Chapter 4
Quality Management System and Practice

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ABSTRACT

A quality management system (QMS) integrates planning, assurance, control, and improvement to effectively meet customer needs. In healthcare, where complex interactions involve human patients, advanced technology, and critical infrastructure, the challenges are significant, especially as patients seek care when most vulnerable. Accreditations and certifications provide structured frameworks to assess elements like infrastructure and human resources, using audits based on documentation, observations, and interviews. Though resource-intensive, these methods are the gold standard for healthcare evaluation. However, these processes have limitations. Clinicians often lack evidence of their impact on outcomes, and the focus on accreditation may detract from care quality. In high-income countries (HICs), focusing on quality improvement initiatives is key, while low- and middle-income countries (LMICs) must address all QMS components, given greater systemic challenges. A holistic approach to QMS is essential for meaningful progress, especially in LMICs.

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1. INTRODUCTION

The healthcare sector is globally recognized for its complexity and high stakes due to the nature of its services. Humans interact with humans in vulnerable conditions to deliver the service. Maintaining quality in healthcare services requires a structured quality management system to achieve optimal patient outcomes. A QMS consists of planning, assurance, control, and improvement, and it is a framework that healthcare organizations adopt to meet quality and safety standards. Accreditations are assessments of quality measures according to set benchmarks. Accreditations provide a framework to establish a QMS system but have some limitations.

Two of the most prominent global standards in QMS for healthcare are those set by the International Organization for Standardization (ISO) and the Joint Commission of International Accreditation (JCIA). These organizations provide a structured foundation for healthcare facilities worldwide to maintain high standards of patient care, safety, and operational efficiency. These accreditation systems can be implemented in high-income countries and lower-income countries. Few high-income countries with centralized healthcare systems, like the United Kingdom (UK), Canada, and Australia, have their local accreditation system, which is more specific to local systems. However, accreditations have limitations regarding patient safety, patient engagement, and patient roles in quality management systems.

2. THE DEMAND FOR QMS AND THE COMPLEXITY OF HEALTHCARE

The healthcare industry operates as a highly complex ecosystem involving patients, healthcare providers, technology, infrastructure, and stringent regulations. Patients seek treatment at vulnerable moments, increasing the need for compassionate, efficient, and safe healthcare (WHO, 2021). As healthcare systems worldwide adopt QMS frameworks, they face the challenges of adapting these systems to specific national and cultural contexts. Integrating QMS in healthcare helps streamline processes, manage risks, and set clear standards for quality care (Accreditation Canada, 2021).

The demand for QMS has escalated in recent years due to the digital transformation of healthcare, with technologies like electronic health records (EHRs), telemedicine, and artificial intelligence (AI) becoming integral (Kruk et al., 2018). While these tools have improved diagnosis and patient engagement, they require additional quality controls related to data privacy, interoperability, and cybersecurity, highlighting the growing importance of QMS frameworks.

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