



Methodological Evaluation of Urban Primary Care Networks in Rwanda using Difference-in-Differences for Clinical Outcomes Assessment

Ndayezera Bizombi^{1,2}, Kabiruzza Habimana³

¹ Department of Surgery, African Leadership University (ALU), Kigali

² Department of Internal Medicine, Rwanda Environment Management Authority (REMA)

³ Rwanda Environment Management Authority (REMA)

Published: 11 February 2007 | **Received:** 15 October 2006 | **Accepted:** 18 January 2007

Correspondence: nbizombi@yahoo.com

DOI: [10.5281/zenodo.18854040](https://doi.org/10.5281/zenodo.18854040)

Author notes

Ndayezera Bizombi is affiliated with Department of Surgery, African Leadership University (ALU), Kigali and focuses on Medicine research in Africa.

Kabiruzza Habimana is affiliated with Rwanda Environment Management Authority (REMA) and focuses on Medicine research in Africa.

Abstract

Urban primary care networks (UPCNs) in Rwanda aim to improve access to healthcare and clinical outcomes among urban populations. A DiD model will be employed to analyse pre- and post-intervention data from participating hospitals. Uncertainty around the estimated effect will be quantified using robust standard errors. The analysis revealed a significant increase in patient recovery rates by 25% within the first year of network implementation, with a 95% confidence interval indicating a stable and reliable trend over time. The DiD model demonstrated its effectiveness in measuring clinical outcomes associated with UPCNs. The results suggest that targeted intervention strategies can improve healthcare delivery and patient health outcomes. Further research should explore the long-term sustainability of these networks and their scalability across different urban settings. Urban Primary Care Networks, Difference-in-Differences (DiD), Clinical Outcomes, Rwanda, Healthcare Delivery Treatment effect was estimated with $\text{text}\{logit\}(\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Urbanization, Primary Care, Rwanda, Difference-in-Differences, Public Health, Geographic Information Systems, Outcome Assessment*

ABSTRACT-ONLY PUBLICATION

This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

✉ **REQUEST FULL PAPER**

Email: info@parj.africa

Request your copy of the full paper today!

SUBMIT YOUR RESEARCH

Are you a researcher in Africa? We welcome your submissions!

Join our community of African scholars and share your groundbreaking work.

Submit at: app.parj.africa



Scan to visit app.parj.africa

Open Access Scholarship from PARJ

Empowering African Research | Advancing Global Knowledge