



Methodological Evaluation of Community Health Centre Systems in Tanzania Using Difference-in-Differences Approach for Efficiency Assessment,

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Abstract

This case study evaluates the operational efficiency of community health centers in Tanzania, focusing on the period from to . A difference-in-differences model was employed to analyse changes in service delivery efficiency over time, comparing pre- and post-intervention periods among selected centers. The study found that implementation of standardised protocols led to a 20% reduction in patient wait times (direction: decrease) across the evaluated health centers. The difference-in-differences model demonstrated significant efficiency gains, with reductions in service delivery bottlenecks attributed to policy interventions. Implementing continuous quality improvement initiatives and regular staff training programmes are recommended for further enhancing operational efficiency. Treatment effect was estimated with $\text{text}\{\text{logit}\}(\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: Tanzania, Geographic Disparities, Community Health Centers, Efficiency Gains, Difference-in-Differences, Statistical Methods, Quantitative Analysis

ABSTRACT-ONLY PUBLICATION

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