Replication Study on Digital Health Record Systems in Northern Ghana: Efficiency and Satisfaction Evaluation

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Abstract

This study addresses a current research gap in Computer Science concerning Impact Evaluation of Digital Health Record Systems Among General Practitioners in Northern Ghana: Practice Efficiency Improvements and Patient Satisfaction Outcomes in Ghana. 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. Impact Evaluation of Digital Health Record Systems Among General Practitioners in Northern Ghana: Practice Efficiency Improvements and Patient Satisfaction Outcomes, Ghana, Africa, Computer Science, replication study This work contributes a formal specification, transparent assumptions, and mathematically interpretable claims. Model estimation used $\hat{\theta} = argmin_{\theta} \; sumiell(y_i, f\theta(\xi)) + \lambda lVert\theta rVert_2^2$, with performance evaluated using out-of-sample error.

Keywords: *Sub-Saharan, African, Spatial-Data-Analysis, Network-Security, Qualitative-Evaluation, Health-Care-Reform, Electronic-Health-Rooms*

ABSTRACT-ONLY PUBLICATION

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