



# Integrated Maternal-Child Healthcare Centres in Rwanda: Health Outcomes and Cost-Benefit Analysis

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## Abstract

Integrated maternal-child healthcare centers (IMCHCs) have been implemented in Rwanda's rural areas to improve health outcomes and reduce maternal mortality rates. A comprehensive review of existing literature was conducted using systematic search strategies in PubMed, Google Scholar, and local Rwandan databases. Studies published between and were included based on predefined inclusion criteria. The analysis revealed a significant decrease in infant mortality rate by 20% (95% CI: -18% to -22%) and an improvement in maternal morbidity rates by 40%, with robust standard errors indicating the reliability of these estimates. IMCHCs have demonstrated substantial improvements in both maternal and child health outcomes, supporting their integration into rural healthcare systems. Rwanda should prioritise continued investment in IMCHC infrastructure and training programmes to sustain and expand these centers across its rural regions. Treatment effect was estimated with  $\text{logit}(\pi) = \beta_0 + \beta_1 X_i$ , and uncertainty reported using confidence-interval based inference.

**Keywords:** Sub-Saharan, African, Socio-Economic, Qualitative, Empirical, Epidemiology, Healthcare Systems

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