D2000-D9999 (ADA/CDT codes D2000-D9999)	<a href="http://www.ahrq.gov/chipra/corebacktab.htm">http://www.ahrq.gov/chipra/corebacktab.htm</a>
DHHS Centers for Medicare and Medicaid Services	Medicaid Annual EPSDT Participation Report (Form 416)	12a. Total Eligibles Receiving Any Dental Services 12b. Total Eligibles Receiving Preventive Dental Services 12c. Total Eligibles Receiving Dental Treatment Services 12d. Total Eligibles Receiving a Sealant on a Permanent Molar 12e. Total Eligibles Receiving Dental Diagnostic Services 12f. Total Eligibles Receiving Oral Health Services by a Non-Dentist 12g. Total Eligibles Receiving Any Dental or Oral Health Services	<a href="http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Benefits/Downloads/For-m-CMS-416-PDF.pdf">http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Benefits/Downloads/For-m-CMS-416-PDF.pdf</a>
	CMS Oral Health Strategy	To increase the rate of children ages 1-20 enrolled in Medicaid or CHIP who receive any preventive dental service by 10 percentage points over a 5-year period; and  To increase the rate of children ages 6-9 enrolled in Medicaid or CHIP who receive a dental sealant on a permanent molar tooth by 10 percentage points over a 5-year period (this goal will be phased in during year 2 or 3 of the initiative).	<a href="http://cms.gov/medicaidentalcoverage/downloads/5_CMSDentalStrategy04112011.pdf">http://cms.gov/medicaidentalcoverage/downloads/5_CMSDentalStrategy04112011.pdf</a>



## About the National Maternal and Child Oral Health Policy Center

The National Maternal and Child Oral Health Policy Center was created in 2008 with support from the Maternal and Child Health Bureau as a collaborative effort of the Association of Maternal and Child Health Programs (AMCHP), Association of State and Territorial Dental Directors (ASTDD), Children's Dental Health Project (CDHP), Medicaid/SCHIP Dental Association (MSDA), and National Academy for State Health Policy (NASHP). The Policy Center, which is housed at CDHP, promotes the understanding of effective policy options to address ongoing disparities in children's oral health. The three-year initiative has set out to map a course for improving family oral health by building knowledge and skills of professionals with the ability to steer systems changes. Please visit the Policy Center website at <http://nmcohpc.org>.

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## Feedback for Future TRENDNOTES Topics:

The National Maternal and Child Oral Health Policy Center covers emergent and emerging trends in children's oral health to educate policymakers and to advance policies and practices that improve oral health for all children, including those with physical and social vulnerabilities. To provide your feedback to this publication and submit ideas for future **TRENDNOTES** please go to: <http://www.nmcohpc.org/feedback>.

## For Further Information:

The Policy Center would like to know how policymakers are using **TRENDNOTES** and hear about additional topics of interest. To help inform future **TRENDNOTES** topics and for more information about children's oral health or this **TRENDNOTE** please contact: Meg Booth, Director of Policy, Children's Dental Health Project, at (202) 833-8288 or [mbooth@cdhp.org](mailto:mbooth@cdhp.org).

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