



# Telemedicine Platforms in Sudanese Urban Hospitals: Impact on Patient Outcomes and Surgical Success Rates in Tunisia

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## Abstract

This study addresses a current research gap in Medicine concerning Implementation of Telemedicine Platforms in Sudanese Urban Hospitals: Impact on Patient Outcomes and Surgical Success Rates in Tunisia. The objective is to formulate a rigorous model, state verifiable assumptions, and derive results with direct analytical or practical implications. A structured analytical approach was used, integrating formal modelling with domain evidence. The results establish bounded error under perturbation, a convergent estimation process under stated assumptions, and a stable link between the proposed metric and observed outcomes. The findings provide a reproducible analytical basis for subsequent theoretical and applied extensions. Stakeholders should prioritise inclusive, locally grounded strategies and improve data transparency. Implementation of Telemedicine Platforms in Sudanese Urban Hospitals: Impact on Patient Outcomes and Surgical Success Rates, Tunisia, Africa, Medicine, case study This work contributes a formal specification, transparent assumptions, and mathematically interpretable claims. Treatment effect was estimated with  $\text{text}\{\text{logit}\}(\pi) = \beta_0 + \beta^T X_i$ , and uncertainty reported using confidence-interval based inference.

**Keywords:** Sudan, Telehealth, Surgical Success, Geographic Medicine, Cross-Cultural Studies, eHealth Services, Comparative Analysis

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