ENVIRONMENTAL SCAN
Oral Health Quality Improvement Initiatives and Performance Improvement Projects

Dental Quality Alliance

Implementation Committee, 2017

Contents

Background

Since 2012, the Dental Quality Alliance (DQA) has focused on developing measures for quality improvement in dentistry. While the DQA measure development has been quite successful, it is important to remember that measurement is simply a means to seek improvement in quality of care and population oral health- the ultimate vision for the DQA. The work of the DQA has allowed the profession to be less fearful of "quality measurement". It is now time to move the conversation towards improvement. In order to meet the growing needs of system-wide quality improvement, the Implementation and Evaluation Committee was formed in the fall of 2016 to focus on areas that need attention to move the oral health care system into a learning health system[1].   As such, the purpose of the Implementation Committee is to: 1) Support the use of DQA measures for system-level improvement; 2) Support the establishment of a feedback loop to identify evidence from measurement; and 3) Support data infrastructure development that facilitates automated measurement. In order to begin developing support for systems, the committee must first understand the current environment of oral health quality improvement projects. The committee agreed that an environmental scan should be the first step in the process. This is a report of the environmental scan that was conducted **to understand the core implementation details and framework of any current oral health quality improvement initiative.**

Purpose

Several Medicaid programs already require Performance Improvement Projects (PIPs) in their contracts with managed care organizations (MCOs) and dental-only MCOs. In a new regulation finalized the summer of 2016, the Centers for Medicaid and Medicare Services (CMS) requires states to include PIPs in their contracts with the MCOs and prepaid inpatient health

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[1] https://www.nap.edu/catalog/13444/best-care-at-lower-cost-the-path-to-continuously-learning

plans (PIHPs) that provide carved-out (dental only) or otherwise limited services. Given these regulations, it is very likely that state Medicaid agencies will begin requiring MCOs with embedded dental benefit or dental-only PAPs to conduct PIPs. However, it is also very likely that PIPs are conducted without the ultimate goal of better oral health. The DQA can be a leading force in developing resources and assisting state Medicaid agencies/MCOs/PAHPs in conducting meaningful PIPs. By first conducting an environmental scan of current PIPs and other quality improvement projects, the DQA will be a valuable resource for states that are looking to implement PIPs with their MCOs.

Furthermore, CMS's Innovator Accelerator Program (IAP) has a technical support program to create sustainable programs for children's oral health care delivery, and improve value-based payment approaches. The DQA has the opportunity to be in an advisory role because this environmental scan and its contents demonstrate that we have the knowledge of successful program models and implementation strategies.

Another opportunity to highlight the expertise of the Dental Quality Alliance is in the Maternal Child Health arena. The Health Services Resource Administration is announcing funding for the National Maternal and Child Health Center for Oral Health Systems Integration and Improvement Cooperative agreement, which will fund a national key stakeholder to build on the science of quality improvement and service delivery integration, while using successful practices identified by national partners. As the national leader in dental quality measures, the Dental Quality Alliance is poised to provide implementation strategies to the cooperative, and has developed criteria to gather information on successful models worth scaling and replicating.
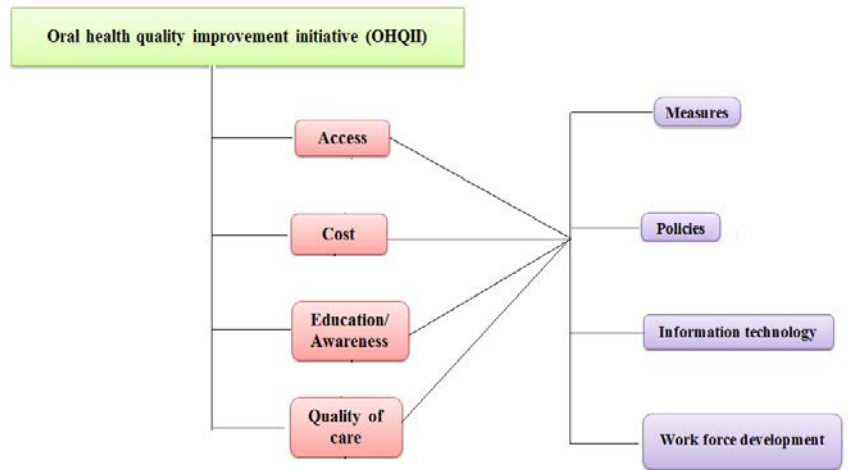
Method

Existing oral health quality improvement initiatives were identified four ways. First, public data available through the Medicaid/Medicare/Chip Services Dental Association's (MSDA) national profile report on performance improvement projects (PIP) were used to identify state programs to interview; interviews were conducted with four states. Second, data from the Center for Medicaid/Medicare Services (CMS) and the Center for Healthcare Strategies (CHCS) were gathered on states pioneering PIPs for children. Third, a search was conducted via Google using the following terms: oral health quality programs in the United States, dental quality measures, dental quality improvement initiatives, and oral health quality improvement initiatives. Finally, a Pub Med search was conducted using the following terms: (("oral health"[MeSH Terms] OR ("oral"[All Fields] AND "health"[All Fields]) OR "oral health"[All Fields]) AND ("quality improvement"[MeSH Terms] OR ("quality"[All Fields] AND "improvement"[All Fields]) OR "quality improvement"[All Fields])) AND ("2012/01/26"[PDat] : "2017/01/23"[PDat]) and (("dental health services"[MeSH Terms] OR ("dental"[All Fields] AND "health"[All Fields] AND "services"[All Fields]) OR "dental health services"[All Fields] OR "dental"[All Fields]) AND quality[All Fields] AND ("weights and measures"[MeSH Terms] OR ("weights"[All Fields] AND "measures"[All Fields]) OR "weights and measures"[All Fields] OR "measures"[All Fields])) AND ("2012/01/15"[PDat] : "2017/01/12"[PDat]). A total of 58 project/initiative/study projects were found related to oral health quality improvement initiatives in addition to the information gathered from the four state PIPs. The ensuing pages list all oral health quality improvement initiatives identified in the scan.
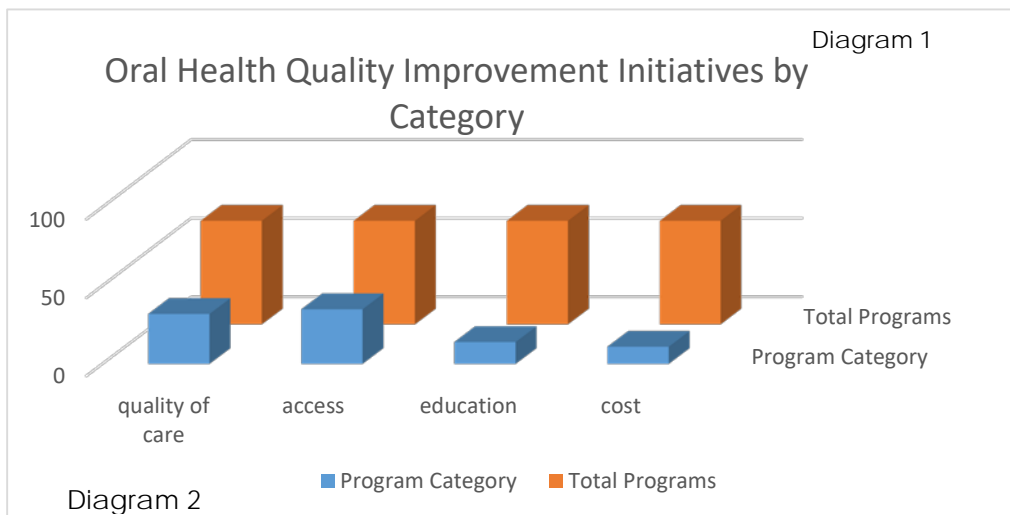
Results

The environmental scan resulted in a total of 58 oral health quality improvement initiatives (Table 1), and 8 state Performance Improvement Projects (Table 2). The project name and organization were collected, then divided into two categories. Category 1 is comprised of four possible focus areas: oral health care access (access), lowering of the oral health care cost (cost), oral health awareness/education (education), and oral health care quality improvement (quality of care). Category 2 further captures the nature of the projects as subcategories titled measures, policies, information technology, or workforce development (see diagram 1)

Of all the 66 programs listed, nearly half (32) address quality of care, and over half address access (35). Fourteen of the programs addressed Education and eleven addressed Cost. (Diagram 2).

Diagram 1

Diagram 2

While four of the projects noted are from outside of the United States, they were included as their models worth noting as relevant.

The intent of the gathered information is to determine of which projects are worth investigating more detailed information. Further research into the projects needs to be done to answer the following the questions:

1. Does the project have an implementation strategy that specifically involves outcomes?

2. What are the outcomes of the project?

3. Does the project use measures or health information technology?

Acknowledgements

Table 1

Key: National Projects I State-wide Projects I Local Projects

Name of Projects/Initiatives/Study	Organization /Agencies/Programs	Category 1	Category 2	Description
America's tooth fairy: National Children's Oral Health Foundation	Multiple	Access/Cost/ Education/ Quality of care.	----	The America's Tooth Fairy Affiliate Network of community-based dental clinics and outreach programs provides dental care and education services to hundreds of thousands of at-risk kids each year.
Best practices project	ASTDD	Quality of care	Policy	The goal of the ASTDD Best Practices Project is to promote the development of best practices by state, territorial and community oral health programs to enhance the oral health of Americans and reduce disparities
Campaign for oral health equity	Oral Health America	Access/Education	Policy	Educate the public and policy makers about the importance of oral health for overall health. Emphasize the need to prioritize oral disease alongside other serious health.
CAPHS dental plan survey	AHRQ	Access/Quality of care	Measures	The CAHPS Dental Plan Survey asks patients to report on their experiences with care and services from a dental plan, the dentists, and their staff.
Children's Dental Care Program Partnership With USC, UCLA and Western University (CDCP)	First 5 LA	Access	----	The goal of CDCP is to provide oral health services and improve oral health status for at least 95,000 children ages 0-5 in Los Angeles County over a five year period.
CHIPRA Initial Core Set of Children's Health Care Quality Measures	Department of health and human services	Access/Quality of care	Measures	CHIPRA required HHS to identify and publish a core measure set of children's health care Quality measures for voluntary use by State Medicaid and CHIP programs. An annual state specific report on this measures is submitted by HHS.
Dental Caries Management (DCM) Collaborative	DentaQuest Institute	Quality of care	Policy/IT	The Dental Caries Management (DCM) Collaborative is a national Quality improvement Initiative focused on developing and testing a chronic disease management protocol for children and adolescents.

Dental Dashboard project	National Network for Oral Health Access (NNOHA)	Quality of care	Measures	The Dental Dashboard is an interactive resource that allows users to monitor a set of measures through an online data collection tool and a chart presentation tool. These tools are for individual Community Health Centers to use as a part of their Quality improvement efforts, to more effectively monitor and measure Quality, and drive performance within their dental programs.
Dental Health Innovation Project	First 5 LA	Access	IT	This project aids in infrastructure development via Dental Health IT, Strengthening the Dental Safety Net to Provide Services in Non-Traditional Settings.
Dental Managed Care (DMC) QI Projects	California Department of Health Care Services	Quality of care	Measures/IT	Identify baseline utilization for the enrolled population for established DMC performance measures; Identify variances Within the enrolled population utilizing demographic information and statistics, such as ethnicity and cultural differences; Utilize the demographic information and statistics to develop and test intervention strategies to increase utilization over a one-year period.
Dental Quality Alliance(DQA)	American Dental Association	Quality of care /Education	IT	The mission of the Dental Quality Alliance is to advance performance measurement as a means to improve oral health, patient care and safety through a consensus-building process
Dental Quality and framework outcome	Department of health, National health service, UK	Quality of care	Measures/p olicy	This document describes the DQOF indicators for 2016 to 2017 measure performance in clinical effectiveness, safety and experience of patients and data Quality.
Dental Quality metrics workgroup	Oregon Health Authority	Quality of care	Measures	Identifying objective outcome and Quality measures and benchmarks for oral health care services provided by coordinated care organizations (CCOs); Recommending no more than five measures and associated benchmarks for use in CCO monitoring, from which one or more will be considered for inclusion in the set of CCO incentive measures for the third measurement year

Early Childhood Caries (ECC) Collaborative.	DentaQuest Foundation	Quality of care	Measures	The ECC Collaborative has trained dental and oral health care teams across the U.S. to use Quality improvement strategies to test and implement a chronic disease management approach to addressing ECC
Early Childhood Oral Health Initiative	Ohio Association of community health centers	Access/Education	Workforce development	The Early Childhood Oral Health (ECOH) Program is a Quality improvement Initiative focused on Federally Qualified Health Center (FQHC) and Look-Alike (FQHCLA) networks.
Expanding the dental team	Pew charitable trust	Access/cost	Policy	Pew researchers used input from health economists and dentists to craft a methodological framework for analyzing practice records that empirically assessed changes in productivity, patient access to care, revenue, and other variables in these practices
Fall for smiles	Oral Health America	Quality of care/Education		Annual communications campaign (occurring Aug.-Sept.) that educates communities about the importance of healthy food choices, regular dental visits, brushing and flossing your teeth, and avoiding tobacco.
Fluoride legislative user information database	Children's Dental Health Project(CDHP)	Quality of care/ Access	IT/Measures	The CDHP develops scientifically grounded tools, resources and training to support state oral health programs as they build capacity and infrastructure.
Healthy people 2020	Health and human services	Access/Quality of care/Workforce development/education	Policy	These are the objectives and measures laid down by the HHS to improve access and Quality of oral health care.
HHS Measure Inventory	National Quality measures clearing house(AHRQ)	Access/cost / Quality of care	Measures	The HHS Measures Inventory is a repository of measures in use or in development by the agencies of the U.S. Department of Health and Human Services for Quality measurement, improvement, and reporting.

Improving Access to Oral Health Care for Vulnerable and Underserved Populations	Institute of Medicine(IOM)	Access	Policy	The committee was charged to assess the current oral health care system, to develop a vision to improve oral health care for vulnerable and underserved populations, and to recommend strategies to achieve the vision.
IQuaD dental trial	University of Dunde,UK	Education/ Quality of care		The aim of this study is to compare the effectiveness and cost-effectiveness of theoretically based, personalized oral hygiene advice (OHA) or periodontal instrumentation (PI) at different time intervals (no PI; 6 monthly PI or 12 monthly PI) or their combination, for improving periodontal health in dentate adults attending general dental practice
Let's talk teeth	Connecticut Oral Health Initiative	Education	Policy	The Connecticut Oral Health Initiative (COHI) launched the Let's Talk Teeth Campaign With the purpose of informing the general public about the connection between dental care and a person's overall health
Medicaid oral health performance improvement projects: A How-To-Manual for States	Oral health initiative (CMS)	Quality of care,	Measures	An oral health performance improvement project (PIP) is a Quality improvement effort to improve oral health care for children and youth enrolled in Medicaid/ Children's Health Insurance Program (CHIP) across three key areas namely utilization, Quality and timeliness
Medicaid Oral Health Learning Collaborative	Center for Health care strategies, Inc.	Access	Policy, IT	The teams from different states participated in the Initiative, which included peer-to-peer learning, as well as individual and group technical assistance from national experts in oral health Quality-improvement.
Medi-cal dental dashboard	California Department of Health Care Services	Quality of care	Measures/IT	The dashboard allows for easy interpretation and analysis of the Medi-Cal dental data and more effective monitoring of the dental plans. IT provides DHCS With the ability to easily modify parameters and create data visualizations to efficiently answer questions and make informed decisions by determining any driving trends or program issues in Medi-Cal dental care.
Medical Oral Expanded Care(MORE)	DentaQuest Institute	Access, Quality of care	IT	MORE Care (Medical Oral Expanded Care) is an Initiative of the DentaQuest Institute (DQI) With an aim of providing primary and secondary preventive oral health services in primary care medical offices to underserved populations, as well as testing optimal patient-centered referral systems between primary care and dental care teams.

Michigan's Dental Registry	Michigan"s caries prevention program	Access/Quality of care	IT	IT provides a web based platform that facilitates communication between primary care providers and dentists regarding pediatric patient oral health. IT is designed to document provided care, and place and track referrals to a dentist as needed.
Multiple projects	Dental Trade Alliance Foundation(DTA)	Access/ Quality of care	IT/workforce development	DTA foundation awards grants to multiple dental projects which focus on improving access to oral health especially for underserved foundation.
National health care Quality and disparities report and national Quality strategy update	AHRQ	Access/Quality of care/cost	Policy	The National Quality strategy outlines the aims and priorities to address a range of Quality concerns in health care that affects most of the Americans. National health care Quality and disparities report address the progress made against these priorities in this comprehensive report.
National Interprofessional Initiative on Oral Health	DentaQuest Foundation	---	Workforce development	The National Interprofessional Initiative on Oral Health is filling the gap in professional education about oral health. This systems change Initiative is focused on embedding oral health competency into the education and training systems that support primary care clinicians.
National Oral Health Innovation and Integration Network	DentaQuest Foundation	Access/Quality of care	Policy	The National Oral Health Innovation and Integration Network (NOHIIN) is leading a national movement to unify and empower Primary Care Associations (PCAs) and safety net providers to be champions of oral health as an essential component of good overall health. This network convenes virtually and in-person throughout the year to highlight challenges and promote best practices for integrating oral health into primary care at the community level.
National Oral Health Quality Improvement Committee	DentaQuest Foundation	Access/Quality of care		The Committee is comprised of national leaders from dentistry, medicine, academia, business, government, and philanthropy who are tasked With developing a roadmap for an oral health care system that improves the oral health of all using the tools of Quality and accountability.

National Oral Health Surveillance System (NOHSS)	CDC	Quality of care	Measures	NOHSS is designed to monitor the burden of oral disease, use of the oral health care delivery system, and the status of community water fluoridation on both a national and state level. NOHSS is designed to track oral health surveillance indicators based on data sources and surveillance capacity available to most states.
Nordic Project	Nordic Council of Ministers	Quality of care	Measures	Developing Quality indicators for oral health care.
Oral Health 2020	DentaQuest Foundation	Access/Quality of care	Measures	Some of the goals of this initiative is to improve access to dental care and build a comprehensive national oral health measurement system by 2020.
Oral Health and Nutrition Expansion and Enhancement Project	First 5 LA	Access/Education	Policy/IT	The First 5 LA Oral Health and Nutrition Expansion and Enhancement Project (OHN Project) coordinates oral health and nutrition efforts for children prenatal to 5 years old in Los Angeles County. Ensures that prenatal to 5 years old throughout L.A. County receive direct preventive and restorative oral health services, as well as education, outreach and referrals to providers to help establish a dental home by age 1. Provides significant capacity-building funds to community dental and primary health-care clinics in an effort to strengthen the dental safety net throughout L.A. County.
Oral Health and Nutrition-21st Century Dental Homes Project	First 5 LA	Access, Education	Policy	Establish a dental care delivery model based on AAPD's Dental Home for all children With main focus on infants/age one patients.
Oral Health Community Development	First 5 LA	Quality of care	---	The Initiative provides funding for water fluoridation infrastructure equipment construction to supplement existing fluoridation efforts to achieve optimally fluoridated water levels that prevent tooth decay, including dental caries in children.
Oral Health Integration in the Patient-Centered Medical Home (PCMH) Environment	Qualis health	Access/Quality of care	Policy	This paper documents four community health center case studies where steps have been taken to have the medical and dental delivery systems work more closely together and to incorporate oral health in their Quality improvement processes.

Oral Health Quality Improvement in the Era of Accountability	W.K.Kellogg Foundation	Quality of care	Measures/Policy	The purpose of this report is to review the current status and trends in Quality measurement and improvement and describe efforts underway to expand and enhance those efforts. The report will also describe opportunities to use emerging oral health measurement and Quality improvement systems to improve and maintain the oral health of the U.S. population.
Oral health state plan	Louisiana Department of Health	Access/education/Quality of care	Measures/policy	The main goals of the plan are to improve access, oral health awareness, and surveillance and evaluation of the oral health diseases.
Pediatric Measures	National Quality Forum	Quality of care	Measures	The report lays out several Quality measures to measure the Quality of oral care in children.
Pediatric Quality Measures Program	AHRQ	Access/Quality of care	Measures	The PQMP focused on developing new and enhanced pediatric measures to improve children's Quality of care through cooperative agreement grants With the seven PQMP Centers of Excellence (COEs).
Perinatal and infant oral health Quality improvement initiative	HRSA	Access/Cost/Quality of care	IT/measures / Policies.	The goal of the Perinatal and Infant Oral Health Quality Improvement (PIOHQI) Initiative is to reduce the prevalence of oral disease in pregnant women and infants through improved access to high-Quality oral health care (i.e., preventive services, restorative treatment, education)
Project Engage	Temple university school of dentistry, United Healthcare, United Health Foundation, Colgate Palmolive Company, and the state of Pennsylvania	Access/Quality of care	IT/Workforce development	Coordinates the dental care of young children (0-5 years) who have not seen a dentist before the start of the project, children who have received dental care under general anesthesia or intravenous sedation, and pregnant women. Project ENGAGE has also initiated an oral health registry that uses dental claims information and medical histories to identify children that are at greatest risk of developing disease, mainly tooth decay.

Quality oral health care in Medicaid through health IT	NORC, Chicago	Quality of care	IT	This is a report prepared by NORC, chicago for AHRQ on whether and how health IT (health IT) and the Medicaid EHR incentive program can be used as tools to improve access to Quality oral health care for children enrolled in Medicaid and the Children's Health Insurance Program (CHIP).
Readability of pediatric health materials for preventive dental care	Department of Dental Public Health Sciences, School of Dentistry, University of Washington	Education/ Quality of care		This study examined the content and general readability of pediatric oral health education materials for parents of young children.
School-Based Comprehensive Oral Health Services	HRSA	Access/Education		The School-Based Comprehensive Oral Health Services (SBCOHS) grant program's purpose was to demonstrate successful integration of comprehensive oral health services into primary care in an existing school-based health center (SBHC)
Smiles for life	Society of Teachers of Family Medicine	Education		Smiles For Life produces educational resources to ensure the integration of oral health and primary care
State Oral Health Workforce Improvement Program (SOHWI)	HRSA		Workforce development	HRSA's State Oral Health Workforce Improvement Program (SOHWI) provides grants to states to help develop and implement innovative programs to address the dental workforce needs of designated Dental Health Professional Shortage Areas
The effect of different methods of remuneration on the behavior of primary care dentists	University of Manchester	Cost/Quality of care		The study describes the changes in dentist behavior and the quality of care provided to the patient in relation to the method of reimbursement.
The State of Health Care Quality Report (HEDIS Measures)	National Committee for Quality Assurance	Access	Measures	This report is published annually which access annual dental visits of Medicaid members aged between 2yrs-20 yrs.

US preventive services task force annual reports on evidence based recommendations about clinical preventive services.	AHRQ	Quality of care	Measures	U.S. Preventive Services Task Force is an independent, volunteer panel of national experts in prevention and evidence-based medicine. The Task Force works to improve the health of all Americans by making evidence-based recommendations about clinical preventive services such as screenings, counseling services, and preventive medications.
Virtual dental home	Pacific Center for Special Care	Access/Quality of care	IT/Workforce development/policy	The Virtual Dental Home (VDH) creates a community-based oral health delivery system in which people receive preventive and simple therapeutic services in community settings where they live or receive educational, social or general health services. IT utilizes the latest technology to link practitioners in the community With dentists at remote office sites.
West Virginia oral health initiative	Benedum Foundation	Access/Education.	workforce development	Improving the oral health status of West Virginia residents through public awareness, provider training, dental screenings, and access to dental care
WHO Oral Health Country/Area Profile Programme(CAPP)	WHO	Access/ Quality of care	Measures/Policy	The CAPP database is based on national oral health surveys, publications from national health bulletins and personal communications. Additionally, the dentition status information, as well as periodontal diseases information, have been retrieved from bibliography databases such as PubMed and Google.
Wisdom tooth Project(WTP)	Oral Health America	Access/Education/	Measures/Policy	This project educates the older adults about importance of the oral health care and also advocates for better policies to increase the access to oral health care for older adults.

Table 2

Name of Projects/Initiatives/Study	Organization/Agencies/Programs	Category 1	Category 2	Description
Oregon State Performance Improvement Project	Oregon Medicaid Program	Quality of care	Measures/Policy	Provides incentive measures for CCOs on sealants and for foster children to receive dental care. Sealant measure in place due to policy changes.
Delaware State Performance Improvement Project	Delaware Medicaid Program	Cost/Quality of Care	Measures/Policy	Managed care medical; the program was able to get MCOs to focus on oral health through PCP, and a Fluoride Varnish program, by inserting it into the Medicaid contract. USPSTF recommendations and reimbursement for FV were major drivers for behavior change. Project measures the # of pediatricians applying Fluoride Varnish, # of children getting to the dentists following referral, and the # of children treat/not treated.
Texas State Performance Improvement Project	Texas MCOs/Medicaid	Access/Cost /Quality of care	Measures	Uses DQA sealant measures to increase utilization of preventive services.
Kentucky State Performance Improvement Project	Kentucky Medicaid Program	Access	Measures	Paying dentists for patients that missed appointment to track percent and number of no-show appointments
Arizona's Strategies for Increasing Oral Health Access for Children	Arizona Health Care Cost Containment System	Cost/ access/ education	Measures/Policy	Arizona works closely with its contracted health plans to increase fluoride varnish application and dental referrals by primary care providers; increase the number of beneficiaries who have selected a dentist; educate dental providers; and outreach to enrolled families.
New Hampshire Women, Infants, and Children (WIC) Pay-for-Prevention Project	New Hampshire Division of Public Health Services	Cost/Education	Measures	The state's pay-for-prevention project successfully launched to improve oral health of pregnant women, infants, and children via dental education and service delivery at WIC sites.
Increasing Dental Service Utilization Among California's Low-income children	Children Now, California Department of Health	Access	Measures/Policy	Works to engage Child Health and Disability Prevention program to identify children who have not been to the dentists and promote/strengthen the medical/dental collaboration in LA County
Virginia Smile for Children	VA DentaQuest	Access/ Education	Measures	Works to increase the number of children ages 6-9 enrolled in Medicaid or CHIP who receive a sealant; Preventistry program