



# Methodological Evaluation of Community Health Centre Systems in Ethiopia: A Randomized Field Trial for Yield Improvement

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## Abstract

Community health centers (CHCs) play a crucial role in primary healthcare delivery in Ethiopia, particularly for rural and underserved populations. A mixed-methods approach was employed to assess the impact of CHCs on health outcomes, including quantitative surveys and qualitative interviews. Data were analysed using logistic regression models with robust standard errors for statistical inference. The analysis revealed a significant increase ( $p < 0.05$ ) in patient consultation rates from baseline levels by 25% within the first year of implementation. CHCs have demonstrated potential to enhance service yield, but further improvements are needed to address unmet health needs. Continuous quality improvement initiatives and enhanced training programmes for CHC staff should be prioritised to maximise their impact on patient care delivery. Community Health Centers, Ethiopia, Randomized Field Trial, Service Yield Improvement 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:** Ethiopia, Geographic Health Systems, Mixed-Methods, Community Health Centres, Methodological Evaluation, Randomized Trials, Yield Assessment

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