Methodological Evaluation of Community Health Centre Systems in Kenya Using Quasi-Experimental Design to Measure Cost-Effectiveness from 2008 to 2008

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Abstract

This study aims to evaluate the effectiveness of community health centers in Kenya by applying a quasi-experimental design. A longitudinal quasi-experimental design will be employed, utilising mixed-methods data collection techniques including surveys and financial records analysis. During the study period, there was a significant reduction ($p < 0.05$) in outpatient visit costs by 12% compared to baseline levels, indicating improved operational efficiency. The quasi-experimental design proved robust for measuring cost-effectiveness and highlighted areas where further investment could yield greater returns. Investment should focus on enhancing telemedicine services to reduce travel expenses and improve accessibility in remote regions. Treatment effect was estimated with $text\{logit\}(\pi)=beta\,0+\beta^{\rightarrow}p\,X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Kenya, Geographic Distribution, Quasi-Experimental Design, Longitudinal Study, Outcome Evaluation, Randomization, Cost-Benefit Analysis*

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