Quality Measurement in Oral Healthcare

A Guidebook

NOVEMBER 2022

DQA

DENTAL QUALITY ALLIANCE®

Improving Oral Health Through Measurement

DENTAL QUALITY ALLIANCE

NOVEMBER 2022

QUALITY MEASUREMENT IN ORAL HEALTHCARE

Purpose

This Guidebook was developed by the **DQA Education Committee** and serves as a quality measurement, evaluation, performance management resource for education, training and developing standardized messages. The Guidebook can be used as a source document by individuals, teams, and organizations developing messages, resources, and tools to educate various audiences about quality measures, performance, and evaluation.

For more information on the DQA, please access www.ada.org/dqa or contact dqa@ada.org.

Table of Contents

INTRODUCTION

Increasing societal interest in health and healthcare expenditures has fostered a national dialogue about the need to assess quality, safety and value across several dimensions of care. This national priority has led to the development, implementation, and integration of feasible, valid, reliable, relevant, and meaningful measures within organizational policies. Meaningful measurement can improve practice processes, as well as foster innovative strategies that prevent and reduce the burden of oral/medical disease, while advancing efficiency and effectiveness of care. Data, information, and knowledge for measurement can be obtained from administrative sources (encounters and claims), surveys, individual patient, electronic medical/dental and electronic health records. In oral healthcare, much of the data is routinely collected through the claims process. Payers employ data to make policy decisions, conduct research, and increasingly to provide quality measurement, evaluation and performance management information to providers, employers, subscribers and consumers.

The Dental Quality Alliance (DQA) has over a decade of experience in bringing stakeholders together in a collaborative approach to develop and advance performance measures to improve oral health, patient care, and safety. This multi-stakeholder collaborative continues to support dental practices with critical competencies to assist with information and knowledge about measurement, evaluation, and performance management. Absent widespread integration of standardized oral health information systems to document clinical, experiential data within medical/dental interoperable electronic health records, predictive quality of patient oral health status is primarily based on dental clinical records. Correspondingly, administrative and claims data remain the dominant accessible source of aggregated oral health information.

As associated health entities are developing programmatic indicators for defining and measuring quality, the dental profession has a vested interest in the coordination of stakeholders to work towards similar goals. Group practices, commercial payers, and other dental/medical stakeholder groups are developing and implementing a variety of dashboards, registries, and technologies to communicate proprietary information related to measuring patient experience, clinical quality, care utilization, and

cost. Feasible, valid, reliable, relevant, and meaningful measures are needed to facilitate the quality, safety, and value of care, as well as evaluate policies, processes, and systems.

The Dental Quality Alliance has become a trusted and respected resource, and its collaborative stakeholder model reflects a diverse membership, community partnerships and public engagement. The Dental Quality Alliance (DQA) is the leader in the oral healthcare landscape for the development and implementation of quality measurement, evaluation and performance management.

WHY MEASURE?

Healthcare providers work hard to deliver skilled, thoughtful care. Measures pave the way for providers, showing where systems are breaking down and where they are succeeding to help patients get and stay well.[1] Measurement forms the basis of evaluation and has become one of the foundations of current efforts to improve healthcare quality. Performance measures are tools to assess healthcare against recognized standards and are of importance to providers, patients, payers and policy makers. Quality measures drive improvement by allowing healthcare providers to review their own performance and make adjustments, share successes and probe for causes when progress comes up short- all on the road to improved patient health outcomes. Quality measures allow us to quantify the care provided to patients and gauge how improvement activities are indeed improving care or outcomes for certain conditions in various settings or during a specific timeframe.[1] When used in healthcare practice or performance improvement activities, measures help determine how well care is provided for certain aspects of care, for certain conditions, or for various populations or communities.[1] There are many forms and functions of measures. Their common feature is that they seek to improve healthcare outcomes by improving quality of care.

[1] National Quality Forum. Retrieved from The ABCs of Measurement on February 7, 2022.

NATIONAL INTEREST IN QUALITY MEASURES

As national expenditures on healthcare continue to rise, the need to accurately assess quality and efficiency of care has become more meaningful. The science of measuring healthcare performance has made enormous progress over the last two decades, and it continues to evolve. Studies have documented treatment reporting variations across providers, care settings, and geographic regions. [2,3,4,5,6,7] Measuring the quality of healthcare and using those measurements to promote improvements in the delivery of care are now commonplace.[8]

Faced with a national need for change, an Institute of Medicine (IOM) Committee on the Quality of Health Care in America released several reports to address quality improvement. One report, *Crossing the Quality Chasm* (2001) focuses more broadly on how the health system can be reinvented to foster innovation and improve the delivery of care. Toward this goal, the committee defined six important aims for quality improvement: patient- centered, equitable, effective, efficient, safe, and timely.[9]

- ***Patient-centered*** — providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions.
- ***Equitable*** — providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status.

---

[2] Shugars DA, Bader JD. Cost implications of differences in dentists' restorative treatment decisions. J Public Health Dent. 1996 Summer;56(4):219-22.

[3] Shugars DA, Hayden WJ Jr, Crall JJ, et al. Variation in the use of crowns and their alternatives. J Dent Educ. 1997 Jan;61(1):22-8.

[4] Bader JD, Shugars DA. Variation in dentists' clinical decisions. J Public Health Dent.1995 Summer;55(3):181-8.

[5] Quality of Care for Children in Medicaid and CHIP: Findings from the 2017 Child Core Set. September 2018.

[6] Okunseri C, Szabo A, Garcia RI, et al. Provision of fluoride varnish treatment by medical and dental care providers: variation by race/ethnicity and levels of urban influence. J Public Health Dent. 2010 Summer;70(3):211-9.

[7] Kateeb ET1, Warren JJ, Gaeth GJ, Momany ET, Damiano PC. Understanding Pediatric Dentists' Dental Caries Management Treatment Decisions: A Conjoint Experiment. JDR Clin Trans Res. 2016 Apr;1(1):86-94. doi: 10.1177/2380084416636589. Epub 2016 Feb 29.

[8] Chassin MR, Loeb JM, Schmaltz SP, et al. "Accountability Measures - Using Measurement to Promote Quality Improvement." The New England Journal of Medicine (2010): 683-88. Print.

[9] Institute of Medicine (IOM). Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, D.C: National Academy Press; 2001.

- ***Effective*** — providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding underuse and overuse, respectively).
- ***Efficient*** — avoiding waste, including waste of equipment, supplies, ideas, or energy.
- ***Safe*** — avoiding injuries to patients from the care that is intended to help them.
- ***Timely*** — reducing waits and sometimes harmful delays for both those who receive and those who give care.

Evolving regulatory priorities of the Centers for Medicare and Medicaid Services (CMS), the leading agency within the Department of Health and Human Services (DHHS), clearly prioritize the need to prove and measure improvements in the quality of health care in both the public and private sectors. Following the IOM's reports, several legislative and regulatory actions have promoted the national interest on quality issues and these resource links are included in **Appendix B**.

Since the Passage of the Affordable Care Act (ACA) in 2010, the focus continues to shift from volume-based reimbursement to payment models that emphasize quality and value. The National

Quality Strategy (NQS) was developed as part of the ACA to "improve the delivery of health care services, patient health outcomes, and population health." [10] A central goal of the NQS is to build a consensus on how to measure quality so that stakeholders can align their efforts for maximum results by improving the overall quality of care, improving the health of the population and communities and making healthcare more affordable. The strategy also established six priority areas to help focus efforts by public and private partners. These priorities fall under the domains of **patient and family engagement, patient safety, effective communication and care coordination, population and public health, efficient use of healthcare resources, and clinical processes/effectiveness.**[11] There is significant movement among the federal agencies to align with the NQS.

[10] National Quality Strategy. http://www.ahrq.gov/workingforquality/. Accessed 2022.

[11] About the National Quality Strategy. Content last reviewed March 2017. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/workingforquality/about/index.html

PLAYERS IN THE ORAL HEALTHCARE QUALITY LANDSCAPE

The terms "quality measures" and "performance measurement" have been largely elusive in oral healthcare. IOM defines "quality of care" as "the degree to which healthcare services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge".[12] IOM reports have identified a lack of quality measures as a barrier to improving oral health and reducing oral health disparities. [13], [14] The role of an oral healthcare measure developer has long been occupied by entities that are not traditionally from the dental industry. These activities within oral healthcare, until recently, have been limited to the federal agencies such as the CMS, Health Resources and Services Administration (HRSA), the Agency for Healthcare Research and Quality (AHRQ), commercial private purchasers/payers, data analytics companies supporting these commercial health plans, and leading health plan accreditation agencies such as National Commission on Quality Assurance (NCQA), which are all engaging in developing measures for the purpose of program management.

As the single largest payer of health services for children in the United States, CMS plays a pivotal role in working with States and other partners in implementing quality measurement and improvement strategies Furthermore, greater emphasis is placed on patient-centered,

[12] Institute of Medicine, 2001; Lohr & Committee to Design a Strategy for Quality Review and Assurance in Medicare, 1990

[13] Institute of Medicine of the National Academies, Committee on an Oral Health Initiative. Advancing Oral Health in America. Washington, DC: National Academies Press; 2011.

[14] Institute of Medicine and National Research Council, Committee on Oral Health Access to Services. Improving Access to Oral Health Care for Vulnerable and Underserved Populations. Washington, DC: National Academies Press; 2011.

coordinated, and integrated care and accountability that forms the basis for growing demands for measuring quality, performance, and value pursuant to the ACA. CMS Measurement upholds public trust and provides consumer information by the establishment of core measures designed to be meaningful to patients, consumers, and physicians. The alignment of these core measure sets aid in the promotion of measurement that is evidence-based while generating valuable information for quality improvement, consumer decision-making and value-based payment and purchasing while reducing the variability in measure selection and decreasing provider collection burden and cost. The process of developing such transparency should be carefully implemented.

In 2022, CMS announced the adoption of two DQA measures, Topical Fluoride for Children and Oral Evaluation, into 2022 Core Set reporting. These two measures join the already adopted DQA sealant measure and will be a mandatory reporting requirement for all Medicaid programs starting in 2024. The National Commission on Quality Assurance (NCQA) that accredits health plans has added the DQA Oral Evaluation measure, as well as a derivative of the DQA Topical Fluoride measure, into HEDIS for health plan reporting for 2023. These initiatives are pivotal in ensuring alignment across both public and commercial reporting.

DQA's sealant eMeasure has been part of the Health Resources and Services Administration (HRSA) Uniform Data System (UDS) reporting since 2015. The UDS grantees, federally qualified health centers (FQHC), have reported tremendous improvement on the measure since its adoption. Recently, entities who work closely with HRSA have reported on the agency's need to align their reporting with other federal reporting programs, such as the CMS Merit Incentive-Based Payment System (MIPS). CMS MIPS is a Medicare provider incentive program. MIPS has two dental

measures that address topical fluoride application in non-dental setting and an outcome measure focused on dental decay.

DQA has played a critical leadership role in advocating and supporting alignment in oral healthcare quality measures to maintain consistency across applications.

In March 2017, CMS launched the Children's Oral Health Initiative (OHI) Value-Based Payment (VBP) that allowed selected state Medicaid programs to select, design, and test value-based payment approaches to sustain care delivery models that demonstrate improvement in children's oral health outcomes such as increasing outreach and services coordination to preventing childhood caries.

States are individually promoting the usage of quality measures by incorporating these into various reporting requirements such as for payment for performance (P4P) program by Texas Health and Human Services Pay-for-Quality (P4Q) Program and Massachusetts Delivery System Reform Incentive Payment Program; public reporting by the California Health Exchange (Covered California); and internal quality improvement within individual Medicaid programs.

The National Quality Forum (NQF) is a private, not-for-profit organization, that works towards improving the quality of healthcare by building consensus on national priorities and goals for performance improvement and working in partnership to achieve them, endorsing national consensus standards for measuring and publicly reporting on performance, and promoting the attainment of national goals through education and outreach programs. An NQF endorsement reflects rigorous scientific and evidence-based review, input from patients and their families, and the perspectives of individuals throughout the healthcare industry. Five of the measures developed by the DQA have received NQF endorsement.

Commercial health plans have long been engaged in developing measures for the purpose of program management and have used administrative data analyses to assess various quality or performance-related aspects of dentists in their network. In 2019, 49 percent of Americans received their health insurance through their employers[15]. Large employers purchasing health benefits for their workforce are in a strong position to influence the health care marketplace and routinely make health plan purchasing decisions on measurable quality and member satisfaction.[16] By making quality of care a purchasing criterion and requiring evidence of quality, large purchasers also can use their power to create competition on the basis of quality and outcomes.

Organizations like National Network of Oral Health Access (NNOHA)[17] as well as multi-site group practices have long been using complex quality measurement programs within their practices and developing "quality dashboards" that are made available to dentists that are sometimes paired with pay-for-performance programs.

An increasing variety of stakeholders are demanding accurate measures of quality to determine whether high-quality care is being provided consistently across the healthcare delivery system. A growing number of quality measures and reporting initiatives have resulted in a proliferation of measures that are often duplicative and unduly burdensome on healthcare providers and increase the potential for confusion among the public. In response to this measurement burden,

[15] Kaiser Family Foundation. http://kff.org/other/state-indicator/total-population/. Accessed 2022.

[16]Robst J, Rost K, Marshall D. Do employers know the quality of health care benefits they provide? Use of HEDIS depression scores for health plans. Psychiatr Serv. 2013 Nov 1;64(11):1134-9. doi: 10.1176/appi.ps.201200534. PMID: 23945985.

[17] National Network of Oral Health Access. The Dental Dashboard. Accessed 2022.

CMS has established a standardized system for developing and maintaining the quality measures used in various CMS initiatives and programs.[18] Excessive measurement burden could lead to confusion and inefficiency that make health care more expensive and undermine the very purpose of measurement, namely, to facilitate improvement.[19] Not uncommonly, a health care organization delivering primary care to a typical population is asked to report and collect hundreds of measures aimed at dozens of conditions. [19]

[18] MMS Overview | The Measures Management System (cms.gov)

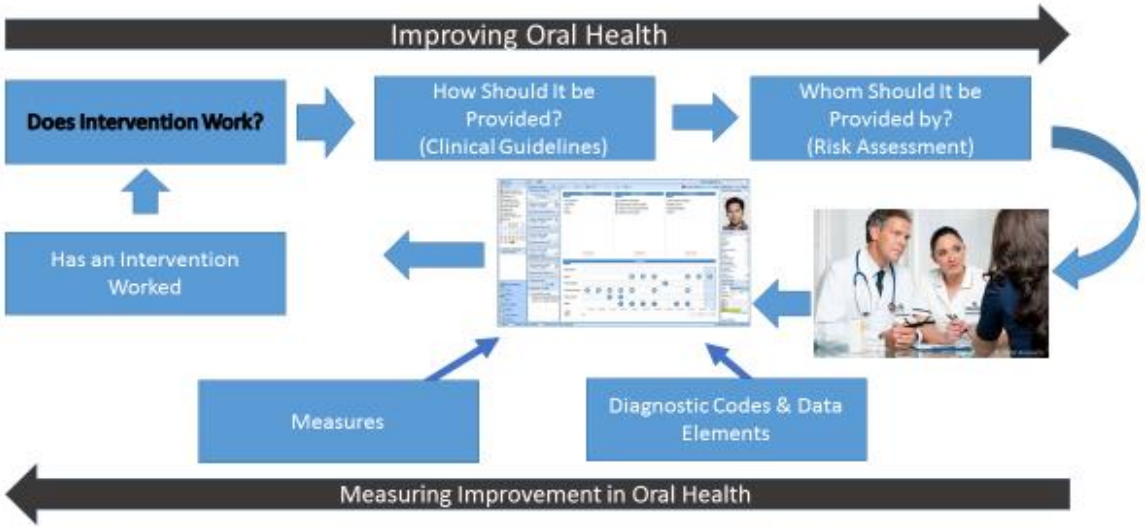
[19] D. Blumenthal and J. M. McGinnis., "Measuring Vital Signs: An IOM Report on Core Metrics for Health and Health Care Progress," Journal of the American Medical Association Viewpoint, published online April 28, 2015.

[26] DQA comprehensive scans include: 2020 scan of patient reported oral health measures, 2017 scan on oral health quality improvement initiatives, 2015 scan on practice-based measures, and the original 2012 scan of pediatric measures. DQA Dental Quality Measures | American Dental Association (ada.org). Accessed October 2022.

CHALLENGES FOR MEASUREMENT IN ORAL HEALTHCARE

Although a wide variety of entities have independently pursued quality measure development in oral healthcare, several environmental scans conducted by the DQA since 2012 have demonstrated a significant lack of standardized set of measures between public and private sectors and across communities, state, and national levels.[20] The measures that are routinely used are duplicative across different organizations (e.g., risk assessments, treatment planning, sealant and fluoride placement), lacking information on detailed specification with numerator and denominator descriptions and an excess of process measures rather than more outcome focused measurements.[20] Further, a balanced approach is needed that evaluates all aspects of care to better understand disparities and adequately plan for improved quality.[20] The development of and the use of valid, reliable, feasible and useable measures in oral healthcare remain challenging for many reasons. [20]

- Limited availability of clear specifications
- Lack of standardization in measurement, with many duplicates
- Limited evidence to support many of the measures currently available
- Limited measurement of all aspects of care
- Lack of an organized system relating disease risk to diagnostic measures
- Limited availability of measures of patient safety
- Limited measures across multiple care delivery systems including medical, dental, and public health
- Limited accessibility of claims data



Although oral healthcare has recognized the need to adopt evidence based principles in the delivery of care, often they may be of limited value due to insufficient or inconclusive evidence. There are very few high-quality prospective clinical trials on oral health therapies. There is limited knowledge of true oral health outcomes, partly because oral healthcare does not have a tradition of formally reporting specific diagnoses or associating such diagnoses with specific services,[21] especially through the claims process. Although retrospective claims data have many limitations, they continue to be the only data that are aggregated in oral healthcare today. Yet, limited availability of freely accessible claims data is also a significant challenge in measuring quality and performance. **Ultimately, oral healthcare needs a cost-effective measurement system that can be easily implemented on a routine basis in small practices, measures factors under the control of the practitioner, and yields meaningful information that can be acted upon for improvement.**

[21] Bader JD, Shugars DA. Variation, treatment outcomes, and practice guidelines in dental practice. J Dent Educ 1995, 59: 61-96.

SUMMARY

In summary, the need to measure is rooted in the basic responsibility to assure that the public receives optimal benefits from available knowledge and effective care. Steeply rising costs and inconsistent quality of medical care have culminated in the national priority to deliberately seek value from healthcare. To assure that we are providing the highest quality patient-centered dental care, oral healthcare must measure what works and what doesn't and make changes needed to improve health outcomes. Not only are many measures imperfect, but they are proliferating at a rapid rate, increasing the data burden and blurring the ability to focus on issues most important to better health and health care. In an effort to curb any inappropriate quality measures being implemented across the oral healthcare delivery system, the Dental Quality Alliance is now leading the dental profession into a paradigm of standardized measuring and reporting for the purpose of quality improvement of oral healthcare.

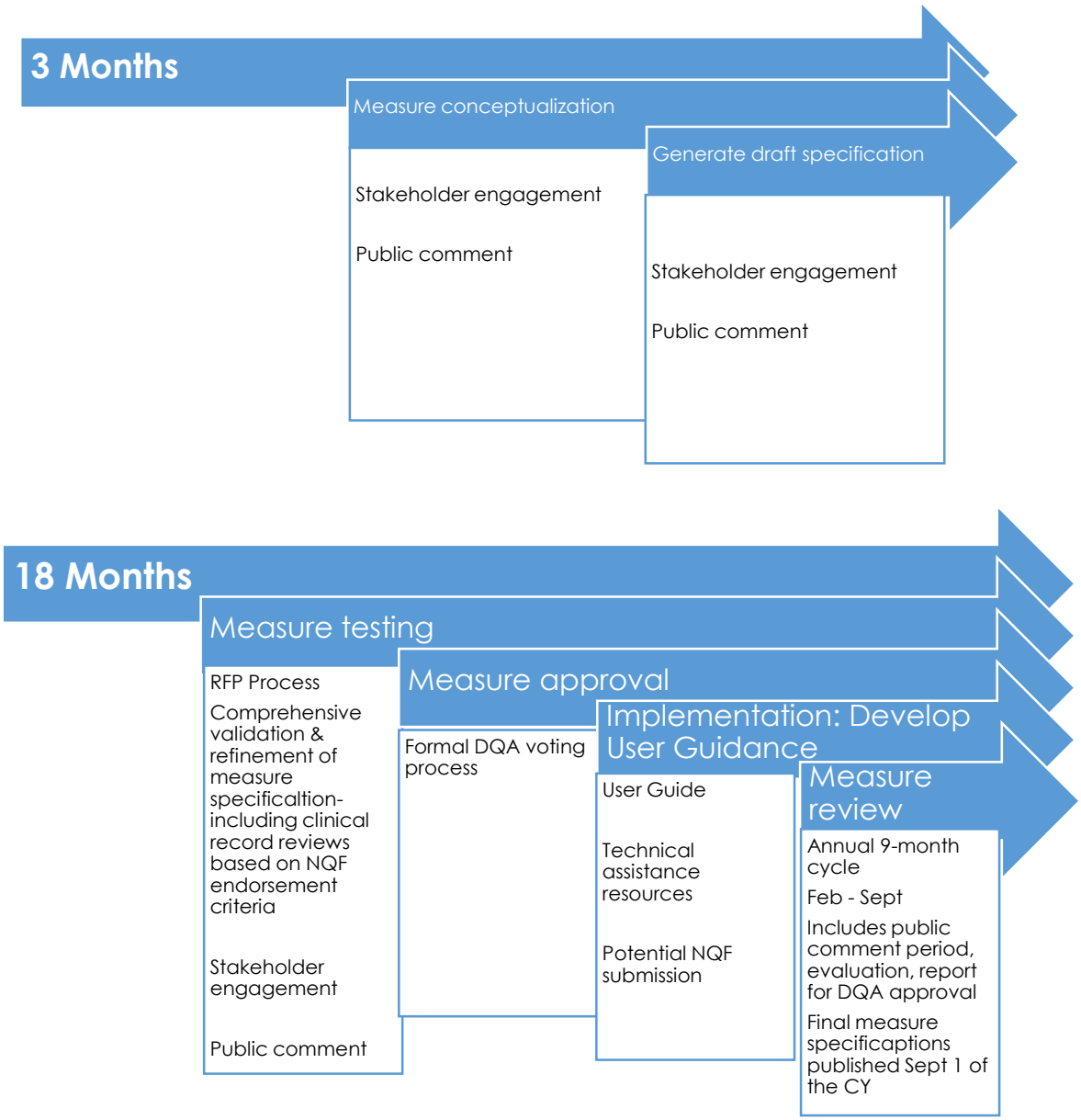
DENTAL QUALITY ALLIANCE

The Dental Quality Alliance (DQA) was established in 2008 by the American Dental Association (ADA) upon request from the Centers for Medicare and Medicaid Services (CMS), to have an authoritative leadership role in the development of quality measures. Many major dental professional societies, payers, educators, and a member from the general public have come together as an Alliance to further the DQA mission. This strong participation by diverse stakeholders in oral healthcare, along with the volunteerism that generates the work products for the DQA, are paramount to its success. Details on the current membership and organizational structure of the DQA can be found in **Appendix A**.

DQA MEASURE DEVELOPMENT PROCESS

DQA undertakes a comprehensive approach to measure development that is collaborative, transparent, and meaningful. This process is discussed in detail in the DQA Measure Development Manual.[22]

DQA Measure Development – Process Overview/Projected Timeline



[22] Dental Quality Alliance (2022). Procedure Manual for Performance Measure Development: A Voluntary Consensus Process. Accessed 2022.

SYSTEMS (PROGRAM/ PLAN) LEVEL ORAL HEALTHCARE QUALITY MEASURE SET

In order to advance its mission of advancing performance measures and quality improvement in oral health, the DQA has developed and approved to date a total of 13 pediatric (Appendix B). Targeted at the goal of addressing "Dental Caries in Children: Prevention and Disease Management", these measures fall under the AHRQ's domains of use of services, process, access, and cost of care and address utilization, cost, and quality of dental services for children enrolled in public (Medicaid, CHIP) and private (commercial) insurance programs. In addition, DQA has also developed six adult dental quality measures that address utilization and quality of dental services for adults enrolled in public (Medicaid) and private (commercial) programs (Appendix B). DQA measures have been developed through extensive testing for validity, reliability, feasibility, usability, and clear specification, and with the intent of evaluating dental health services to allow dental plans and programs to monitor these services. Following CMS guidance, DQA began submitting its measures for endorsement to the NQF. NQF endorsement is the gold standard for healthcare quality and an important criterion for quality measure selection among public and private payers. NQF endorsed measures are evidence-based and valid, and in tandem with the delivery of care and is an important criterion for quality measure selection among many public and private payers. Five DQA measures are currently endorsed by the NQF.

PRACTICE LEVEL ORAL HEALTHCARE QUALITY MEASURES

The DQA has published measure specifications to support quality improvement (QI) at the practice level aligned with the program/plan level measures. In addition, the DQA has released a comprehensive guidance on implementation of practice-based quality measures to encourage payers to use appropriate measures when they engage in measuring practices. Work to support this level of measurement is ongoing.

IMPLEMENTATION AND IMPROVEMENT ACTIVITIES

As measures are developed and endorsed, the DQA is placing significant focus on their implementation. User Guides have been developed by the DQA to provide guidance on the appropriate use of the DQA measures. DQA measures are currently implemented across both public and private sectors. These include marketplaces, public entities like the CMS[23] and HRSA and individually by states.[24] As more entities implement these measures across different systems, a standardized, balanced approach towards measurement is coming into focus. In an effort to facilitate implementation, DQA provides technical assistance to users of DQA measures by conducting webinars and workshops, developing technical briefs and reports to educate the dental community at large to facilitate the appropriate implementation of these measures:

- DQA has built and continues to add new features to the first-of-its-kind **State Oral Healthcare Quality Dashboard**. These dynamically-generated reports now include analysis of pediatric emergency department use for non-traumatic dental conditions, a national comparison, and time trends for individual measure reports. This activity is being led using state Medicaid program claims and enrollment data from their Transformed Medicaid Statistical Information System (T-MSIS) database.
- DQA is continuing a collaborative project through a HRSA/Maternal Child Health Bureau (MCHB) co-operative grant in collaboration with Georgetown University as part of the **Consortium for Oral Health Systems Integration and Improvement (COHSII).** The first four-year grant period led to the development and implementation of a core set of quality indicators for the maternal and child health population. This grant award has been extended an additional three years, through 2024, to continue its three core functions: 1) identify gaps and barriers within systems of care that prevent optimal delivery of preventive oral health care to MCH populations; 2) improve MCH systems of

[23] 2022 Core Set of Children's Health Care Quality Measures for Medicaid and CHIP (Child Core Set). Accessed 2022.

[24] Texas Health and Human Services Medicaid and CHIP Programs - for payment program, public reporting, and quality improvement. Accessed 2022; Oregon Health Authority- for payment program, ¬ Michigan Healthy Kids Dental – for quality improvement. Accessed 2022; Florida Medicaid – for public reporting and quality improvement.

care; and 3) translate evidence into practice, raising awareness and knowledge through the dissemination of new and reliable resources and guidance.

- **Medicaid Quality Improvement Learning Academy:** The DQA conducted a state level learning collaborative to promote system wide improvement; the pilot included state teams from Kansas, Missouri and Ohio and the resources remain available online.
- **Quality Innovators Spotlight (QIS):** The DQA supports and highlights champions in the quality improvement arena by sharing summaries of successful quality improvement projects and outcomes so others can use the strategies and program examples to create their own quality improvement project.

EDUCATIONAL ACTIVITIES

As the measure development and implementation activities progress, the DQA recognizes that all sectors of the profession that impact the oral health of our population must be educated on the need for quality and performance measurement. DQA maintains extensive educational resources on its webpage including:

- a quality measurement webinar series,
- journal articles and publication of whitepapers
- DQA, in partnership with the Institute of Healthcare Improvement (IHI), developed an **online course** specific to oral healthcare that provides tools to identify key areas for improvement, then drive toward meaningful change.
- DQA holds a **conference** every two years with the intent of training thought leaders in oral healthcare to spread knowledge and information about quality measurement.

The DQA is continuously developing educational resources for various target audiences to promote the value of standardized measurement.

DQA'S MEASURE DEVELOPMENT FRAMEWORK

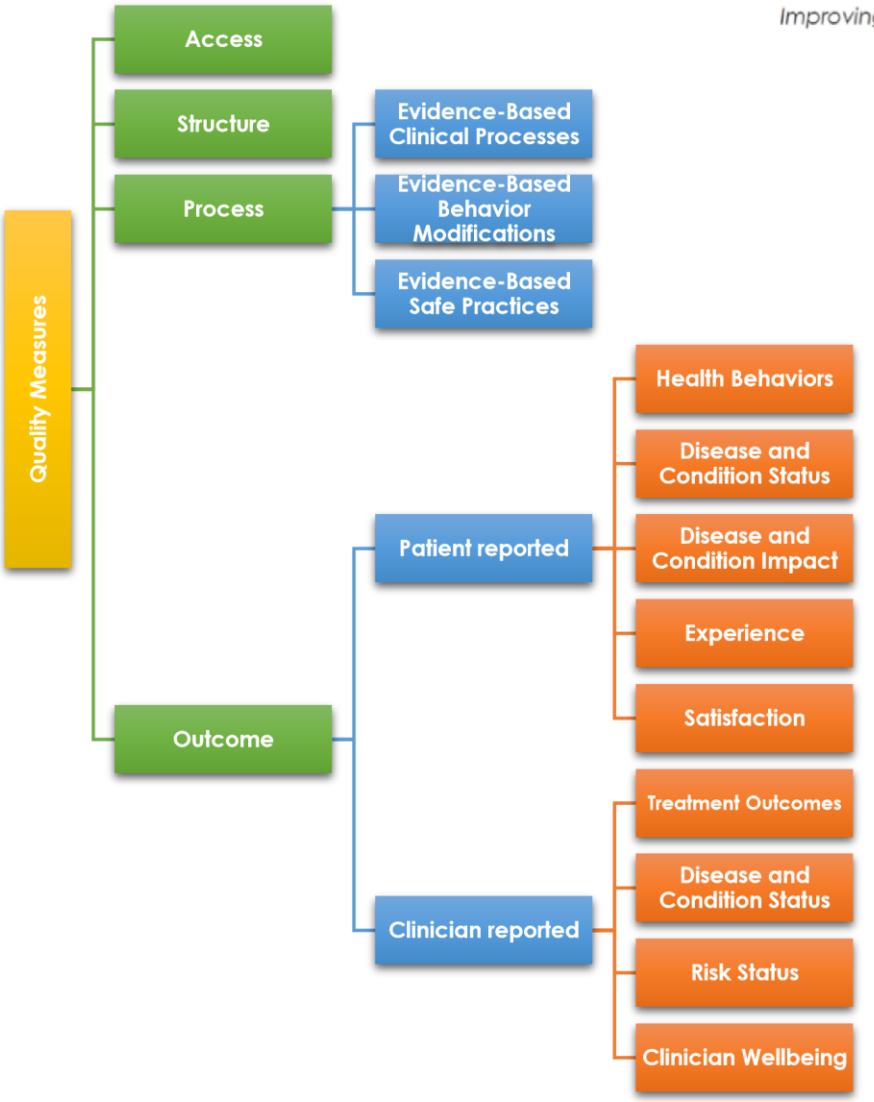
The DQA has historically looked at the work of the Institute of Medicine (IOM), National Quality Measurement Clearinghouse (NQMC) and National Quality Forum (NQF) as the authoritative voices in the quality measurement landscape. In November 2021, the DQA expanded on the NQMC domains with this updated framework[25] to identify measurement gaps and support measure prioritization activities. The intent of this framework is to anchor current DQA measures and serve as the guide for the identification of future measure development activities. It is not intended to replace industry-accepted frameworks.

Appendix D presents the detailed definitions for each of the terms included in this framework:

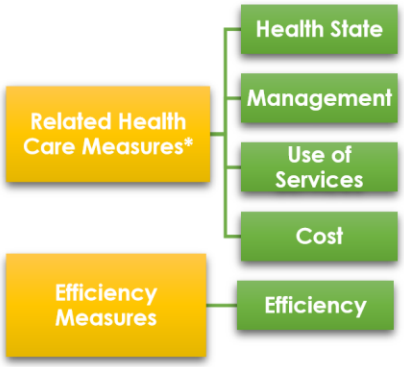
[25] Adapted from National Quality Measures Clearinghouse. NQMC Measure Domain Framework. July 2018; https://www.ahrq.gov/gam/summaries/domain-framework/index.html and

Cochrane Effective Practice and Organisation of Care (EPOC). *What Outcomes Should be Reported in EPOC Reviews.* EPOC Resources for review authors, 2017. epoc.cochrane.org/resources/epoc-resources-review-authors (accessed September 23, 2021)

DQA
DENTAL QUALITY ALLIANCE™
Improving Oral Health Through Measurement



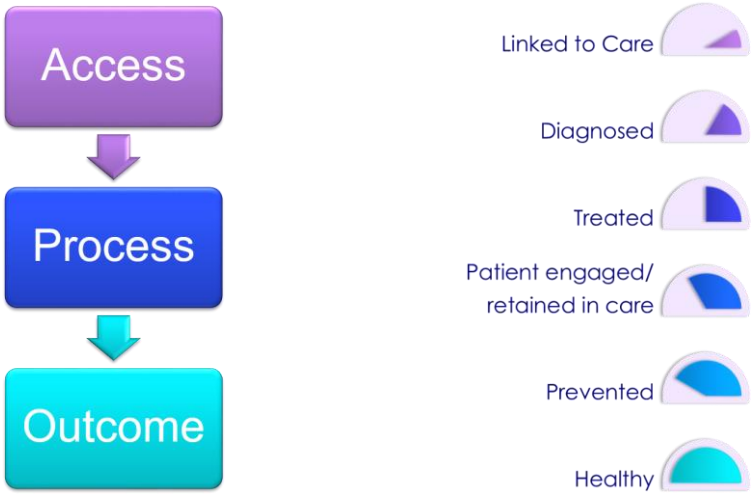
EQUITABLE	PATIENT CENTERED	EFFECTIVE	EFFICIENT	SAFE	TIMELY



LEVELS OF MEASUREMENT AND MEASURE ALIGNMENT

Measures should span the quality domains of access, utilization, process, and outcomes. As the DQA User Guide notes: "There is no single 'magic' measure. Rather, a set of carefully chosen measures can be used to provide a more complete picture of care, establish baseline performance, identify improvement opportunities, and monitor progress toward achieving the ultimate care goals."

Measure Sets to Support Attaining Ultimate Care Goal



Measurement Alignment Across Reporting Levels

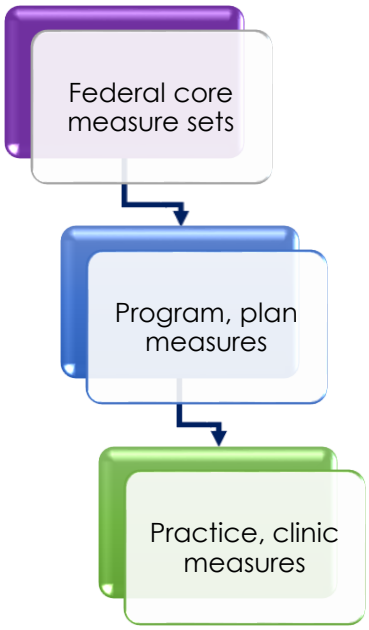


Figure adapted from Dental Quality Alliance. 2018. *Alignment and Harmonization in Reporting Quality: Establishing Reliability Across Reporting Levels*. Chicago, IL: American Dental Association.

Quality of care is assessed at multiple levels, such as practices, managed care organizations or medical/dental benefits administrators, public insurance programs, and public health programs. There often are different measurement considerations at different "levels" of care or "reporting unit" as well as across different types of data sources (e.g., administrative claims, EHRs, or surveys). Measures should be reported at the level (e.g., program, plan, or practice) and using the data source (e.g., administrative claims or EHR) for which they were developed and validated. Implementation of measures at different levels or with different data sources than those for which the measure was intended may not be reliable.

As public and commercial payers, and their associated organizations, are increasingly held accountable for performance on these measures, they in turn hold their contracted practices accountable. Because practice-level measurement is often driven vertically (from program to plan to practice), practice-level measures will be most effective when aligned with program- and plan-level measurement. Standardized measurement that is aligned across public and private sectors and harmonized across different levels of reporting aggregation can help pave the way to improvement. Starting with broad populations, national

goals guide the development of program-level measures, which are then used to derive practice- and clinician-level measures such that the underlying care improvement goals remain unchanged and the derivative measures are relevant to the populations served at each level. As part of quality improvement, this entity may provide benchmarks or other targets to encourage individual providers and institutions to undertake quality improvement.

Measurement Alignment Across Reporting Levels

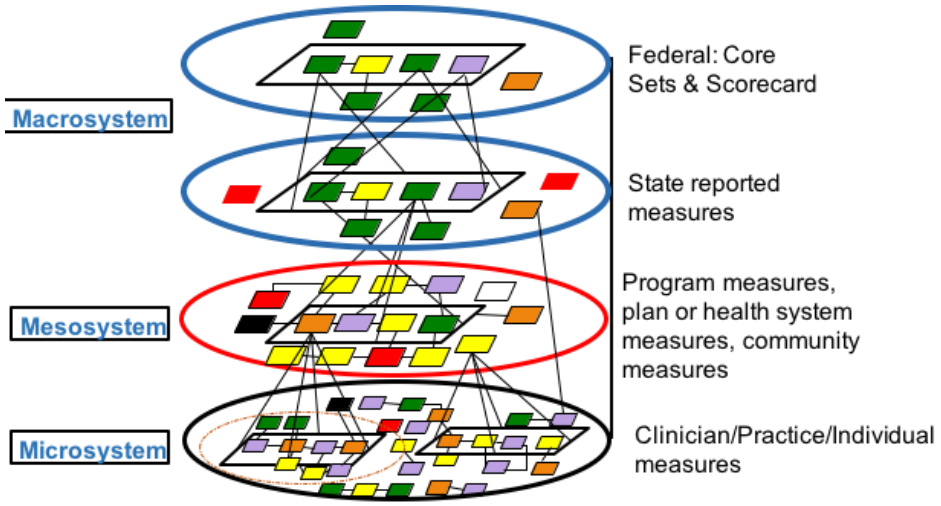
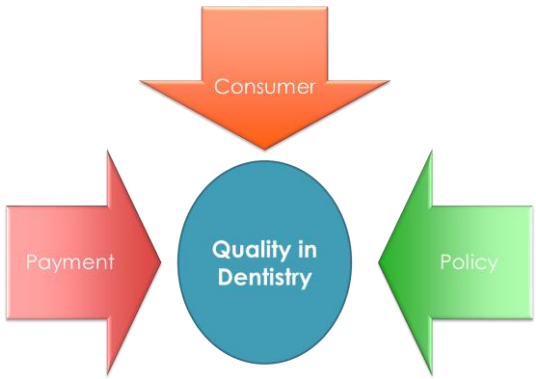


Figure source: Mary S. Applegate (Medicaid Medical Director, Ohio), adapted from Bojestig, M; Jonkoping County Council, Sweden. (2011). *Making system wide improvement in health care.* [PowerPoint slides]. Retrieved from http://www3.ha.org.hk/haconvention/hac2011/proceedings/pdf/Plenary%20Sessions/P3.2.pdf.

The level of accountability that an entity should have depends on whether the entity being evaluated has had an adequate opportunity to affect the aspect of quality that is being measured.

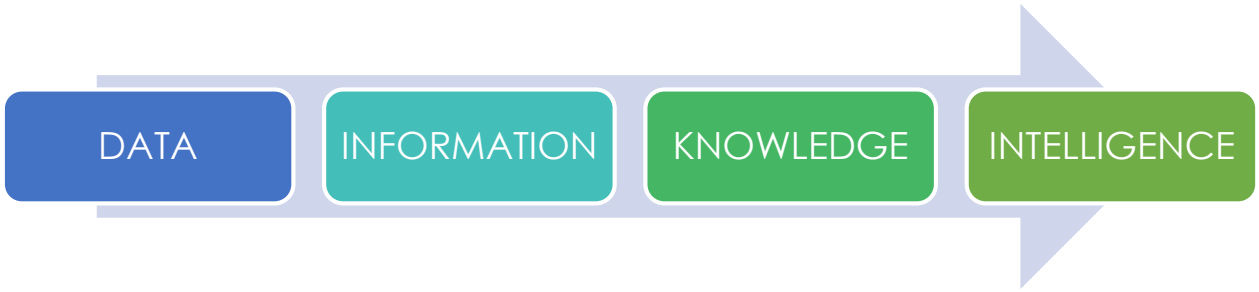


There is always a shared responsibility for treatment decisions between a doctor and patient. Providers can increase the likelihood that their patients will adhere to clinical recommendations, but there are no perfect interventions, and sometimes consideration challenges of patient compliance. In choosing which aspects of quality to measure, which risk factors to adjust for, and which performance benchmarks to set, decisions should be made explicitly about how to distribute responsibility. Information about the disease course or risk-adjustment methods must be used to establish reasonable standards of accountability to distinguish between individual and health system responsibility.[26] The DQA has evaluated the concepts of "risk adjustment" in the context of dental quality measures and published a discussion document titled Risk Adjustment in Dental Quality Measurement.

[26] Health Affairs, 16, no.3 (1997):7-21 Six challenges in measuring the quality of health care. Accessed at Challenges for Measurement, 2011.

CONCLUSION

Measures are primarily intended for improving the quality of care, accountability, or research. Data generated through measurement needs to be translated into information and knowledge and then used to make intelligent decisions on improving processes and outcomes of care. Improving quality of care can be conducted as either an internal process or through an external process.**Error! Bookmark not defined.**, 27



- The AHRQ defines Quality Improvement (QI) in health care, as "the framework we use to systematically improve the ways care is delivered to patients. Processes have characteristics that can be measured, analyzed, improved, and controlled. QI entails continuous efforts to achieve stable and predictable process results, that is, to reduce process variation and improve the outcomes of these processes both for patients and the health care organization and system.
- **Measure to gauge process in achieving aims**: Measures should be selected that inform progress toward reaching the ultimate care goal. Each specific aim should have corresponding performance measures. Some measures may address more than one aim.
- **Measure over time:** Baseline measurement provides the starting point from which opportunities for improvement can be identified and progress can be assessed. **Repeated measurement** over time is necessary to monitor for change. It is important to recognize that some measures, such as process of

[27] Medicare: A Strategy for Quality Assurance, Volume I (1990) Institute of Medicine (IOM).

care measures, may show more immediate improvement. In contrast, some outcome measures may not show improvement until after several aims have been implemented and have had time to take effect at the population level. Set realistic time frames for achieving intermediate and longer-run goals.

- **Maintain a Population Health Focus:** Keep eyes on the prize! The program should examine "outcomes" at the population level and include measures that ensure that the true care goal is being met without unintended adverse consequences. For example, focusing measurement on only the subset of enrollees that seek dental care will miss a significant component of the population.

APPENDIX A: DENTAL QUALITY ALLIANCE MEMBERSHIP AND ORGANIZATIONAL STRUCTURE

DQA MEMBERS

1. Academy of General Dentistry
2. Agency for Healthcare Research and Quality
3. America's Health Insurance Plans
4. American Academy of Oral & Maxillofacial Pathology
5. American Academy of Pediatric Dentistry
6. American Academy of Periodontology
7. American Association for Dental, Oral and Craniofacial Research
8. American Association of Endodontists
9. American Association of Oral & Maxillofacial Radiology
10. American Association of Oral & Maxillofacial Surgeons
11. American Association of Orthodontists
12. American Association of Public Health Dentistry
13. American Board of Pediatric Dentistry
14. American College of Prosthodontics
15. American Dental Association
16. American Dental Education Association
17. American Dental Hygienists' Association
18. Centers for Disease Control and Prevention
19. Centers for Medicare and Medicaid Services
20. D4C Dental Brands
21. Defense Health Agency
22. Delta Dental Plan Association
23. CareQuest Institute for Oral Health
24. eClinicalWorks
25. The Food and Drug Administration
26. Haleon
27. Health Resources and Services Administration
28. Managed Care of North America (MCNA) Dental
29. Medicaid | Medicare | CHIP Services Dental Association
30. National Association of Dental Plans
31. National Network for Oral Health Access
32. Public Member
33. The Joint Commission
34. Veterans Health Administration

MISSION

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.

OBJECTIVES

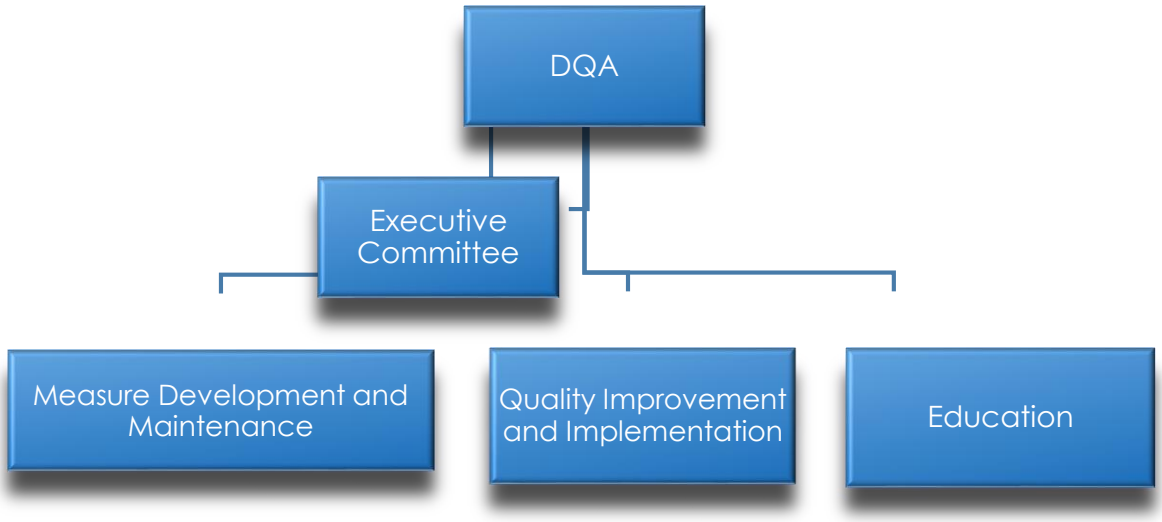
1. To identify and develop evidence-based oral health care performance measures and measurement resources.
2. To advance the effectiveness and scientific basis of clinical performance measurement and improvement.
3. To foster and support professional accountability, transparency, and value in oral health care through the development, implementation, and evaluation of performance measurement.

STRUCTURE AND COMMITTEES

The **DQA Executive Committee** oversees the governance, finance, structure, and operations of the DQA. The Executive Committee is composed of the following organizational members: the American Dental Association, the American Academy of Pediatric Dentistry, the Academy of General Dentistry, the National Association of Dental Plans, the American Dental Education Association, the CMS, and a member-at-large serving a rotating two year term, as voted by the DQA members..

The DQA has three standing advisory committees that are organized to advance the field of performance and quality measurement by supporting the development, maintenance, implementation of measures as well as educating the different communities of interest.

The structure of the DQA is as follows:



The Measures Development and Maintenance Committee (MDMC) is charged with the development and maintenance of dental performance measures. This includes identifying concepts that are evidence-based, the development of the rationale and specifications of the measure and validating the concepts to satisfy the criteria set forth by the NQF. The MDMC also has an annual measure review to ensure timely assessment of the evidence and the properties of the measures.

The Education Committee (EC) is charged with identifying objectives and strategies for educating and communicating with the dental profession and other interested parties regarding performance measures and performance measurement. This Committee enables effective communication on quality and performance measures, as well as the DQA and its structure and function.

The Quality Improvement and Implementation Committee (QIIC) oversees the planning, development, and operation of a DQA Technical Assistance Resource Center to support and advance the use of DQA and DQA-endorsed measures, and application of improvement science to improve oral health care quality and performance within programs, plans and practices.

APPENDIX B: LIST OF DQA PEDIATRIC AND ADULT MEASURES‡

Evaluating Utilization

Measure Abbreviation	Measure Name	Description
UTL-CH-A	Utilization of Services (NQF #2511)	Percentage of all enrolled children under age 21 who received at least one dental service within the reporting year.
PRV-CH-A	Preventive Services for Children	Percentage of all enrolled children who received a topical fluoride application and/or sealants within the reporting year.
TRT-CH-A	Treatment Services	Percentage of all enrolled children who received a treatment service within the reporting year.
PEV-A-A	Periodontal Evaluation in Adults with Periodontitis	Percentage of enrolled adults aged 30 years and older with history of periodontitis who received a comprehensive or periodic oral evaluation or a comprehensive periodontal evaluation within the reporting year.

Evaluating Quality of Care

Measure Abbreviation	Measure Name	Description
OEV-CH-A	Oral Evaluation (NQF# 2517)	Percentage of enrolled children under age 21 who received a comprehensive or periodic oral evaluation within the reporting year.
TFL-CH-A	Topical Fluoride for Children (NQF #2528, 3700, 3701)	Percentage of enrolled children aged 1–21 years who received at least 2 topical fluoride applications within the reporting year.
SFM-A-A	Receipt of Sealants on First Permanent Molar	Percentage of enrolled children, who have ever received sealants on permanent first molar teeth: (1) at least one sealant and (2) all four molars sealed by the 10th birthdate
SSM-A-A	Receipt of Sealants on Second Permanent Molar	Percentage of enrolled children, who have ever received sealants on permanent second molar teeth: (1) at least one sealant and (2) all four molars sealed by the 15th birthdate
CCN-CH-A	Care Continuity	Percentage of all children enrolled in two consecutive years who received a comprehensive or periodic oral evaluation in both years.
USS-CH-A	Usual Sources of Care	Percentage of all children enrolled in two consecutive years who visited the same practice or clinical entity in both years.
EDV-CH-A	Ambulatory Care Sensitive Emergency Department Visits for Dental Caries in Children	Number of emergency department visits for caries-related reasons per 100,000 member months for all enrolled children

EDF-CH-A	Follow-Up after Emergency Department Visits for Dental Caries in Children	Percentage of ambulatory care sensitive Emergency Department (ED) visits for dental caries among children 0–20 years in the reporting period for which the member visited a dentist within (a) 7 days and (b) 30 days of the ED visit.
POC-A-A	Non-Surgical Ongoing Care in Adults with Periodontitis	Percentage of enrolled adults aged 30 years and older with a history of periodontitis who received an oral prophylaxis OR scaling/root planing OR periodontal maintenance visit at least 2 times within the reporting year.
TFL-A-A	Topical Fluoride for Adults at Elevated Caries Risk	Percentage of enrolled adults aged 18 years and older who are at "elevated" risk (i.e., "moderate" or "high") who received at least 2 topical fluoride applications within the reporting year.
EDV- A-A	Ambulatory Care Sensitive Emergency Department Visits for Non-Traumatic Dental Related Reasons in Adults	Number of emergency department (ED) visits for ambulatory care sensitive dental conditions per 100,000 member months for enrolled adults
EDF-A-A	Follow-up after Emergency Department Visits for Non-Traumatic Dental Related Reasons in Adults	The percentage of ambulatory care sensitive dental condition emergency department visits among adults aged 18 years and older in the reporting period for which the member visited a dentist within (a) 7 days and (b) 30 days of the ED visit
DOE-A-A	Adults with Diabetes – Oral Evaluation	Percentage of enrolled adults with diabetes who received a comprehensive or periodic oral evaluation or a comprehensive periodontal evaluation within the reporting year

Evaluating Efficiency and Cost

Measure Abbreviation	Measure Name	Description
CCS-CH-A	Per Member Per Month Cost of Clinical Services	Total amount that is paid on direct provision of care (reimbursed for clinical services) per member per month for all enrolled children during the reporting year.

†The detailed specifications can be found on the DQA website at DQA Dental Quality Measures | American Dental Association (ada.org).

APPENDIX C: USEFUL LINKS & RESOURCES

Below are some links that provide more detailed information on measurement.

Oxford Journal Method to Develop Measures
This link from Oxford Journals describes the methods to develop measures.

National Quality Forum
This link to the NQF website provides information on NQF endorsed measures including the endorsement methods.

AHRQ Child Health Toolbox
This link from AHRQ provides information on concepts, tips, and tools for evaluating the quality of health care for children.

Institute for Healthcare Improvement (IHI) Educational Resources
This link to the Institute for Healthcare Improvement website offers tools, change ideas, measures to guide improvement, IHI white papers, audio and video, improvement stories, and more to help with improvement efforts.

Donabedian Paper on Quality
Avedis Donabedian's 1966 publication on defining quality.

HRSA Oral Health Mainpage
This is the HRSA Oral Health page which explores the identification of five key oral health domains and associated core clinical competencies.

Medicaid Innovation Acceleration Project – Oral Health
This resource list provides hyperlinks and brief descriptions of relevant Value-Based Payment articles and toolkits.

National Quality Strategy

The Affordable Care Act required HHS to establish a National Strategy for Quality Improvement in Health Care (the National Quality Strategy) that pursues three broad aims including better care, healthy people/healthy communities and affordable care. These aims are used to guide and assess local, state, and national efforts to improve health and the quality of healthcare.

HHS Strategic Plan FY 2022-2026 (HHS Strategy)
HHS Strategic Plan 2022-2026 identifies 5 strategic goals and 20 strategic objectives that focus on the major functions of HHS and outcomes the Department aims to achieve that include emphasis on reformation and modernization of the healthcare system, accountability for promoting healthier lifestyle for the population; economy and social wellbeing of the population while promoting and fostering advances in science and effective, efficient management and stewardship. The full HHS Strategic Plan for FY 2022-2026 is located here.

CMS Quality Payment Program
The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) created the Quality Payment Program. This legislation repealed the sustainable growth rate (SGR) formula that calculated payment cuts for physicians and created a new framework for rewarding physicians for providing higher quality care by establishing alternative payment mechanisms for providers that placed value over volume.

The Nationwide Privacy and Security Framework for Electronic Exchange of Individually Identifiable Health Information

HHS shares extensive resources and a comprehensive toolkit to implement the principles in The Nationwide Privacy and Security Framework for Electronic Exchange of Individually Identifiable Health Information.

APPENDIX D: DEFINING TERMS FROM ACROSS THE QUALITY LANDSCAPE

Healthcare Delivery Measures

These are used to assess the performance of *individual clinicians*, clinical *delivery teams*, *delivery organizations*, or *health insurance plans* in the provision of care to their patients or enrollees.

Population Health Measures

These are applied to groups of persons identified by geographic location, organizational affiliation or non-clinical characteristics, in order to assess public health programs, community influences on health, or population-level health characteristics that may not be directly attributable to the care delivery system.

Defining Terms From Across the Quality Landscape:	
Aims for Improvement[28]	**Equitable:** providing care that does not vary in quality because of personal characteristics, such as gender, age, race, ethnicity, education, disability, sexual orientation, geographic location, and socioeconomic status
	Patient-centered: providing care that is respectful of, and responsive to, individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions
	Effective: providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding underuse and overuse)
	Efficient: avoiding waste, in particular waste of equipment, supplies, ideas, and energy
	Safe: avoiding injuries to patients from the care that is intended to help them

[28] Institute of Medicine (US) Committee on Quality of Health Care in America. Crossing the Quality Chasm: A New Health System for the 21st Century. Washington (DC): National Academies Press (US); 2001. PMID: 25057539.

<table>
<tr><td></td><td>Timely: reducing waits and sometimes harmful delays for both those who receive and those who give care</td></tr>
<tr><td colspan="2">Quality Measures[29]: Measures used to assess the performance of individual clinicians, clinical delivery teams, delivery organizations, or health insurance plans in the provision of care to their patients or enrollees, which are supported by evidence demonstrating that they indicate better or worse care.</td></tr>
<tr><td colspan="2">Access: Access to care is the attainment of timely and appropriate health care by patients or enrollees of a health care organization or clinician (or of a public health intervention by a population). Access measures are supported by evidence that an association exists between the measure and the outcomes of or satisfaction with care.</td></tr>
<tr><td colspan="2">Structure: Structure of care is a feature of a health care organization or clinician (or public health program for populations) related to the capacity to provide high quality health care. Structure measures are supported by evidence that an association exists between the measure and one of the other clinical quality measure domains.</td></tr>
<tr><td rowspan="2">Process; A process of care is a health care-related activity performed for, on behalf of, or by a patient. Process measures are supported by evidence that the process—that is the focus of the measure—has led to improved outcomes.</td><td>Evidence-Based Clinical Processes: Oral health care is provided using the judicious integration of systematic assessments of clinically relevant scientific evidence (evidence-based guidelines), relating to the person's oral and medical condition and history, with the oral health care provider's clinical expertise and the person's treatment needs and preferences.[30]</td></tr>
<tr><td>Evidence-Based Behavior Modifications: Evidence-Based interventions to positively influence health behaviors. Behavior change requires attention to individuals (e.g., personal health behaviors), families (e.g., family stress, social support), health care professionals (e.g., appropriate counseling techniques), the environment (e.g., accessibility to oral health care, status of community water fluoridation),</td></tr>
</table>

[29] NQMC Measure Domain Definitions. Content last reviewed July 2018. Agency for Healthcare Research and Quality, Rockville, MD. https://www.ahrq.gov/gam/summaries/domain-definitions/index.html. Accessed September 2022

[30] ADA Policy Statement on Evidence-based Dentistry. http://www.ada.org/en/about-the-ada/ada-positions-policies-and-statements/policy-on-evidence-based-dentistry. Accessed May 13th, 2018

	and cross-cutting issues (e.g., racial and ethnic health disparities, cultural preferences).[31]
	Evidence-Based Safe Practices: The evidence-based safe practices are ready-to-use tools to improve safety and have been evaluated, assessed and endorsed to guide large and small healthcare systems in providing the safest care possible.[32]
Outcome: An outcome of care is a health state of a patient resulting from health care. Outcome measures are supported by evidence that the measure has been used to detect the impact of one or more clinical interventions (or public health interventions for population outcomes). Measures in this domain are attributable to antecedent health care (or public health interventions) and should include provisions for risk-adjustment. Outcomes may **be reported by patients** or **clinician assessed**.	
Patient Reported Outcomes: "Reports of the patient's health status, health behavior, experience with health care or satisfaction with health care that comes directly from the patient"[33] as a result of healthcare structures and processes and are supported by evidence that the healthcare system can influence the outcome.	
Health Behaviors: These are "actions taken by individuals that affect health or mortality, may be intentional or unintentional, and can promote or detract from the health of the actor or others. Examples include smoking, substance use, diet, physical activity, sleep, risky sexual activities, health care seeking behaviors, and adherence to prescribed medical treatments."[34]	
Oral Health Status: "The ability to speak, smile, smell, taste, touch, chew, swallow and convey a range of emotions through facial expressions with confidence and without pain, discomfort and disease of the craniofacial complex." **Disease and condition status:** Measures of disease and condition status address diseases of the craniofacial structures: e.g., caries status, tooth loss, and bleeding gums. Measures of condition and disease status often are more reliably assessed through clinical evaluations. When advancing severity of disease is inferred from procedure codes, appropriate validation testing	

[31] IOM (Institute of Medicine). 2011. *Advancing Oral Health in America*. Washington, DC: The National Academies Press. https://doi.org/10.17226/13086.

[32] National Quality Forum (NQF). Safe Practices for Better Healthcare. https://www.qualityforum.org/News_And_Resources/Press_Kits/Safe_Practices_for_Better_Healthcare.aspx Accessed September 23, 2021

[33] National Quality Forum. Patient Reported Outcomes in Performance Measurement. 2013; http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=72549. Accessed September 23, 2021

[34] Short, S. E., & Mollborn, S. (2015). Social Determinants and Health Behaviors: Conceptual Frames and Empirical Advances. *Current opinion in psychology*, *5*, 78–84. doi:10.1016/j.copsyc.2015.05.002

must be conducted to determine if the measure can be classified in this domain. Any concerns related to confounding by access or difficulties in accurately identifying disease severity on the basis of procedure codes alone without diagnoses codes should be evaluated. But patient-reported indicators may be important when clinical assessments are not available or as a gauge of a patient's understanding and perception of his/her oral health status.

Disease and condition impact: Refers to "patient-perceived impact of oral conditions and dental interventions"[35] and include pain, appearance (aesthetics), functional status and psychosocial impacts.

Patient Experience: Experience of care is a patient's or enrollee's report of observations of and participation in health care, or assessment of any resulting change in their health. Patient experience measures are supported by evidence that an association exists between the measure and patients' values and preferences, or one of the other clinical quality domains.

Patient Satisfaction: "Satisfaction is about whether a patient's expectations about a health encounter were met. Two people who receive the exact same care, but who have different expectations for how that care is supposed to be delivered, can give different satisfaction ratings because of their different expectations."

Treatment Outcomes:

Anticipated and unanticipated complications and consequences, as well as functional, physiological and aesthetic outcomes of care.

Risk Status: There are patient-related attributes or characteristics that contribute to outcomes[36]. (Examples include patient's primary diagnosis and condition severity, comorbid conditions, genetic, biological, demographic, socioeconomic, environmental, and psychosocial factors; health-related behaviors; and attitudes, preferences and perceptions regarding health care). These are collectively termed risk factors and understanding any changes in the risk status influences patient's oral health and potential outcomes of care.

Clinician Wellbeing: Clinician well-being is essential for safe, high-quality patient care and supports improved patient-clinician relationships, a high-functioning care team, and an engaged and effective workforce.[37]

Related Healthcare Measures: Measures used to assess the non-quality aspects of	**Health State**: A user-enrollee health state is the health status of a group of persons identified by

[35] John, M. T., Feuerstahler, L., Waller, N., Baba, K., Larsson, P., Celebić, A., Kende, D., Rener-Sitar, K., & Reissmann, D. R. (2014). Confirmatory factor analysis of the Oral Health Impact Profile. *Journal of oral rehabilitation*, *41*(9), 644–652. https://doi.org/10.1111/joor.12191

[36] National Quality Forum. Glossary of Terms. Accessed on: http://www.qualityforum.org/Measuring_Performance/Measuring_Performance.aspx

[37] National Academy of Medicine. Action Collaborative on Clinician Well-being and Resilience. Accessed from: https://nam.edu/initiatives/clinician-resilience-and-well-being/ Accessed September 23, 2021

performance of individual clinicians, clinical delivery teams, delivery organizations, or health insurance plans in the provision of care to their patients or enrollees. These measures are not supported by evidence demonstrating that they indicate better or worse care.	enrollment in a health plan or through use of clinical services.
	Management: Management of care is a feature of a health care organization related to the administration and oversight of facilities, organizations, teams, professionals, and staff that deliver health services to individuals or populations. Management measures assess administrative activities that are important to health care but are not part of the direct interaction between individual patients and health care professionals.
	Use of Services: Use of services is the provision of a service to, on behalf of, or by a group of persons identified by enrollment in a health plan or through use of clinical services.
	Cost: Costs of care are the monetary or resource units expended by a health care organization or clinician to deliver health care to individuals or populations. Cost measures are computed from data in monetary or resource units.
Efficiency Measures	**Efficiency:** Measures that may be used to assess efficiency directly (e.g., by comparing a measure of quality to a measure of resource use) or indirectly (e.g., by measuring the frequency with which population health processes are implemented that have been demonstrated by evidence to be efficient).

APPENDIX E: COMMONLY USED ACRONYMS

CAHPS: Consumer Assessment of Healthcare Providers & Systems is a public-private initiative to develop standardized surveys of patients' experiences with ambulatory and facility-level care. (AHRQ)

CDT: Current Dental Terminology is the ADA reference manual that contains the Code on Dental Procedures and Nomenclature and other information pertinent to patient record keeping and claim preparation by a dental office; (ADA)

CPT: Current Procedural Terminology is a listing of descriptive terms and identifying codes developed by the American Medical Association (AMA) for reporting practitioner services and procedures to medical plans and Medicare. (ADA)

HEDIS: Healthcare Effectiveness Data and Information Set is a tool used by more than 90 percent of America's health plans to measure performance on important dimensions of care and service. This measure set was developed and is maintained by NCQA. (NCQA)

HIPAA: Health Insurance Portability and Accountability Act of 1996 is a federal law intended to improve the portability of health insurance and simplify healthcare administration. HIPAA sets standards for electronic transmission of claims-related information and for ensuring the security and privacy of all individually identifiable health information. (HRSA)

HIT: Health Information Technology is the application of information processing involving both computer hardware and software that deals with the storage, retrieval, sharing, and use of healthcare information, data, and knowledge for communication and decision making. (HRSA)

ICD-10: International Classification of Disease- 10th Revision is an international disease classification system developed by the World Health Organization (WHO) that provides a detailed description of known diseases and injuries. The classification system is used worldwide for morbidity and mortality statistics, reimbursement systems, and automated decision support in medicine. (HRSA)

SNODENT: Systematized Nomenclature of Dentistry is a tool for capturing detailed diagnostic information in a dental EHR environment; clinical findings, anatomic sites, morphologies, etiologies, and diagnoses are encoded and organized in hierarchies for purposes of data capture, aggregation, and analysis designed to support quality assessment, quality improvement, evidence based practices, public health, and patient safety

APPENDIX F: ACRONYMS FOR ORGANIZATIONS

ACHS: The Australian Council on Healthcare Standards is a private, non-profit organization that is the leading accreditation body in Australia. It provides quality assessment for healthcare organizations such as hospitals, ambulatory care clinics, specialty services, and other provider organizations.

AHRQ: Agency for Healthcare Research & Quality is a US federal agency charged with improving the quality, safety, efficiency, and effectiveness of healthcare for all Americans.

ASQ: American Society for Quality is the global quality leader that offers memberships, tools, training, certifications, books, and more on topics around quality assurance and improvement.

CAHMI: Child and Adolescent Health Measurement Initiative is a group based in the Oregon Health and Science University Department of Pediatrics, dedicated to advancing consumer-centered healthcare for children, youth and families.

CMS: Centers for Medicare and Medicaid Services is a US federal agency which administers Medicare, Medicaid, and the Children's Health Insurance Program.

HRSA: Health Resources and Services Administration is the primary US federal agency for improving access to healthcare services for people who are uninsured, isolated, or medically vulnerable.

HMD: The Health and Medicine Division (HMD), previously known as the Institute of Medicine (IOM), is a division of the National Academies of Sciences, Engineering, and Medicine. HMD's aim is to help those in government and the private sector make informed health decisions by providing evidence upon which they can rely.

MCHB: Maternal and Child Health Bureau provides a foundation for ensuring the health of the Nation's mothers, women, children and youth, including children and youth with special healthcare needs, and their families.

NCQA: National Committee on Quality Assurance is a non-profit organization dedicated to improving healthcare quality, and a central figure in driving improvement throughout the healthcare system, helping to elevate the issue of healthcare quality to the top of the national agenda. NCQA accredits and certifies a wide range of healthcare organizations.

NQF: National Quality Forum promotes change through development and implementation of a national strategy for healthcare quality measurement and reporting. It builds consensus on national priorities and goals for performance improvement and working in partnerships to achieve them; endorses national consensus standards for measuring and publicly reporting on performance; and promotes the attainment of national goals through education and outreach programs.

Acknowledgement

The DQA expresses its appreciation to the following individuals who belong to the Education Committee and helped assemble this Guidebook:

- Marie Schweinebraten, DMD, Periodontist; Chair, DQA Education Committee
- Christopher Bulnes, DDS, General Practitioner
- Paul Casamassimo, DDS, MS, Professor Emeritus, Pediatric Dentistry, The Ohio State College of Dentistry; 2022 Chair of the DQA
- Ashley Casey, BSN, MBA, MPH, Co-Founder, Smiles to Go, LLC
- Ralph Cooley, DDS, AGD Fellow, Associate Professor and Assistant Dean for Admissions and Student Services, UTHealth Houston School of Dentistry; 2022 Chair-Elect of the DQA
- Ronald Hunt, DDS, Professor Emeritus at the Midwestern University College of Dental Medicine - Arizona
- Thomas Meyers, Vice President, America's Health Insurance Plans
- Jesley Ruff, DDS, MPH
- Linda Vidone, DMD, Periodontist, Vice President, Delta Dental of Massachusetts

The Committee was assisted by:

- Krishna Aravamudhan, BDS, MS, vice-president, Practice Institute, American Dental Association
- Erica A-M Colangelo, MPH, manager, Dental Quality Alliance
- Lauren Kirk, BA, manager, Clinical Data Registry, American Dental Association
- Sean Layman, coordinator, Dental Quality Alliance & Clinical Data Registry
- Diptee Ojha, BDS, MBA, PhD, director, Dental Quality Alliance & Clinical Data Registry, American Dental Association

The Committee expresses its sincere appreciation to all stakeholders within the DQA.