



Enhancing Healthcare Worker Training Programmes in Rwandan Tertiary Hospitals: Evaluating Outpatient Visits Improvement Rates and Patient Satisfaction Scores,Context

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Abstract

This study addresses a current research gap in Computer Science concerning Healthcare Worker Training Program Evaluation in Rwandan Tertiary Hospitals: Outpatient Visits Improvement Rates and Patient Satisfaction Scores in Rwanda. The objective is to formulate a rigorous model, state verifiable assumptions, and derive results with direct analytical or practical implications. A structured review of relevant literature was conducted, with thematic synthesis of key findings. 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. Healthcare Worker Training Program Evaluation in Rwandan Tertiary Hospitals: Outpatient Visits Improvement Rates and Patient Satisfaction Scores, Rwanda, Africa, Computer Science, systematic review This work contributes a formal specification, transparent assumptions, and mathematically interpretable claims. Model estimation used $\hat{\theta} = \operatorname{argmin}_{\theta} \sum_{i=1}^n (y_i - f_{\theta}(\xi_i))^2 + \lambda \|\theta\|_2^2$, with performance evaluated using out-of-sample error.

Keywords: African healthcare, Rwanda, telemedicine, e-learning, patient-centred care, qualitative research, evaluation metrics

ABSTRACT-ONLY PUBLICATION

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