



Quasi-Experimental Evaluation of Community Health Centre Systems in Rwanda: Methodological Insights into System Reliability

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Abstract

Community health centres (CHCs) play a crucial role in healthcare delivery in Rwanda. A quasi-experimental study using differences-in-differences approach to assess system performance over time. CHCs showed significant improvements in patient flow (72% increase) after implementing new protocols, with a 95% confidence interval for the effect size. The findings suggest that systematic interventions can enhance CHC efficiency and reliability. Standardise protocol implementation across all CHCs to ensure consistent performance. Treatment effect was estimated with $text\{logit\}(\pi) = \beta_0 + \beta^T p X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Rwanda, Quasi-experimental, Differences-in-differences, Healthcare delivery, System evaluation, Methodology, Community health centres*

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