

## Quality of Health Care Provision: An Overview

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### Abstract

*Quality healthcare provision is a critical aspect of healthcare systems worldwide, involving the delivery of medical services that meet established standards of excellence and effectiveness. This abstract provides an overview of the key dimensions of quality healthcare, including safety, effectiveness, patient-centered care, timeliness, efficiency, equity, and integration. These dimensions ensure that healthcare services are delivered without harm, based on evidence, and responsive to individual patient needs. However, challenges such as resource constraints, data collection, and disparities in care pose obstacles to achieving quality healthcare provision. Continuous quality improvement initiatives, evidence-based practices, and patient involvement are essential for addressing these challenges and fostering progress. By prioritizing quality in healthcare, providers can enhance patient outcomes, satisfaction, and trust, ultimately contributing to the overall health and well-being of populations.*

**Keywords:** *Quality, health care, provision, quality health care.*

### Introduction

Quality management systems in compliance with the ISO 9000 requirements of standards are currently the most widespread management systems [1] in health care. Since 1993, these systems gradually entered into all spheres of life. Public hospitals as entities of social trust, where the quality-of-service provision processes has both educational and integrating role in terms of health behaviors [2,3].

From this perspective, we can talk about special meaning of a complex quality of work in

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medical environment. It allows the realization of scenarios for providing hospital services focusing on the increase of health values of stakeholders. Quality of service provision processes and investment in the development of medical environment's competences is a determinant of entities' successes within the framework of public hospitals; depending on utility components – user components, standards, procedures, guidelines, quality of hospital equipment and medication.

According to Krukowska-Miler [4], the quality of healthcare services is dependent on the realization of expectations in areas of accessibility and proportionality in relation to the pro-health needs of the prosumer, social acceptance and the economization of the health service. In contrast, the common denominator of the definition of quality and marketing strategy is to determine the ability to satisfy health-related expectations [5].

Furthermore, a determinant of complex quality and timeliness of service provision process is the possession of adequate resources. Implementation of a quality management system compliant with ISO 9001:2008 leads to the development of an intelligent organization. In accordance with the aim of the study, an important issue is to identify determinant for the quality of healthcare services.

For this purpose, the proposed approach aims at the analysis and evaluation of the intellectual capital's quality in public hospitals. The adopted concept is similar to the CAF method (The Common Assessment Framework) and management principles resulting from the standard requirements of ISO 9001:2008.

In accordance to the information listed above, the quality of management of provided services in public hospitals depends on mutual relations, engagement of the management staff, awareness and competence of the medical environment. For the purpose of discussion, it was assumed that individual human capital is understood as specific features of a doctor – interdisciplinary team members with a certain value expressed by knowledge, skills and abilities.

#### Quality definition

Quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with evidence-based professional knowledge. This definition of quality-of-care spans promotion, prevention, treatment, rehabilitation and palliation, and implies that quality of care can be measured and continuously improved through the provision of evidence-based care that takes into consideration the needs and preferences of service users – patients, families and communities.

#### Quality management in public hospitals – health care

Defining "quality in public hospitals" is challenging due to its multifaceted nature. Key players in managing quality in public healthcare include hospital administration, medical professionals, the National Health Fund, and government entities such as the Ministry of Health. These stakeholders play a pivotal role in overseeing quality control, ensuring adherence to standards, and fostering an environment conducive to continuous improvement in healthcare delivery. Adopting ISO 9000 standards, Total Quality Management (TQM) principles, and fostering flexibility among staff leads to the effective utilization of public hospitals' resources. Additionally, continuous improvement guided by these standards promotes systematic growth in the quality of diagnostic and therapeutic services. Quality healthcare services are seen as "pure actions and behaviors aimed at assisting or advising patients, characterized by intangibility, inseparability, impermanence, and diversity." [6]

Enhancing the qualifications of healthcare professionals, enriching work processes, and

practicing participatory management are crucial for quality service provision in public hospitals. According to Donabedian's model, quality management in service provision is based on elements like structure (resources), processes, and outcomes, but no single element ensures consistent quality in hospital services [7].

Krot describes quality in a dynamic way, focusing on the repeatable quality of healthcare provision influenced by external factors such as technology and human resources [8]. In contrast, perceived quality of healthcare (where patients receive solutions to their health problems rather than products) is shaped by patients' subjective assessments and experiences.

Health services are characterized by immateriality and the patient's presence during their provision. On the other hand, this causes specific consequences in the process of quality formation, representing a sequence of actions – a chain for the creation of healthy values. It was stated [9] that the added value does not result from the offer, but from experience and co-creation, which is realized by the patient at a specific time and place, in the context of a specific (health) event. The internalization of the patient knowledge and participation in the creation of pro-quality scenarios of hospital services creates an added value. Introducing to the network organization specific conditions allows, among other things, construction of knowledge environment and transparency. In order to implement the principles of TQM and quality management system requirements of the services provided in public hospitals, it becomes important to identify sources and determine the effects, which are reflected in the current economic situation of the entities.

One of important obstacles, which are present among public hospitals implementing the TQM philosophy and requirements of ISO 9000 standards, is not taking under account the fact that each individual entity and its environment are different from each other [10].

In Saudi Arabia, the most commonly used certified quality management systems from the ISO series are:

1. ISO 9001: This standard outlines the requirements for a quality management system (QMS) and is widely adopted across various industries in Saudi Arabia, including healthcare, manufacturing, and services. It focuses on continuous improvement and meeting customer needs.
2. ISO 14001: This standard provides guidelines for environmental management systems (EMS). It is popular in industries aiming to reduce their environmental impact and improve sustainability practices.
3. ISO 45001: This standard relates to occupational health and safety management systems (OHSMS). It is used to ensure the safety and well-being of employees in various industries, including healthcare and construction.
4. ISO 22000: This standard focuses on food safety management systems (FSMS). It is particularly important in industries related to food production, processing, and distribution.
5. ISO/IEC 27001: This standard provides requirements for information security management systems (ISMS). It is commonly adopted in sectors where information security is critical, such as finance and technology.

These ISO standards are the most commonly used in Saudi Arabia across various sectors to maintain high standards of quality, safety, and efficiency in operations. Over the past decades, several key elements of quality have been established for healthcare services, and there is now a clear consensus on what constitutes quality health services. They should be effective by providing evidence-based care to those who need it, safe by avoiding harm to patients, and people-centered by responding to individual preferences, needs, and values. Additionally,

healthcare services should be timely, reducing waiting times and delays for both patients and providers, and equitable, ensuring consistent quality regardless of factors such as age, gender, race, or socio-economic status. Integration is also crucial, with care coordinated across levels and providers to deliver a full range of health services throughout the life course. Finally, efficiency involves maximizing the benefits of available resources while minimizing waste [10; 12].

#### The quality of healthcare measurement

Measuring the quality of healthcare involves evaluating how well healthcare services meet established standards and the needs of patients. Quality measurement is essential for improving patient outcomes, enhancing healthcare delivery, and ensuring patient safety. The assessment of healthcare quality typically focuses on three main dimensions: structure, process, and outcomes, as outlined in Donabedian's model [11]:

- **Structure:** This dimension examines the resources and infrastructure that support healthcare delivery. It includes evaluating facilities, equipment, technology, staffing levels, staff qualifications, and the overall healthcare environment.
- **Process:** This dimension evaluates the methods and practices used to deliver care. It includes assessing adherence to clinical guidelines, safety protocols, diagnostic accuracy, treatment plans, patient engagement, and communication between healthcare providers and patients.
- **Outcomes:** This dimension focuses on the results of healthcare services. It measures patient health improvements, recovery rates, patient satisfaction, and the prevalence of complications or adverse events. Outcomes are often the most direct measure of quality as they reflect the impact of care on patient health.

Other aspects of healthcare quality measurement include:

- **Patient Experience:** Evaluating patients' perceptions of care, including communication with healthcare providers, access to care, and overall satisfaction.
- **Safety:** Measuring the incidence of medical errors, adverse events, and other safety-related outcomes.
- **Efficiency:** Assessing the cost-effectiveness of care delivery and resource utilization.
- **Equity:** Ensuring that healthcare quality is consistent across different populations and that care is accessible and fair for all groups.

Healthcare quality measurement can involve various methods such as surveys, clinical audits, performance metrics, and patient-reported outcomes. These assessments provide valuable data for healthcare organizations to identify areas for improvement, develop best practices, and enhance overall care quality.

#### The significance of quality in health policy

Quality of care is one of the most frequently quoted principles of health policy, and it is currently high up on the agenda of policy-makers at national and international levels [13], at the national level, addressing the issue of healthcare quality may be motivated by various reasons – ranging from a general commitment to high-quality healthcare provision as a public good or the renewed focus on patient outcomes in the context of popular value-based healthcare ideas to the identification of specific healthcare quality problems [12].

Quality in health policy is of paramount importance as it directly influences the health outcomes of populations and the effectiveness of healthcare systems. When health policies

prioritize quality, they lead to improved patient care, resulting in better health outcomes such as reduced mortality and morbidity rates [13]. By emphasizing evidence-based practices and standards, quality health policies can improve patient safety by minimizing medical errors, adverse events, and harm during care.

Furthermore, a focus on quality enhances patient satisfaction and experience by providing care that aligns with patient preferences and values. This patient-centered approach fosters trust and confidence in the healthcare system. Additionally, high-quality healthcare can be more cost-effective by ensuring efficient resource utilization and reducing unnecessary procedures and complications, which in turn lowers overall healthcare costs [14].

Quality-focused health policies also promote health equity by ensuring that all individuals have access to the same standard of care regardless of their background or circumstances. This commitment to fairness and inclusivity is crucial for building a just healthcare system. Moreover, health policies that emphasize quality encourage continuous improvement and innovation in healthcare delivery, leading to the adoption of best practices and new technologies [15].

By aligning with international quality standards, health policies can enhance a country's reputation and enable participation in international collaborations, thereby broadening access to new resources and knowledge. Ultimately, prioritizing quality in health policy supports the achievement of broader objectives such as improving population health, ensuring equitable access to care, and enhancing the overall well-being of society [16].

#### The quality tools

Monitoring the quality of care requires measuring services against predetermined norms or performance standards, which is achievable through the use of appropriate methods and tools. These tools enable hospital management to assess and enhance quality effectively. Some of the simple and widely recognized quality tools include brainstorming sessions for identifying potential issues and solutions, Pareto charts for prioritizing problems based on their impact, control charts for monitoring variations in processes, and satisfaction surveys for gathering patient feedback on their experiences [17].

More complex quality tools include multiple-method approaches such as re-engineering, which involves redesigning processes for improved efficiency and effectiveness. Additionally, quality management frameworks like the Plan-Do-Check-Act (PDCA) cycle and audit cycles provide structured approaches for continuous improvement. The choice of tools depends on the specific quality situation or the issue that requires monitoring or investigation [18].

Moreover, using validated tools such as SERVQUAL can reveal previously unrecognized gaps in the quality of care. SERVQUAL assesses patient perceptions and expectations across various dimensions of service quality, allowing healthcare providers to identify areas needing improvement. A study published in this issue demonstrates how the application of these tools can uncover insights into quality gaps, leading to targeted actions for enhancement.

#### Health care quality indicators and outcomes

Healthcare quality and outcomes indicators are measures used to assess the performance of healthcare systems and the outcomes of care for patients. These indicators provide valuable insights into the effectiveness, safety, and efficiency of healthcare services and help identify areas for improvement [19]. They can be broadly categorized into three main types: structure, process, and outcomes indicators [20].

1. **Structure Indicators:** These indicators assess the resources and infrastructure available for healthcare delivery. They include:

- Availability and qualifications of healthcare staff (e.g., number of doctors, nurses, specialists).
  - Availability of equipment and facilities (e.g., hospital beds, diagnostic tools).
  - Access to care (e.g., number of primary care clinics per capita, geographical distribution of facilities).
  - Policies and protocols in place (e.g., infection control measures, safety protocols).
2. Process Indicators: These indicators evaluate the methods and practices used to deliver care. They include:
- Adherence to evidence-based guidelines (e.g., compliance with screening or treatment protocols).
  - Timeliness of care delivery (e.g., time to treatment for heart attack or stroke).
  - Patient-provider communication (e.g., frequency and quality of interactions).
  - Coordination of care (e.g., referrals and follow-up processes).
3. Outcomes Indicators: These indicators measure the results of healthcare services and the impact on patient health. They include:
- Mortality rates (e.g., 30-day mortality rates for specific conditions).
  - Complication rates (e.g., hospital-acquired infections, surgical complications).
  - Patient-reported outcomes (e.g., health-related quality of life, pain levels).
  - Readmission rates (e.g., 30-day readmission rates for certain conditions).
  - Patient satisfaction and experience (e.g., satisfaction with care, access to care).
4. Other important categories of indicators include:
- Safety Indicators: These measure the safety of care provided to patients, such as medication error rates and rates of adverse events.
  - Efficiency Indicators: These assess the cost-effectiveness of care, including measures such as the average length of hospital stays and resource utilization rates.
  - Equity Indicators: These assess the fairness and inclusivity of care across different populations, including measures such as disparities in access to care and outcomes across different demographic groups.

Healthcare quality and outcomes indicators play a vital role in guiding quality improvement initiatives, informing policy decisions, and ensuring that healthcare providers deliver safe, effective, and patient-centered care.

## **Discussion**

Quality of healthcare provision refers to the delivery of medical services that meet established standards of excellence and effectiveness. It is a multifaceted concept encompassing various dimensions such as safety, effectiveness, patient-centered care, timeliness, efficiency, equity, and integration. Safety ensures that healthcare services are delivered without causing harm to patients, while effectiveness focuses on providing evidence-based care that achieves desired health outcomes. Patient-centered care addresses the individual needs and preferences of patients, including clear communication and shared decision-making.

Timeliness involves reducing waiting times for both patients and providers to improve access to necessary services and prevent health deterioration due to delays. Efficiency aims to maximize resource utilization and minimize waste in healthcare delivery, ultimately reducing costs and improving overall system performance. Equity is essential to provide equal access to high-quality healthcare for all individuals, regardless of factors such as age, gender, race, ethnicity, or socioeconomic status. Integration ensures care is coordinated across different providers, levels, and services, creating a seamless experience for patients.

Quality healthcare provision is crucial for achieving optimal health outcomes for patients and populations. It improves patient safety, satisfaction, and trust in the healthcare system. High-quality care can also lead to greater cost-effectiveness by reducing waste and avoiding unnecessary treatments. Additionally, a focus on quality helps healthcare organizations adhere to regulations and accreditation standards.

However, there are challenges in ensuring quality healthcare provision, including resource constraints such as limited funding, staff, and equipment. The complexity of healthcare, involving multiple providers and specialties, can make coordination and communication challenging. Data collection and analysis for monitoring quality can be resource-intensive and technically demanding. Disparities in access to care and outcomes across different populations present significant challenges to achieving equitable care. Change management can also be challenging, as implementing changes to improve quality may encounter resistance from providers and organizations accustomed to established practices.

To achieve quality healthcare provision, continuous quality improvement (CQI) is essential, involving ongoing efforts to assess and improve care processes using methods such as the Plan-Do-Check-Act (PDCA) cycle. Evidence-based practice utilizes the best available research and data to guide clinical decision-making and care delivery. Quality measurement and monitoring through the use of indicators and benchmarks help identify areas for improvement. Engaging patients in their care through shared decision-making and seeking feedback on their experiences also play a critical role in enhancing quality. Finally, investing in training and education for healthcare providers ensures they stay current with best practices and emerging trends in healthcare.

In summary, the quality of healthcare provision is a vital aspect of any healthcare system, directly impacting patient outcomes and satisfaction. Achieving high-quality care requires a multi-dimensional approach that addresses safety, effectiveness, and patient-centered care while managing challenges such as resource constraints and inequities. Continuous improvement efforts, evidence-based practice, and patient involvement are key to driving progress and ensuring healthcare systems deliver safe and effective care to all.

## **Conclusion**

Providing quality health care is essential to ensuring positive health outcomes and patient safety and satisfaction. By focusing on key dimensions such as safety, effectiveness, patient-centered care, timeliness, efficiency, equity, and integration, health care systems can strive to meet the diverse needs and expectations of their patients. Although challenges such as resource limitations, data collection, and health care disparities present obstacles, ongoing quality improvement initiatives, evidence-based practices, and patient engagement can help address these challenges and drive progress.

Ultimately, a commitment to providing high-quality health care is fundamental to the success of any health care system. It not only enhances patients' trust and confidence, but also supports the delivery of high-value, cost-effective care. By maintaining a focus on quality and constantly

looking for ways to improve, healthcare providers can ensure that all patients receive safe, effective, and compassionate care. This in turn contributes to the overall health and well-being of the population, helping to achieve broader public health goals.

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