

Evaluating the Impact of Rural Clinic Systems on Clinical Outcomes in Kenya

A Quasi-Experimental Design

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ABSTRACT

Background: Rural clinic systems are a critical component of healthcare delivery in sub-Saharan Africa, yet robust evidence on their causal impact on clinical outcomes remains limited due to methodological challenges in isolating their effect from other health system factors.

Purpose and objectives: This study aimed to quantify the causal effect of integrated rural clinic systems on key clinical outcomes in a resource-constrained setting, using a rigorous quasi-experimental design to address selection bias.

Keywords: *sub-Saharan Africa, rural health services, health systems evaluation, quasi-experimental design, clinical outcomes, Kenya*

Article Highlights

- Difference-in-differences design isolates causal effect of clinic system enhancements.
- 18.2 percentage point reduction in maternal complication rates observed.
- Analysis of 120 rural facilities during phased rollout provides robust evidence.
- Effects on vaccination completeness were positive but not statistically significant.

Methodological Note

The study employs a rigorous quasi-experimental design (difference-in-differences) to address selection bias, using the phased rollout of enhancements across facilities as a natural experiment.

This study provides novel causal evidence on the effectiveness of integrated rural clinic systems.

ABSTRACT-ONLY PUBLICATION

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