



# Methodological Evaluation of Community Health Centre Systems in Uganda: A Randomized Field Trial for Risk Reduction Measurement

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### Abstract

This study addresses a current research gap in Medicine concerning Methodological evaluation of community health centres systems in Uganda: randomized field trial for measuring risk reduction in Uganda. 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. Methodological evaluation of community health centres systems in Uganda: randomized field trial for measuring risk reduction, Uganda, Africa, Medicine, protocol This work contributes a formal specification, transparent assumptions, and mathematically interpretable claims. Treatment effect was estimated with  $text\{logit\}(\pi) = \beta_0 + \beta_1 p X_i$ , and uncertainty reported using confidence-interval based inference.

**Keywords:** African geography, community health centers, randomized trials, methodology evaluation, risk assessment, intervention effectiveness, public health systems



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