

Dental Quality Alliance (DQA): improving Patient Care and Safety in Public Oral Health

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Abstract: *The practice of dentistry in private practice and in the public sector faces important challenges as science and technology are constantly renewed. The interactions between the dentist and the patient attract the discussion of addressing the issue of quality. Concerns about health care quality, patient safety, and the cost of timely dental care have caused the concept of quality to take center stage. The protagonism of quality in dentistry is slow, but constant, and for that reason, it is important to generate discussion and share information about instruments such as the DQA to ensure a culture of constant improvement.*

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The health professions have made considerable efforts to improve the quality of their care and services, thus responding to the growing public demand for improved safety, higher quality and more transparency. This includes the concern of dentists, who wish to improve the outcomes of their care in the interest of both their patients and public health.

Therefore, talking about quality implies the knowledge of some needs, the presence of a reference model with which to compare our reality and achieve, through this reality, the satisfaction of the needs and expectations of the client. Another element that must be added is that the quality of a product or service is not predetermined by fate, but can be programmed, measured and improved. Consequently, quality can be managed.^{1,2}

Total quality control and continuous quality improvement as a unit has been the objective of numerous contributions by key quality figures, such as Joseph Juran with the Quality Trilogy Diagram, Deming with the development of PHVA, the Fourteen Points and Seven Diseases of Management, Ishikawa (1915-1989) with the Quality Circles and the Cause and Effect Diagram that bears his name, among other quality-oriented management tools.³ These and other contributions have consolidated a body of properly structured theories, methods and tools that form the basis of how quality is managed in contemporary conditions.⁴

Several of the basic concepts about continuous improvement have a particular meaning for health institutions and systems. To situate quality not as an independent activity, but as an inseparable part of the work of generators, supervisors, health professionals and technicians, and above all extending it to patients, families and the community.

The inequity in Dental treatments that are not offered to the population in public services are offered in private services, but to access them requires a high cost investment, so it is affordable only for those who can afford it. This makes dental care discriminatory, that is, it is different for each social group depending on their purchasing power.⁵

Nonetheless the inequity in the access to dental services that contribute to the deterioration of the population's living conditions, access to real-time information on the progress of science and service competence has become of high interest to patients. Patients concerns and quality movement have been slower to reach dentistry, but they have arrived, hence it is important that the dental profession define quality in dentistry and lead the development of appropriate performance measures. The predominant clinical-biological approach in dental care that delimits as object of work the dental pieces prevents to know and to transform the true causes of the problem health-mouth disease and to produce the necessary changes in the epidemiological profile of the population.

I. Quality in Dentistry

The quality of care in dental services incorporates the analysis of user perception within the evaluation of health schemes. It is important to know the relationship between patient satisfaction and the quality of dental care offered.

The use of new technologies in the most innovative dental clinics and the use of high quality materials, contributes to the fact that dental treatments are increasingly personalized, obtaining better results, while responding more efficiently to the aesthetic and comfort expectations of the patient.⁶

A healthy mouth says a lot about the general health of the human being, and its impaired status also affects to their emotional and mental health. Access to expert professionals in each branch of dentistry, who can help fulfill this objective, has fortunately ceased to be an aspirational topic to become a reality accessible to anyone.

The Institute of Medicine (IOM) defines health care quality as "the degree to which health care services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge." When applying the IOM definition quality of care to dentistry, the desired health outcome is improved oral health.⁷ The World Health Organization (WHO) defines oral health as a "state of being free from chronic mouth and facial pain, oral and throat cancer, oral sores, birth defects such as cleft lip and palate, periodontal (gum) disease, tooth decay and tooth loss, and other diseases and disorders that affect the oral cavity".^{8,9} To comply with these definitions of improving the oral health of the community, dentistry must evaluate its current practices of delivering care to ensure quality care is being provided.

The terms "quality measures" and "performance measurements" have been largely elusive in dentistry. The role of a dental and oral health measure developer has long been occupied by entities that are not traditionally from the dental industry. These activities within dentistry, 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 engaging in developing measures for the purpose of program management.^{7,10}

In 2008, the federal government, through CMS, proposed to the American Dental Association the idea of establishing a Dental Quality Alliance (DQA) to lead effort in quality measurement development in dentistry. The mission of the group is to advance performance measurement as a means to improve oral health, patient care, and safety through a consensus-building process.⁷

DQA: Measuring the Quality in Dentistry

The establishment of the DQA provided an opportunity to define what quality means in dentistry and create appropriate measures.

In dental practice, it is important to mention that both the need for information (reason for the consultation) and the need treatment (need for treatment identified by the clinician) contribute to a fair assessment of patient satisfaction. The dental health services must respond to the needs of individuals, therefore, the expectations that patients have in terms of health service received, as well as satisfaction, are conditions of a multifactorial nature that are in charge of the staff providing the service and the conditions of the establishment that provides the dental service.

In numerous researches about the perception of quality and satisfaction of patients who received dental care, they express that the treatment received by professionals is reflected in the interest of listening to the needs that patients have, in the accompaniment of the disease, solidarity, guidance, support and desire to treat them.

The DQA has clear objectives, which include:

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 improvements.
3. To foster and support professional accountability, transparency, and value in oral health care through the development, implementation, and evaluation of performance measurement.

To date, the DQA has developed and approved 14 pediatric measures targeted at addressing dental caries in children, along with prevention and disease management. Of these pediatric measures, 12 are claims administrative quality measures that have been developed with the intent to evaluate state and federal programs such as the Medicaid and State Children Health Insurance Program (CHIP) and dental plans.¹¹

Also, the DQA has developed two electronic measures that require electronic health records data for computation. In collaboration with the University of Florida Institute for Child Health Policy, in testing and validating each of these measures using administrative enrollment and claims data before issuing final approval. At each step in the testing process comment from the dental community play an important role in moving the measure forward. These measures are not meant to serve as standards of care or guidelines for treatment, but rather as a starting point by giving a broad description of what should be measured when evaluating quality of care.^{8,12}

What to expect in Quality Measurement

Nowadays it is evident the need to generate instruments to be used in the various processes in the different areas of society, which are fundamental in the modern world, where a strong influence of globalization can be observed, and from which the field of dentistry is not exempt.

In this context, where the user plays a primary role in the functioning of the system, it is evident that there is a lack of measurement methods that clearly establish the current situation in health quality, not only of private practice but also of public establishments that offer dental services to the community, limiting the improvement of the service provided to both the patient and the dental professional. The need to measure is rooted in the basic responsibility to assure that the public receives optimal benefits from available knowledge and effective care.

The minimum prerequisite for a quality measure is that it is based on scientific evidence, accepted by experts in the field and measured using reliable data sources. A reliable measure should be free of measurement errors. To the maximum extent possible, variation in the quality measure should be due to actual differences in the respective population. Another important aspect is the correct validity of a measure; that is, the measure is underpinned by scientific evidence and adequately reflects what it intends to a measure.¹¹

The acceptance of a quality measure by experts in the field is necessary to minimize disagreement of the evidence. To use measures in practice, unambiguous descriptions of numerators and denominators as well as instructions for use are imperative.

There is a need for all areas of the oral health care community to stay abreast of changes in dental quality measurement and the impact of the profession of dentistry. Everyone in the dental profession must understand quality measurement and its role in the dental delivery system. Awareness is the first step toward leading anything new. The Dental Quality Alliance is an organization of 35 stakeholders from across the oral health community, including members from appropriate ADA councils, all dental specialty organizations, the Academy of General Dentistry, the American Dental Hygiene Association, CMS, public and private payer organizations, the National Association of Dental Plans, a public member and other sponsors. This alliance will continue creating educational opportunities for members of its many stakeholder organizations and others throughout the dental profession, however, the most important contribution should be from Dentists from all different backgrounds and/or professional and academic purposes. Dentist from all generations are aimed to improve in quality, provide proper information and achieve the Triple Aim goals of improved oral health, a better dental patient experience, and more cost-effective care. The DQA has developed a guidebook or those seeking more in-depth information.

Communication is an activity that is useless if it is not personalized, that is why it is important to properly study the needs of each organization and its specific circumstances, because communication is a custom-made suit. It is essential that the internal administration of health institutions and organizations that provide services to communication, improve their service areas with innovative strategies that improve the quality of care in their external and internal users.

Health management should be viewed and integrated from a systemic perspective. It is a dynamic process, of continuous improvement, with objectives that are reformulated for each evaluation of the results achieved.⁴ The majority of dental research is focused on aspects of clinical and operational practice and not from the perspective of management or administration. It is important to make dental professionals aware of having a broad, multifunctional vision focused on the future.

The role of any health professional is threefold: to provide the best care to patients individually, to care for the community in which they work and use the resources they have in the most effective way.

References

- [1]. Project Team Oral Care. Conclusions and recommendations from a pilot study focusing on outcome indicators for oral health care (Conclusiesenaanbevelingenuiteen pilot studienaaruikomstindicatoren in de mondzorg). May 2015. (Dutch)
- [2]. EGOHID. Health Surveillance in Europe. A selection of essential oral health indicators. Recommended by European Global Oral Health Indicators Development Project (Catalogue); 2005.
- [3]. Carrs, S et al. Roles, relationships, perils and values: development of a pathway between practice development and evaluation research. *Rev Quality in Primary Care*. 2008; 16: 157-64. Pag. 2.
- [4]. Álvarez, M et al. Guía de diseño y mejora de procesos asistenciales mejorados. 2nd. Edition Spain: Junta de Andalucía. Consejería de Salud 2009; Pag. 13.
- [5]. Robert Wood Johnson Foundation. The state of health care quality in America. Available from: <http://www.rwjf.org/contact/dam/files/legacy-files/article-files/2/currentstateofquality.pdf>. Accessed 28 Jun 2016
- [6]. Hunt RJ, Tomar SL, Catalanotto FA, et al. Measuring quality of dental care: caries prevention services for children. *J Am Dent Assoc*. 2015;146(8):581-591.
- [7]. Dental Quality Alliance (DQA). Quality measurement in dentistry: a guidebook. American Dental Association; 2016. http://www.ada.org/media/ADA/Science%20and%20Research/Files/DQA_2016_Quality_Measurement_in_Dentistry_Guidebook. Accessed Jul 3, 2017.
- [8]. Institute of Medicine (IOM), Committee on an oral health initiative. *Advancing Oral Health in America*. Washington, DC: National Academies Press; 2011. <https://www.hrsa.gov/sites/default/files/publichealth/clinical/oralhealth/advancingoralhealth.pdf> Accessed Jan 2, 2018.

- [9]. World Health Organization. Health Topics:oral health. Available from: http://www.who.int/topics/oral_health/en/. Accessed 28 Jun 2016.
- [10]. Hunt RJ, Aravamudhan K. The quality movement in oral health care: Who will lead? JADA. 2014; 145(5):421-423
- [11]. Righolt, A.J., Sidorenkov, G., Faggion, C. M., Listl, S., &Duijster, D (2019). Quality measures for dental care: A systematic review. Community Dentistry and Oral Epidemiology, 47(1), 12-23.
- [12]. Herndon JB, Crall JJ, Aravamudhan K, Catalanotto FA, Huang I, Rudner N, Tomar SL, Sheenkman EA. Developing and testing pediatric oral health-care quality measures. J Public Health Dent. 2015;75(3):191-201

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