

# Enhancing care standards: Accreditation's impact on healthcare quality.

Dr. Angela Priyanka Gogoi<sup>1</sup>, Jublee Kalita<sup>1</sup> and Nishan Kakati<sup>1</sup>

1. NETES Institute of Technology & Science, NEMCARE Group of Institutions, Mirza, Guwahati, Assam- 781125

## Abstract

In the dynamic and intricate landscape of healthcare, ensuring the delivery of high-quality care stands as a primary objective. Standardization, achieved through policies, guidelines, and accreditation models, provides a pathway for healthcare leaders to improve healthcare quality. This chapter explores the application of accreditation models, emphasizing their role in fostering consistent and high-quality care. Commencing with the historical backdrop of hospital accreditation, the exploration extends to encompass the holistic aspects of healthcare quality, covering effectiveness, efficiency, accessibility, patient-centeredness, equity, timeliness, and safety. The chapter elucidates the intricacies of healthcare accreditation, portraying it as an external evaluation process that assesses adherence to standards of patient safety and quality. While acknowledging the benefits of accreditation, the narrative navigates through challenges faced by healthcare institutions in its implementation. These challenges range from resource-intensive processes to concerns about the return on investment. Moreover, the chapter addresses challenges encountered in diverse healthcare settings, emphasizing the importance of overcoming infrastructural, financial, and regulatory constraints. The narrative then envisions the future directions of healthcare accreditation, proposing structural changes, regular updates to standards, and a systemic model that integrates industrial management principles.

## Introduction

In the Complex ever-evolving landscape of healthcare, the provision of quality care stand as a paramount objective. Establishing a pathway for healthcare leaders to enhance the quality of care, standardization through the implementation of policies, standards, guidelines, and procedures plays a crucial role (Bogh et al., 2016)<sup>1</sup>. Applying an accreditation model in healthcare can be an effective approach to foster standardization, as it will guarantee both consistent care and high quality. To encourage standardization, a potential approach involves implementing an accreditation model. This aims to guarantee a uniform quality of care and ongoing enhancement of services in alignment with advancing standards (Bogh et al., 2016). The initiation of hospital accreditation traces back to The American College of Surgeons a century ago. Over time, the proliferation of hospital accreditation programs has been notable. In 2000, The World Health Organization recognized 36 nationwide healthcare accreditation programs (Brubakk et al., 2015). Accreditation plays a crucial role in healthcare systems across over 70 countries and is commonly administered through external, independent reviews, assessments, or audits (Greenfield & Braithwaite, 2009). However, quality means different things to different organizations/providers. Ideally, quality in hospital encompasses everything it does: how the hospitals care for its patients, how hospitals ensure health and safety of each of its patients and employees, and how it contributes to the overall health and well-being of its

communities (Joseph Sanfilippo et al., 2016). Healthcare quality (HQ) is a comprehensive notion encompassing the extent to which health services contribute to favourable health outcomes for both individuals and populations while aligning with contemporary professional knowledge. It encompasses different elements like safety, patient-centeredness, timeliness, equity, access, efficiency, and effectiveness.

Table 1. Healthcare Quality Dimension

Quality Aspect	Description
Effectiveness	The delivery of healthcare services is grounded in scientific knowledge, leading to improved health outcomes. Services are extended to those likely to benefit, avoiding unnecessary provision to those unlikely to benefit.
Efficiency	Healthcare service delivery is designed to enhance resource utilization, reducing the unnecessary consumption of equipment, supplies, ideas, and energy. The goal is to attain optimal health improvements at the most economical cost, with a focus on achieving a positive cost-benefit ratio.
Access	Healthcare is delivered promptly, in locations that are geographically suitable, and provided in settings where the expertise and resources align with the medical requirements.
Patient-centeredness	Healthcare is considerate and adaptable to the unique preferences, needs, culture, and values of individual patients. It aligns with patient choices concerning the patient-practitioner relationship, service accessibility, facilities, and the impacts and expenses associated with care.
Equity	Consistency in healthcare quality is maintained irrespective of individual characteristics like gender, ethnicity, geographic location, and socioeconomic status. This guarantees fairness in the delivery of care and its influence on health.
Timeliness	Healthcare is provided promptly, reducing wait times and detrimental delays for both recipients of care and healthcare providers.
Safety	Healthcare is administered in a manner that reduces risks and safeguards service users, preventing harm or injuries stemming from the intended care meant to assist them.

### Understanding Healthcare Accreditation

Healthcare accreditation is a process by which healthcare organizations undergo an external evaluation to assess their compliance with established quality and safety standards. Accreditation ensures that healthcare facilities, such as hospitals, clinics, and long-term care facilities, meet specific criteria and deliver high-quality patient care (Joseph et al., 2021). Accreditation is a means of publicly recognizing a health-care organization against predetermined performance standards of operation by trained external peer reviewers. It enables organizations to have an introspection based on the reports and recommendations of the accreditation team, and therefore, enables them to benchmark themselves (Joseph, 2021). In practice, licensing, certification and accreditation overlap to form an “external evaluation spectrum”, with licensing being the most straightforward of these activities and accreditation the most complex. Accreditation involves the systematic assessment of performance (including clinical and organizational aspects) related to predefined standards to advise a process of continuous improvement, with cycles of re-accreditation after a set period (*Health Care Accreditation and Quality of Care WHOpdf.Pdf*, n.d.). The accreditation process yields two

significant advantages: the standardization of procedures and internal policies, along with the establishment of management systems (Araujo et al., 2020). In high-income countries, accreditation aims to standardize healthcare organizational processes, promoting safety and quality of care to enhance patient satisfaction, ensure public accountability, and support staff development, as outlined by Shaw (2003). Conversely, in low- and middle-income countries, where resources and hospital infrastructure are often limited, the primary emphasis is usually on enhancing and ensuring equitable access to healthcare services. This is achieved by establishing basic health facilities with sufficient staffing and equipment, as discussed by Shaw (2003). While accreditation initially started as a voluntary approach to enhance hospital performance, health care organizations in low- and middle-income countries have increasingly utilized it as a tool to address poor hospital performance. Moreover, accreditation has been incorporated into the implementation of internationally agreed practices like universal health coverage or national policies such as healthcare tourism. Presently, there are over 120 healthcare accreditation programs spanning more than 80 countries. Several indications imply that accreditation functions as an effective strategy to improve healthcare service quality, reduce hospital infections and medical errors, and advance patient safety. The accreditation initiative plays a role in educating and training employees, clarifying organizational rules and procedures, encouraging adherence to clinical protocols, promoting evidence-based practices, fostering collaboration among clinicians from various disciplines, enhancing employees' organizational commitment, and increasing their responsiveness and accountability, as highlighted by Mosadeghrad (2021).

However, despite the potential advantages of healthcare accreditation, its implementation in hospitals has faced numerous challenges. Some argue that accreditation is bureaucratic, resource-intensive, and diverts hospital employees' time away from clinical duties. The process may lead to increased paperwork, bureaucracy, staff workload, financial burdens, and employee fatigue, negatively impacting patient care. The underlying issue lies not in accreditation itself but in its development and deployment (Mosadeghrad, 2021).

The varied outcomes of healthcare accreditation in the literature stem from differences in accreditation standards, methods, and surveyors employed across different countries. The credibility and effectiveness of an accreditation program hinge on its methods, standards, and surveyors. A well-designed and efficiently implemented accreditation program has the potential to enhance the quality, safety, and effectiveness of hospital services. The financial burden associated with accreditation remains a persistent concern for healthcare institutions, particularly in developing and low-income nations. Leaders in healthcare organizations express reservations about whether the benefits of accreditation justify the expenses and efforts invested. Therefore, it is considered essential to make certain adjustments in the structure and functions of the accreditation body, accreditation standards, accreditation methods, and surveyors to ensure uniformity in accreditation outcomes, as emphasized by Mosadeghrad (2021).

### **The Accreditation Process:**

To initiate the accreditation process, the institution or program must complete the following steps:

- Define or restate the program's objectives and standards.
- Explore existing accrediting organizations to identify the most suitable one for the program.
- Reach out to the chosen accrediting body to gather information on eligibility, criteria, and accreditation procedures.
- Conduct an initial self-assessment and examine the requirements of the chosen accrediting body to assess the feasibility of accreditation.

- Establish mechanisms for collecting data on the program's parameters and activities. • Create systems for utilizing data to validate or revise program activities.
- Conduct a comprehensive self-assessment.
- Formally apply for an accreditation visit and review by submitting an application to the selected accrediting body.

### Key steps in Accreditation Process

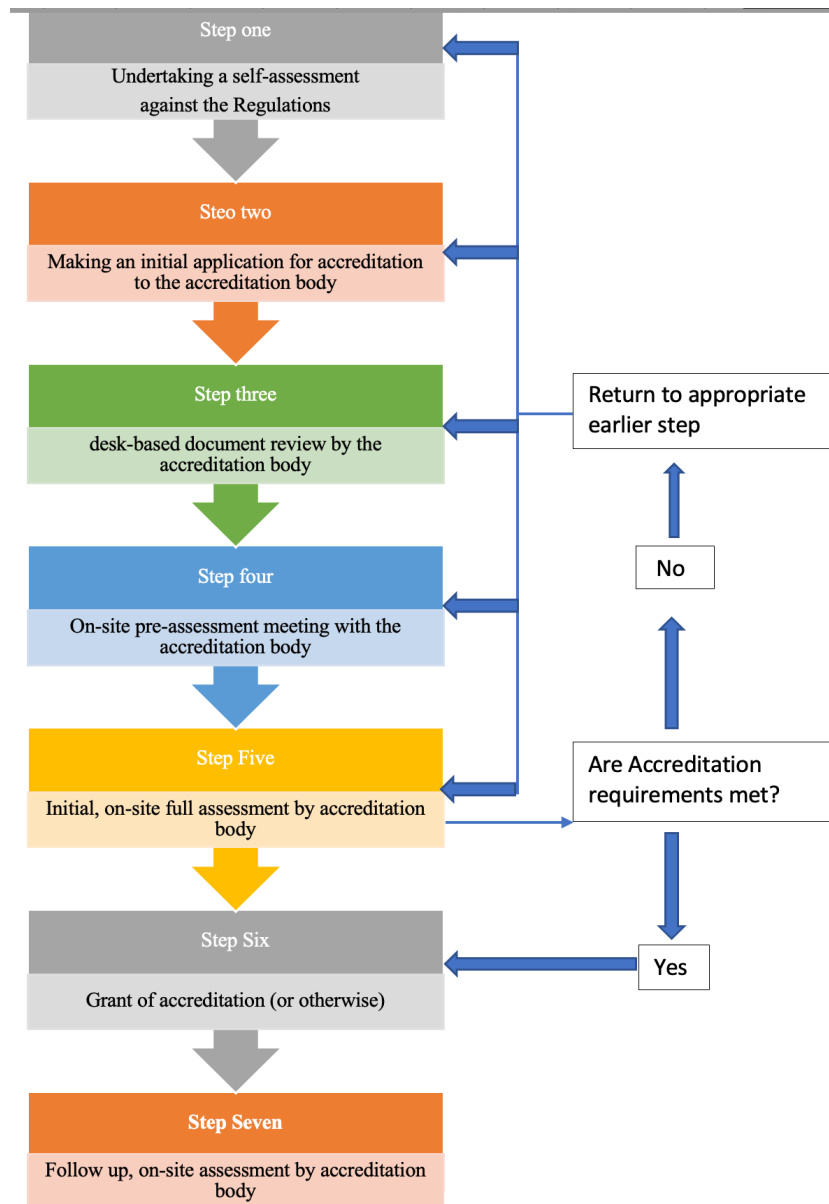


Figure 1: Accreditation Process of NABH

### Benefits and Impact of Accreditation:

Research indicates that both hospital accreditation and patient satisfaction are notable quality indicators for healthcare services (Mohebbifar et al., 2017). Professionals assert that the application of accreditation standards leads to improvements in patient safety, cost control, reduction of medical errors, increased patient engagement, enhanced communication between

patients and staff, and overall satisfaction with healthcare services (Chun et al., 2020). Notably, hospitals meeting the requirements of the patient care process domain, which is the central focus of accreditation, demonstrate lower mortality rates compared to non-compliant hospitals. This finding suggests a potential mechanism that explains the variation in mortality rates before and after accreditation. Accreditation plays a pivotal role in improving patient outcomes and mitigating risks. The expectation is that individuals should receive high-quality, safe care when needed. In 2011, Dr. Alkhenizan, a Saudi researcher, conducted a review encompassing 26 studies on accreditation, with a specific focus on its influence on outcomes related to distinct health conditions. The results revealed that broad accreditation programs contribute to the improvement of care quality and clinical outcomes across diverse conditions. Furthermore, there is supporting evidence for the notion that preventive protocols integrated into accreditation standards, such as those addressing infections, bed sores, and prescribing omissions, decrease the likelihood of adverse events. More broadly, the standardization of healthcare practices, achievable through participation in accreditation, leads to improved clinical outcomes and treatment.

Accreditation functions as a mechanism for pinpointing strengths and weaknesses within programs and processes. It is essential to differentiate between effective and needing-improvement programs and processes. This enables a concentration on areas requiring enhancement, ensuring the sustained success of effective practices. In a 2010 article published in the American Journal of Clinical Pathology, researchers reviewed studies on the impact of accreditation on labs. The conclusion was that accreditation exposes deficiencies in a lab's programs and processes, directing attention to areas of greatest need, such as the supply chain, training, and instrument maintenance. Utilizing accreditation as a measure of performance facilitates the identification of gaps and guides efforts toward improvement.

Accreditation fosters a culture centered on quality and safety, influencing how an organization's staff approach their responsibilities. The organizational culture significantly affects staff motivation and engagement. A culture focused on quality and safety creates an environment where communication and learning are paramount. In a study at an Australian teaching hospital, Greenfield et al. explored the experiences of health executives, managers, and frontline clinicians involved in accreditation. The findings indicated that a positive culture of quality and safety is characterized by staff witnessing positive outcomes from a well-executed accreditation process, thereby motivating them to continue making improvements collaboratively. Accreditation is a valuable tool in cultivating such a positive culture.

Accreditation also promotes communication and staff empowerment across organizations. It provides individuals with a clearer understanding of their contributions to the organization's mission. Understanding each person's role within a team is essential. Effective communication enables the sharing of best practices and the identification of opportunities to enhance care. Studies on staff perceptions reveal that participation in accreditation enhances the sense of community and mutual concern among providers, leading to improved teamwork and productivity. By adhering to a common standard, providers can communicate more meaningfully and learn from each other's experiences

### **Challenges and Future Directions:**

Healthcare accreditation faces various challenges that require proactive solutions. These issues include shortcomings in infrastructure, financial limitations, complexities in complying with regulatory and professional standards, a scarcity of human resources, gaps in training, difficulties in documentation, and the integration of information technology. Additionally, teaching hospitals encounter specific obstacles related to infrastructure, financial constraints, legal support, workforce recruitment and training, documentation processes, and technology adoption. The successful application of accreditation standards encounters

obstacles stemming from both financial and non-financial constraints. The challenges associated with implementing healthcare accreditation in Indian hospitals are diverse. Indian hospitals face substantial obstacles, including insufficient infrastructure, financial limitations, complexities in adhering to regulatory and professional standards, a shortage of human resources, inadequate training, and difficulties in adopting information technology. Overcoming these challenges is imperative to fortify the implementation of accreditation standards and enhance healthcare quality in India. The solutions require a comprehensive approach, including targeted investments, streamlined regulatory processes, enhanced training programs, and the adoption of innovative technologies, emphasizing the optimization of regulation, funding, and government commitment for long-term sustainability and relevance. Obtaining accreditation for a healthcare organization involves recognition of its performance standards by a national accreditation body, such as NABH, or an international accreditation organization like JCI. This indicates that the organization has met the rigorous standards set at various levels by an independent external peer, the accrediting body. Accreditation stands as evidence of a healthcare organization's commitment to improving the safety and quality of patient care. It underscores the commitment to providing a secure care environment for patients and an ongoing effort to minimize risks to both patients and staff. Obtaining accreditation in the healthcare sector requires addressing several critical challenges. First and foremost is the establishment of a proficient core team comprising representatives from various departments, including clinicians, nursing, quality, HR, training, engineering, microbiology, housekeeping, front office, F&B, MRD & pharmacy. This team plays a pivotal role in conducting a detailed gap analysis across departments, ensuring compliance with accreditation standards. The following are the challenges needed to be successfully overcome by the team to achieve accreditation

#### **1. Establishing a Proficient Core Team:**

- Form a core team with representatives from various departments.
- Incorporate healthcare professionals, nursing personnel, quality control, human resources, training, engineering, microbiology, housekeeping, front office, food and beverage services, medical record department (MRD), and pharmacy.
- Conduct a detailed gap analysis across departments to meet accreditation standards.

#### **2. Addressing Procrastination and Inconsistent Processes:**

- Overcome inertia by creating and implementing Standard Operating Procedures (SOPs) on time.
- Conduct cross-functional audits and intradepartmental training for compliance.

#### **3. Ensuring a Safe Environment:**

- Improve hospital infrastructure for patient and staff safety.
- Adhere to national building codes, revise bilingual signages, and rework air-conditioning systems.
- Test patient safety devices regularly and host committee meetings for proper documentation.

#### **4. Tackling Improper Documentation:**

- Address documentation errors such as unsigned treatment orders and incomplete discharge sheets.
- Involve top administration in understanding the sensitivity of the issue.
- Create checklists, conduct regular CMEs for clinicians, and emphasize documentation.

#### **5. Staff Training for Emergency Preparedness:**

- Identify hospital-wide and department-specific training needs.
- Overcome challenges in employee attendance during duty hours.

- Conduct mock drills and provide constant motivation for cohesive teamwork.
- 6. Embracing a Data-Driven Approach:**
- Implement a culture of continuous improvement through accurate and undiluted data capture.
  - Encourage functional heads to work towards improving quality indicators and metrics.
  - Initiate top management involvement in quality improvement activities.
- 7. Ensuring Compliance with Laws and Regulations:**
- Track and renew licenses for pharmacy, lift, and blood bank before accreditation.
  - Centralize tracking systems for all regulatory compliances.
  - Collaborate with legal departments and prioritize document sharing.
- 8. Adhering to Timelines:**
- Recognize the essential role of time in achieving accreditation.
  - Foster enthusiasm and a sense of urgency among employees.
  - Provide continuous support from the core team for timely completion of tasks.
- 9. Dispelling Misconceptions about Accreditation:**
- Educate stakeholders on the benefits of accreditation.
  - Highlight benefits for patients, staff, and healthcare organizations.
  - Build understanding of accreditation as a commitment to quality care.
- 10. Improving Inventory Control Measures:**
- Implement joint audits between central and user departments.
  - Identify and reduce errors in identifying expired drugs.
  - Establish regular processes for inventory control.

Addressing these points with commitment from all stakeholders, effective communication, and proactive project management will contribute to successful accreditation.

**Future direction:**

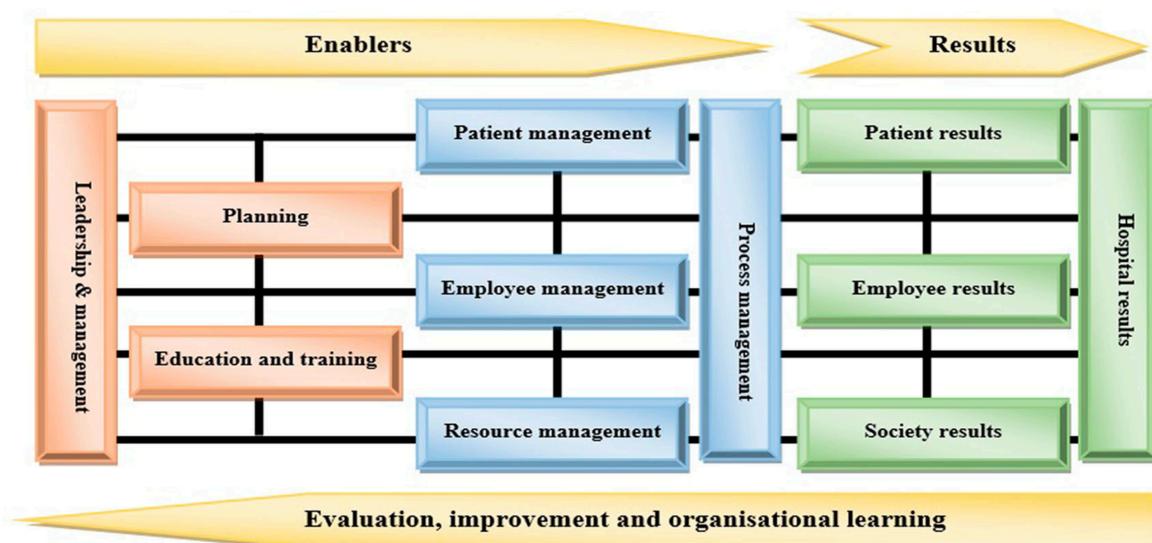


Fig 2: A model of hospital accreditation. Source: Mosadeghrad.

To enhance the effectiveness of hospital accreditation, it is crucial to implement changes in the accreditation body's structure and functions. Regular updates to accreditation standards are essential to align with the latest advancements in healthcare. Accreditation methods should evolve to ensure comprehensive assessments, and surveyors need to stay informed about industry best practices. This dynamic approach fosters continuous improvement in hospital services through accreditation.(Mosadeghrad, 2020)

To bolster independence, the accreditation body should institute an accreditation council along with three committees—technical, accreditation, and appeal. The accreditation council, comprising representatives from regulatory agencies, professional organizations, practitioners, and the public, would govern the program, offering overall direction and guidelines. The technical committee, involving members from health-related associations and academic institutions, would be responsible for formulating, periodically reviewing, and updating accreditation standards. This committee would also generate training materials for hospitals. Simultaneously, the accreditation committee would oversee the accreditation process, providing essential documentation for the council to decide on a hospital's accreditation status. Lastly, the appeal committee would address hospital appeals, ensuring a thorough and impartial accreditation system.(Mosadeghrad, 2020)

Developing accreditation standards and criteria for hospitals requires a systemic model that comprehensively addresses the structures, processes, and outputs/outcomes of the healthcare organization. This approach draws inspiration from successful practices in industrial management, emphasizing the need to learn and adapt strategies from other industries to enhance the efficiency and effectiveness of the healthcare sector. The recommendation is to not merely adopt but also adapt and implement industrial management models in the healthcare domain. This nuanced approach recognizes the distinctive challenges and requirements inherent in the healthcare industry, encouraging a tailored application of proven strategies.(Mosadeghrad, 2020)

Currently, hospitals undergo evaluation through diverse models like hospital accreditation frameworks, business excellence models (such as EFQM and Malcolm Baldrige awards), and the ISO 9000 series. These models share a commonality in adopting a systems approach, evaluating organizational performance by considering the interconnected aspects of structures, processes, and outputs/outcomes.(Mosadeghrad, 2020)

The emphasis on a systems approach in measuring organizational performance reflects a holistic perspective. Business excellence models and ISO 9000 standards underscore the importance of understanding how various components of the organization contribute to its overall effectiveness.(Mosadeghrad, 2020)

In essence, the proposed approach advocates for a strategic amalgamation of industrial management principles into healthcare practices. This integration, conducted with sensitivity to the unique demands of the healthcare sector, aims to foster improved productivity and a heightened ability to serve patients effectively. It aligns with the principles of business excellence models and ISO standards, ushering in a comprehensive and tailored framework for evaluating and enhancing hospital performance. Integrating systemic models and standards, as outlined earlier, holds the promise of substantially improving organizational performance and elevating the quality of products and services in the healthcare sector.(Mosadeghrad, 2020)

A comprehensive hospital accreditation model has been developed, encompassing 11 constructs that are classified into two categories: seven enablers and four results. The enablers focus on the essential structures and processes within the hospital, covering leadership and management, planning, education and training, employee management, patient management, resource management, and process management. In parallel, the results constructs delve into the performance outcomes related to patients, employees, society, and the hospital as a whole.(Mosadeghrad, 2020)



A distinctive feature of this accreditation model lies in its allocation of weightage to the different constructs. Notably, the enablers, encapsulating the foundational elements of the hospital's operations, constitute a significant portion, contributing 65% to the total accreditation scores. These enablers encompass critical aspects such as leadership effectiveness, strategic planning, staff development, employee management, patient care, resource utilization, and operational efficiency. On the other hand, the results constructs, reflecting the tangible outcomes of the hospital's efforts, constitute 35% of the total accreditation scores. These results encompass the impact on patients, the well-being and engagement of employees, the hospital's contribution to society, and overall organizational performance. (Mosadeghrad, 2020)

This weighted distribution emphasizes the importance of having robust structures and processes in place (enablers) as a foundation for achieving positive and meaningful outcomes (results). The model recognizes that successful accreditation goes beyond adherence to standards; it requires an integrated approach that considers both the journey (enablers) and the destination (results) (Mosadeghrad, 2020).

The accreditation model under discussion intricately breaks down each construct into sub-constructs, standards, and criteria, presenting a thorough evaluation framework that spans from the entire hospital down to individual departments, teams, and staff. This all-encompassing approach ensures a holistic assessment of the healthcare system, promoting a nuanced understanding of its strengths and areas for enhancement. Within this framework, each standard is meticulously crafted to assess multiple layers of the healthcare setting, utilizing specific criteria that address eight key indicators of quality care: effectiveness, efficiency, safety, timeliness, equity, patient-centeredness, employee-oriented practices, and continuity of care. The incorporation of the Plan, Do, Study, and Act (PDSA) cycle in developing assessment criteria adds a dynamic element, emphasizing a continuous improvement mindset (Mosadeghrad, 2020).

This comprehensive evaluation approach not only scrutinizes organizational structures but also delves into the performance of individual staff, fostering a detailed and insightful accreditation process. The commitment to updating standards based on accepted best practices and the latest evidence and research findings ensures the relevance and applicability of the accreditation criteria in the ever-evolving landscape of healthcare (Mosadeghrad, 2020).

Acknowledging the potential shortcomings of some accreditation methods, the proposed approach emphasizes a rigorous methodology. In certain countries, accreditation processes may solely rely on traditional on-site surveys conducted at fixed intervals, potentially leading to hospitals hastily conforming to standards just before the scheduled survey. To counteract this, the suggested approach advocates for a rigorous accreditation methodology that encourages sustained compliance and improvement, moving beyond short-term adherence to requirements (Mosadeghrad, 2020).

In summary, the recommended accreditation approach, characterized by its thoroughness, integration of quality indicators, inclusion of the PDSA cycle, and commitment to regular updates based on best practices and current research, aims to bolster the credibility and efficacy of hospital accreditation standards. This approach also underscores an enduring dedication to quality improvement, transcending mere compliance with standards (Mosadeghrad, 2020).

In essence, this accreditation model seeks to provide a balanced and holistic framework for evaluating hospitals, ensuring that the accreditation process captures the interplay between foundational elements and the ultimate impact on patients, employees, society, and the overall organizational performance (Mosadeghrad, 2020).

Hospital accreditation is recognized as a costly and time-consuming endeavour. To ensure positive outcomes and view accreditation as a tool for improving service quality and safety, it is suggested that governments focus on addressing its prerequisites. This approach

aims to shift the perspective of hospitals from viewing accreditation as merely a goal to considering it a valuable mechanism for enhancing healthcare standards (Mosadeghrad, 2020). A recommended strategy is to initiate accreditation as a voluntary program, particularly in developing countries. This voluntary phase allows both hospitals and accreditation bodies sufficient time to strengthen their capabilities and allocate necessary resources. Through this gradual introduction, the number of hospitals seeking accreditation is likely to increase as they adapt to the accreditation processes and standards. After this preparatory phase, the government can then consider making accreditation mandatory. Crucially, an effective accreditation system should be seamlessly integrated with national healthcare reforms. This integration ensures that accreditation aligns with broader healthcare objectives, contributing to systematic improvements in healthcare delivery and outcomes (Mosadeghrad, 2020).

In summary, the suggested approach involves initiating accreditation as a voluntary program, allowing a gradual increase in participation, and subsequently transitioning to a mandatory requirement. This phased implementation provides the necessary time and support for hospitals and accreditation bodies to build capacities and resources. Furthermore, aligning the accreditation system with national healthcare reforms ensures a cohesive and synergistic approach toward improving the overall quality and safety of healthcare services.

In conclusion, it's crucial to acknowledge that accreditation is not a cure-all for every challenge within a hospital management system. Rather, it should be seen as a strategic approach to enhance the quality and safety of hospital services. For a more comprehensive impact, hospital managers are advised to go beyond mere accreditation and focus on developing and implementing a robust quality management system. This involves integrating accreditation standards seamlessly into the broader quality management framework. To facilitate this integration successfully, hospital managers must commit to providing the necessary resources to support employees. Additionally, empowering staff to carry out their responsibilities in alignment with accreditation standards is vital. This approach ensures that the accreditation process becomes an integral part of the organizational culture and contributes effectively to sustained improvements in the overall quality and safety of hospital services.

1. Araujo, C. A. S., Siqueira, M. M., & Malik, A. M. (2020). Hospital accreditation impact on healthcare quality dimensions: A systematic review. *International Journal for Quality in Health Care*, 32(8), 531–544. <https://doi.org/10.1093/intqhc/mzaa090>
2. Bogh, S. B., Falstie-Jensen, A. M., Hollnagel, E., Holst, R., Braithwaite, J., & Johnsen, S. P. (2016). Improvement in quality of hospital care during accreditation: A nationwide stepped-wedge study. *International Journal for Quality in Health Care*, *intqhc;mzw099v1*. <https://doi.org/10.1093/intqhc/mzw099>
3. Brubakk, K., Vist, G. E., Bukholm, G., Barach, P., & Tjomsland, O. (2015). A systematic review of hospital accreditation: The challenges of measuring complex intervention effects. *BMC Health Services Research*, 15(1), 280. <https://doi.org/10.1186/s12913-015-0933-x>
4. Chun, Y. J., Lee, B. Y., & Lee, Y. H. (2020). Association between Accreditation and In-Hospital Mortality in Patients with Major Cardiovascular Diseases in South Korean

Hospitals: Pre-Post Accreditation Comparison. *Medicina*, 56(9), 436.  
<https://doi.org/10.3390/medicina56090436>

5. Greenfield, D., & Braithwaite, J. (2009). Developing the evidence base for accreditation of healthcare organisations: A call for transparency and innovation. *Quality and Safety in Health Care*, 18(3), 162–163. <https://doi.org/10.1136/qshc.2009.032359>
6. *Health care accreditation and quality of care WHOpdf.pdf*. (n.d.).
7. Joseph Sanfilippo, Eric Bieber, second, & Richard Siegrist, Jr. (2016). *MBA for Healthcare*. UK Oxford University Press.
8. Mohebbifar, R., Rafiei, S., Mohammadpoor Asl, A., Ranjbar, M., & Khodayvandi, M. (2017). Association between Hospital Accreditation and Patient Satisfaction: A Survey in the Western Province of Iran. *Bangladesh Journal of Medical Science*, 16(1), 77–84. <https://doi.org/10.3329/bjms.v16i1.31137>
9. Mosadeghrad, A. M. (2021). Hospital accreditation: The good, the bad, and the ugly. *International Journal of Healthcare Management*, 14(4), 1597–1601. <https://doi.org/10.1080/20479700.2020.1762052>
10. Joseph S. (2021). Impact assessment of accreditation in primary and secondary public health-care institutions in Kerala, India. *Indian journal of public health*, 65(2), 110115. [https://doi.org/10.4103/ijph.IJPH\\_827\\_20](https://doi.org/10.4103/ijph.IJPH_827_20)
11. Shaw C. 2003. Evaluating accreditation. *International Journal for Quality in Health Care* 15: 455–6.