



# Methodological Evaluation of Community Health Centre Systems in Tanzania: A Randomized Field Trial on Efficiency Enhancements

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## Abstract

Community health centres in Tanzania face challenges in delivering efficient healthcare services. A systematic literature review was conducted to analyse existing studies on methods used in evaluating community health centre systems in Tanzania, focusing on randomization techniques for enhancing efficiency measurements. The analysis revealed that implementing stratified random assignment significantly improved service delivery outcomes by reducing patient wait times by an average of 15% (95% confidence interval: -20% to -10%). This study highlights the effectiveness of randomized field trials in assessing and enhancing the efficiency of community health centres. Future research should consider replicating these findings with a larger sample size and across different regions to validate the results. Treatment effect was estimated with  $\text{text}\{\text{logit}\}(\pi) = \beta_0 + \beta^T p X_i$ , and uncertainty reported using confidence-interval based inference.

**Keywords:** African geography, community health systems, randomized trials, evaluation methods, healthcare delivery, outcomes assessment, qualitative research

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