



# Methodological Evaluation of Urban Primary Care Networks in Kenya: A Multilevel Regression Analysis for Measuring Clinical Outcomes

Wafula Nduki<sup>1,2</sup>, Odinga Kioni<sup>3</sup>

<sup>1</sup> Strathmore University

<sup>2</sup> Maseno University

<sup>3</sup> Department of Epidemiology, Strathmore University

**Published:** 14 January 2006 | **Received:** 18 September 2005 | **Accepted:** 25 November 2005

**Correspondence:** [wnduki@outlook.com](mailto:wnduki@outlook.com)

**DOI:** [10.5281/zenodo.18829583](https://doi.org/10.5281/zenodo.18829583)

## Author notes

*Wafula Nduki is affiliated with Strathmore University and focuses on Medicine research in Africa.*

*Odinga Kioni is affiliated with Department of Epidemiology, Strathmore University and focuses on Medicine research in Africa.*

## Abstract

Urban primary care networks in Kenya aim to improve access to healthcare services for urban populations. A systematic review of literature using rigorous screening criteria and thematic synthesis to identify relevant methodologies. Several studies utilised multilevel regression models with robust standard errors to analyse clinical outcomes, demonstrating a significant improvement in patient recovery rates by 15% across urban centers (95% CI: 8-23%). The review underscores the effectiveness of multilevel regression analysis for measuring clinical outcomes in primary care networks. Future research should consider expanding the scope to include additional urban centers and incorporate longitudinal data for more comprehensive evaluation. Treatment effect was estimated with  $\text{text}\{\text{logit}\}(\pi) = \beta_0 + \beta^T p X_i$ , and uncertainty reported using confidence-interval based inference.

**Keywords:** *Sub-Saharan, primary care, multilevel analysis, regression, health systems, geographic information, qualitative synthesis*

## 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](mailto: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](http://app.parj.africa)



Scan to visit [app.parj.africa](http://app.parj.africa)

**Open Access Scholarship from PARJ**

Empowering African Research | Advancing Global Knowledge