

## **Project Management and Telemedicine Perspectives in Digital Health <sup>1</sup>**

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### **Abstract**

Effective implementation of Telemedicine solutions in healthcare service delivery requires robust project management strategies and stakeholder engagement. Christie (2020) emphasises the importance of stakeholder involvement in telemedicine projects in Nairobi County, finding that early engagement of stakeholders increased the acceptance and adoption of telemedicine services by healthcare providers and patients. Similarly, Grobler (2020) propose a model for teaching imaging informatics as a platform in biomedical informatics, aimed at preparing healthcare providers for the adoption and implementation of ICT solutions in a future integrated National Health Insurance system in South Africa.

As the healthcare sector continues to evolve and embrace new technologies, healthcare providers must engage with stakeholders and adopt evidence-based project management strategies to ensure successful implementation. Effective stakeholder engagement builds trust and enhances communication, critical for successful implementation. By embracing emerging technologies and leveraging evidence-based models, healthcare providers can improve patient outcomes, enhance service delivery, and reduce costs. The proposed model for teaching imaging informatics highlights the need for healthcare providers to be equipped with the necessary skills and knowledge to effectively use ICT solutions in healthcare service delivery. As the South African government moves towards implementing a National Health Insurance system, it is critical for healthcare providers to prepare for the adoption and implementation of ICT solutions. Effective stakeholder engagement and robust project management strategies can ensure successful implementation, improving healthcare delivery and outcomes.

### **Introduction**

In recent years, the use of information and communication technologies (ICT) has gained significant attention in the healthcare sector. As the demand for quality healthcare services continues to grow, public and private healthcare providers are increasingly turning to ICT solutions to improve patient outcomes, enhance service delivery, and reduce costs. In this article, we review key insights from eight scholarly articles that explore various aspects of project management and telemedicine perspectives in digital health.

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## **Stakeholder influence in public sector information systems strategy implementation—The case of public hospitals in South Africa**

One of the critical factors influencing the success of ICT projects in healthcare is stakeholder involvement. In their study on public hospitals in South Africa, Kekana and Pretorius (2020) found that stakeholder involvement played a vital role in the successful implementation of information systems strategy. The authors suggest that involving key stakeholders in the project planning and decision-making process can enhance buy-in, improve communication, and increase project acceptance and adoption.

## **Healthcare systems: future predictions for global care**

With the advent of new and emerging technologies, the healthcare sector is set to undergo significant changes in the coming years. In their article on future predictions for global care, Braithwaiten (2018) explore the potential impact of technologies such as artificial intelligence (AI), robotics, and blockchain on healthcare systems worldwide. The authors argue that the adoption of these technologies has the potential to transform healthcare delivery, enhance patient outcomes, and reduce costs.

## **The development of a telemedicine service maturity model**

Telemedicine has emerged as a valuable tool in improving access to healthcare services, particularly in remote and underserved areas. Van Dyk (2013) proposes a telemedicine service maturity model that can be used to assess the readiness of healthcare organisations to adopt and implement telemedicine services. The model comprises four stages - initiation, expansion, integration, and optimisation - and provides a framework for healthcare providers to plan and execute telemedicine projects effectively.

## **The development of a healthcare innovation adoption readiness assessment tool (HIARAT)**

Innovation adoption is critical to the success of healthcare projects, particularly in the context of ICT solutions. In their study, Leonard et al. (2019) developed a healthcare innovation adoption readiness assessment tool (HIARAT) to evaluate the readiness of healthcare providers to adopt and implement innovations in their organisations. The authors suggest that the tool can help identify potential barriers to innovation adoption and provide a roadmap for successful implementation.

## **E-health Implementation by Private Dental Service Providers in Bulawayo, Zimbabwe**

In their study on e-health implementation by private dental service providers in Bulawayo, Zimbabwe, Maphosa (2023) highlight the challenges faced by healthcare providers in implementing ICT solutions. The author argue that inadequate infrastructure, limited resources, and lack of technical expertise can hinder the successful adoption of e-health solutions.

## **South African Healthcare and the Fourth Industrial Revolution: new applications of technology**

The Fourth Industrial Revolution (4IR) has the potential to revolutionise the healthcare sector, particularly in emerging economies such as South Africa. Abbott (2022) explores the potential applications of 4IR technologies such as IoT, AI, and blockchain in the South African healthcare sector. The author suggest that the adoption of these technologies can improve healthcare outcomes, reduce costs, and enhance service delivery.

## **Effects of stakeholder involvement on performance of telemedicine project in Nairobi County: a case of Access Afya**

In the study on the effects of stakeholder involvement on the performance of telemedicine projects in Nairobi County, Christie (2020) emphasises the importance of stakeholder engagement in ensuring project success. The author found that stakeholder involvement positively influenced project outcomes, particularly in terms of increased acceptance and adoption of telemedicine services by healthcare providers and patients. The study highlights the need for healthcare providers to engage with stakeholders early in the project planning process to build trust, enhance communication, and ensure successful project implementation.

## **A model for the teaching of imaging informatics, a platform in biomedical informatics, in a future integrated National Health Insurance system in South Africa**

As the South African government moves towards implementing a National Health Insurance (NHI) system, there is a need for healthcare providers to be equipped with the necessary skills and knowledge to effectively use ICT solutions in healthcare service delivery. In the study, Grobler (2020) propose a model for the teaching of imaging informatics as a platform in biomedical informatics in a future integrated NHI system. The authors suggest that the model can help prepare healthcare providers for the adoption and implementation of ICT solutions in healthcare service delivery.

## **Conclusion**

Taken together, these articles highlight the critical role of project management and stakeholder engagement in the successful adoption and implementation of ICT solutions in healthcare service delivery. As the healthcare sector continues to evolve and embrace new and emerging technologies, it is crucial for healthcare providers to engage with stakeholders, develop robust project management strategies, and leverage evidence-based models to ensure successful project implementation. By doing so, healthcare providers can improve patient outcomes, enhance service delivery, and drive down costs.

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## About the Author



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