

# Dental Governance and the Saudi Vision 2030: A Narrative Review

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## Keywords

Clinical governance · Healthcare systems · Dental healthcare · Vision 2030 · Saudi Arabia

## Abstract

**Background:** Improving the quality of services and facilitating access to healthcare services are crucial for improving the human quality of life. Hence, clinical governance plays a major role in improving quality of the health services, including dentistry. Governance aims to always improve the care provided in dentistry. Dental governance is based on seven pillars; evidence-based practice, clinical auditing and calibration, risk management, continuing medical education, involving patient and community in healthcare improvement, human resource management, and information management. It is the responsibility of dentists and other relevant practitioners to enhance governance within dental healthcare systems to provide safe and effective care to patients who undoubtedly deserve it. **Summary:** Governance includes many aspects and has multiple facets, and we introduced its basic principles. The aim of this article was to review the seven pillars of dental governance with the implication of the influence of the Saudi Vision 2030 on improving

dental governance in Saudi Arabia. **Key Messages:** The Saudi Vision 2030 is leading the healthcare transformation, including dental care, through a set of health governance strategies by the governmental organizations in Saudi Arabia, which comply with the seven pillars of dental governance.

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## Introduction

Patient satisfaction is crucial in evaluating the overall quality of healthcare and thus the improvement of care services [1]. Hence, healthcare quality should be a core value of healthcare institutions worldwide [2].

Nowadays, healthcare professionals conduct tremendous measures to enhance their quality of care, in response to the public's demand for increased safety, better quality, and greater transparency. Excellence in dentistry is an essential part of developing dental professionals, patients, and other partners in developing and maintaining objectives and procedures to attain maximum outcomes [3]. Patient satisfaction is described as "a person's sense of joy or disappointment as a result of comparing a prod-

uct's perceived performance or outcome to his or her expectations [4].” Patient satisfaction with the healthcare experience has become a top priority for the US Centers for Medicare and Medicaid Services [5]. Patient satisfaction is not only based on treatment quality but also on other factors such as facilities, staff behavior, and basic environmental needs [6].

#### *Health System Governance*

As per the World Health Organization (WHO), health system governance describes the standards and conventions that influence roles and responsibilities, motives, and exchanges in the health sector. Authorities have a significant influence in establishing governance structures in the health sector. They operate using various legislative, policy, planning, and monitoring tools [7].

To improve patient satisfaction with the clinical care services, the National Health System in the UK (NHS) developed the clinical governance framework. This is how NHS institutions are held responsible for consistently improving the quality of service and ensuring high levels of care by fostering excellence [8].

#### *Importance of Clinical Governance on Health Outcomes*

Clinical governance guarantees that patients get high-quality healthcare and holds service providers responsible for therapeutic practice that falls short of such criteria. Efficient medical governance benefits doctors, nurses, and medical/nursing students. Since competing clinical approaches and practices are continually re-examined, clinical governance fosters an academic culture in which healthcare practitioners are driven to improve their decision-making and health results [8].

In the Saudi Vision 2030, healthcare has been described as an essential tool in creating a vibrant society. The document highlights the need for a healthcare sector “that promotes competition and transparency among providers [9].”

As a component of the Saudi Vision 2030, the health system is experiencing significant transformation leadership restructuring to provide significant quality improvement, effectiveness, and safety. These initiatives are organized around six main categories, 15 specific goals, and 22 strategic priorities aimed at transforming the Kingdom of Saudi Arabia's health sector by ensuring sustainable financing, adequate access, and consistent improvement in the quality of services provided to citizens and residents of the Kingdom [10].

#### *Pillars of Dental Governance*

Dental governance is based on seven pillars: evidence-based practice, clinical auditing and calibration, risk management, continuing medical education (CME), involving patient and community in healthcare improvement, human resource management, and information management [11].

#### **Evidence-Based Dentistry**

According to the American Dental Association (ADA), evidence-based practice is defined as the approach to providing oral and dental care through the judicious combination of the recent scientific research findings and the individual patient's condition and disease history, including the dentist's experiences and the needs and preferences of the patient [12]. The ultimate purpose of evidence-based dentistry (EBD) is to improve the standard of oral healthcare by bringing together dentists' experience, patients' values, and the best-available scientific data. The EBD rendered it necessary to ensure that dental physicians have access to high-quality, authentic, and trustworthy evidence to assist their dental practice decisions [13].

According to the Saudi Ministry of Health (MOH) guidelines, evidence-based practice can be divided into two levels: (1) individual level: each patient should be treated as what suits their condition. The treatment of oral trauma and injuries exemplifies this, as each injury is different. (2) Organization level: with practice guides based on the recommendations of MOH or scientific societies. This is exemplified by how to deal with patients considering the COVID-19 pandemic [14].

According to the ADA, EBD has three primary components: applicable scientific evidence, patient requirements and preferences, and dentists' clinical skills [15]. Hence, the dentist should determine therapeutic decisions for each patient individually, integrating scientific evidence with the dentist's practical knowledge. Furthermore, beliefs, values, patient preferences, and the social background of the local area should all be considered [12].

For example, efficient clinical care should be based on high-quality research evidence and include utilizing guidelines, standards, and quality improvement. Guidelines and standards are not meant to replace skilled clinical decision-making applied by individual clinicians in the best interests of their patients, but they are meant to help [2].

## Clinical Auditing and Calibration

Clinical audit is defined as “the systematic review of activity in practice against standards, in order to improve patient care [16].” The goal of auditing is to guarantee that clinical practice is constantly reviewed and that any shortcomings concerning established standards of care are addressed [17].

Types of audits in the dental settings are standards-based audit, adverse events screening and critical incident monitoring, and peer-review. The standards-based audit can be obtained by gathering data on current practices and comparing them to approved guidelines. The adverse events screening and critical incident monitoring refer to the assessment of occurrences with unpredictable outcomes, thus summarizing the dental team’s performance and knowledge for future use. Finally, peer review is a tool for preventing poor practice and maintaining good practice [16]. Examples of clinical audits in dental clinics are infection prevention and control, repeated radiographs, the patient’s exposure to unnecessary doses of X-rays, and service accessibility to ensure that the service is equally provided to all persons in the community [16]. Clinical audits are a multistep process: (1) define an issue, such as patients in accident and emergency waiting so long; (2) establish guidelines, such as the recommendation that 95% of patients wait no more than 4 h; (3) gather statistics, such as tracking how long patients wait over a week (and discovering that 92% of patients wait for less than 4 h); (4) examine areas for improvement, such as 92% vs. 95% aim; (5) bring about change, such as an action plan to assist you in meeting your goals; and (6) reaudit, e.g., by repeating steps 1–5 [18].

In Saudi Arabia, audit standards are based on the recommendations of the MOH, on the recent research literature, or as part of national standards such as those of the Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI). CBAHI’s main purpose is to establish healthcare quality and patient safety regulations by which all healthcare institutions are assessed for proof of compliance [19]. The CBAHI’s standards are divided into three categories, based on the issue at hand: (1) the inputs to the system are addressed by structural requirements. (2) Clinical and management activities or intervention strategies conducted throughout the hospital in the patient care or the management of the hospital or its workforce are addressed by activity and methodology standards (procedural), and (3) outcome standards look at evaluating the benefits of an intervention and whether the anticipated aim of the activity was accomplished [19].

In late 2013, national accreditation by CBAHI on all healthcare facilities became mandatory. In addition, the MOH is mandating CBAHI accreditation as a prerequisite for renewal of the operating license; a step toward encouraging more participation in this ambitious national initiative. Dental centers are audited as a component of the Ambulatory Healthcare Centers program but will be audited through a separate accreditation program as one of the “Accreditation Programs Under Development [19].” The CBAHI standards for dental services encompass competencies of the staff, patient clinical evaluation, documenting in medical records, and infection management and prevention, as well as dental laboratory safety [20].

## Risk Management

The nature of providing dental care to patients is risky. This means the patient may experience an adverse event [21].

When a treatment error occurs, it is critical to notify the patient and document the incident in a medical error record for later analysis and determination of the cause to avoid it in the future. The British Orthodontic Society, e.g., has a page for submitting reports on treatment errors to disseminate and publicize cases for the benefit of the dental practitioner community [22].

In the kingdom of Saudi Arabia, multiple healthcare sectors (governmental, private, military, university hospitals, and medical cities) exist [23]. In January 2016, CBAHI standards included that all accredited hospitals in Saudi Arabia should (a) develop and maintain a risk management program which addresses potential managerial and clinical risks; (b) the hospital has an incident management mechanism that supports reporting of incidents adverse events and near misses through forms issued by CBAHI such as the Sentinel Event Reporting Form; (c) the hospital should have a process to handle sentinel events [20].

Saudi Arabia established the Saudi Patient Safety Center in 2017, which is the first of its kind in the whole region and fulfills one initiative of the National Transformation Vision 2030. The center’s mandate is to galvanize healthcare regulators, payers, providers, patients, families, and communities around patient safety to provide healthcare services free from harm [23].

The Saudi Patient Safety Center published the Saudi Patient Safety Taxonomy in 2018, through collaborative national efforts between expertises from different healthcare sectors representatives led by the MOH and in col-

laboration with health matrix in the Kingdom [23]. It is a comprehensive standard classification of patient safety events providing a structure for organizing information for many purposes, including national statistics, descriptive studies, and evaluative research. The Saudi Patient Safety Taxonomy is in line with Saudi Arabia's 2030 Vision of the health sector in the Kingdom, and it is in line with the National Transformation Program 2020 objectives for the health sector in the Kingdom.

The Saudi Patient Safety Center specified several categories of events to be reported, such as wrong diagnosis or treatment for the wrong patient, procedural errors, infection control related issues, laboratory-related issues, patient care management, medication errors, communication issues, radiation treatment, sentinel events, occupational health, and medical imaging and diagnostic procedure [23]. Risk management aims to identify the inappropriateness within the patient care environment, understand the risk factors, establish a blame-free incident reporting culture, learn from the reported incidents, and have a system to reduce risk and therefore reduce incidents [21]. An example of a risk assessment tool is the WHO surgical safety checklist [24].

To reduce risk, it has been recommended to adhere to the approved guidelines, incident reporting, clinical auditing, and regular team meetings should be held so staff are informed of "best practice" guidelines and are updated with the approved guidelines. Additionally, the dentists should also communicate with local infection control rules [11].

### **Continuing Medical Education**

Dentists play a key role in ensuring their patients' health status. Thereby, dentists should constantly improve their knowledge about prevention, early detection, and technical advances in devices, technologies, and materials, concerning improvements and their patients' overall health.

CME must cover medical advances from all areas of dentistry, focusing on health implementations such as promoting health, risk factor containment, early screening, and referring patients when indicated. The dental education system should also support regular review or surveillance of the most common conditions seen within clinical settings.

Lifelong learning is required for continued professional conduct and expertise. Thus, the existence of CME in dentistry is critical for dental professionals [25].

In Saudi Arabia, in 1992, the Saudi Commission for Health Specialties (SCFHS) was established by Royal Decree No. M/2, as an independent scientific professional body with a legal identity, with its headquarters in Riyadh. The main SCFHS goal is "being a healthy society through qualified health practitioners." The SCFHS oversees direct supervision and assessing educational programs and authentication protocols and rules for healthcare professionals' practice. The SCFHS began operating via proficient supervision, executive, and qualified professional boards and committees. The CME is among the primary methods whereby the SCFHS operates. As a result, the SCFHS requires all healthcare providers to fulfill a certain number of CME hours annually. This is mandatory for licensing and license renewal to practice healthcare delivery in the Kingdom. The required number of CME hours for dentists is 60 h every 2 years; the duration of professional registration validity. Furthermore, the SCFHS offers online professional training for dentists of various specialties, such as Dental Assistant Syllabus 2020 [26].

Nowadays, the SCFHS has adopted 12 programs targeting the different dental healthcare providers out of a total of 168 programs for postgraduates of all healthcare specialties in the Kingdom. These programs aim to enhance professionalism, improve and promote skills, and empower scientific concepts and methods in various health-related disciplines [26]. In addition, the CBAHI standards stated that the head and staff members in the dental department in each healthcare facility should be a dentist qualified by education, training, and experience as a requirement for gaining accreditation and its renewal [19].

### **Involving the Patient and Community in Healthcare Improvement (Public Involvement)**

It is essential in dental clinical care to actively engage and listen to health consumers to respond effectively to their needs and improve their perspectives. Patient feedback surveys and publicly available complaints can help with this. So, dental authorities can regularly update guidelines and regulations to encourage a better quality assurance system, better patient satisfaction, and inspire patients to seek dental care [11].

The MOH launched the Patient Experience Measurement Program in 2018 as one of the national transformation initiatives to enhance patient experience and meet distinctive healthcare. The program aims to allow pa-



tients and their families to participate in quality improvement by assessing their satisfaction with various healthcare services provided by MOH facilities using surveys designed for each visit separately. As a result, the relevant data from the patient's evaluation and perception are especially useful for identifying gaps for potential progress and enhancement [27].

The Patient Experience Measurement Program results are classified into several categories, e.g., measuring quality improvement and patient satisfaction and establishing a national standard for patient experience levels. These results also include comparing the level of services provided by MOH facilities compared to the counterparts in the Gulf Cooperation Council and worldwide, besides recognizing the priority areas and considerations that contribute to a better patient experience at the MOHs facilities [27]. The rating reports concerning patient experience are published semiannually in the Arabic language only through the electronic website of the MOH. The latest report was published in December 2021 with an overall result of 78.18% of patients satisfied with healthcare services provided for them [27].

### Human Resource Management

It is no longer compatible with modern healthcare for any health professional to ignore continuing education after certification. The experience acquired during undergraduate dental/medical training will rapidly become outdated and forgotten. Continuing professional development of healthcare providers is the organization's commitment and the professional responsibility of healthcare providers to keep up to date with their skill and knowledge advancement on new devices or equipment [28].

The delivery of dental medical services is a collaborative effort depending on a uniform group. This signifies that dental system personnel; both health and non-health practitioners require proper training, inspiration, and a willingness to provide the best care. For instance, reception staff must attend classes in effective communication, which is essential because dentists who receive continuing professional education hours give their patients an accountable care perspective [21].

Under the Saudi Vision 2030, the government has developed plenty of strategies, policies, and milestones to examine the efficacy of all stakeholders involved in healthcare Human Resource Development initiatives. It has established strategic goals, key performance indicators, and

key performance targets, which would provide a positive picture of the health sector [29].

The government has taken several steps to almost drastically increase Saudi employment levels in the healthcare field. The National Transformation Program 2020 emphasizes healthcare training and coaching, career management, and talent acquisition [29].

One of the achievements already gained by the Saudi Vision 2030 is increasing the number of health professionals in the Kingdom by over 65% from 2016 to 2020 [30]. This increase in the numbers of healthcare providers includes dental specialties e.g., the number of licensed dentists working in the Kingdom as of December 2016 was 16,887 dentists [31]. However, in 2020, this number increased to 19,622 dentists, with the density of dentists (per 10,000 population) 2010–2019 = 5.64 [32].

To fulfill the aim of Vision 2030, the SCFHS launched the Health Academy and the Health Transformation Program initiative, aiming to enhance the standards of the healthcare system in the Kingdom via many programs in the national health sector. These programs improve the effectiveness of health providers, such as dentists (e.g., Advanced Education in General Dentistry Diploma, Saudi Board of Family Dentistry, Saudi Board of Pediatric Dentistry, Oral Medicine & Pathology and Saudi Fellowship in Implant Dentistry for postgraduates). These programs aim to enhance the HTN program through job training to enable participation in the local health industry, improving healthcare practitioners' knowledge and effectiveness to support the health transformation goals. Additionally, these programs foster a motivating work environment for the national development of competencies and abilities and achieve excellence in governance and assess professional health training levels [26].

### Information Management

Digital technology is continuously improving and is gaining more importance in daily healthcare practice, including dentistry. This creates challenges and issues related to information gathering and management, involving legal and ethical obligations. Rapidly developing digital technology necessitates periodic and continuous review to keep these developments in a manner that preserves the patient's rights and benefits.

Numerous public regulations exist worldwide, including the General Data Protection Regulation under European Union legislation, which states that any processing of personal data must be legitimate and fair. This should

be clear to natural people whose personal information is collected, utilized, consulted, and otherwise processed and to what extent the personal data are being or will be treated. Besides the need for data protection and privacy, the General Data Protection Regulation demands informed consent that should encompass all processing activities carried out for the same objective or reasons before utilizing any electronic information for a patient [33].

Purchasing a dependable server system with antiviral software will protect organizational, clinical, and lab data. A regular backup is required. Due to the vast number of patients at major government dentistry centers, prioritizing cases would increase quality and patient satisfaction. So, sufficient financial resources should be focused on improving health and well-being [28].

In line with Saudi Arabia's Vision 2030, the National Data Management Office issued the National Data Governance Interim Regulations in 2020, which apply to all organizations in the Kingdom that handle personal information, all or portion, and all enterprises outside the Kingdom that process personal data related to persons living in the Kingdom using any means, including online personal data processing. In addition, in 2021, the National Data Management Office established the Data Management and Personal Data Protection Standard [34]. From its side, the MOH issued the patient rights policy in public and private sectors' hospitals which includes the patient's right of keeping his personal and health data confidential [35].

Also, CBAHI mandates certain standards to be fulfilled in every healthcare facility submitting to get accreditation concerning medical records and patient information e.g., (a) hospital leaders should ensure the conduction of needs assessment related to information management in the hospital, (b) the hospital maintains an effective information management system to serve its in-

ternal and external users and stakeholders, and (c) data collected are transformed into information that is used to support patient care and management decisions [19].

## Conclusions

The achievement of effective healthcare requires that the seven pillars be interconnected and that none can perform on their own without the synergy of the rest of the pillars. To foster that culture, there should be effective leadership that spreads and promotes the term "governance" at all levels of the organization. Saudi Vision 2030 provides the maximum supportive culture for the healthcare system development. One of the priorities is "efficient and high-quality healthcare to enhance the standard and quality of healthcare services" that aims to provide a healthcare sector that promotes competition and transparency among providers. Ultimately, this will enhance the capability, efficiency, productivity of care, and treatment and increase the options available to the citizens and residents in the Kingdom.

## Conflict of Interest Statement

The authors have no conflicts of interest to declare.

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## Author Contributions

Mohammed S. Aldossary contributed to literature search, content drafting, writing, critical revision, and proofreading this review.

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