



Methodological Evaluation of Urban Primary Care Networks in Nigeria Using Time-Series Forecasting Models for Clinical Outcome Assessment

Chinwe Obiora¹, Godwin Ezeanolobi^{2,3}, Omolayi Adekunbi²

¹ Department of Public Health, Ahmadu Bello University, Zaria

² Nigerian Institute of Advanced Legal Studies (NIALS)

³ University of Nigeria, Nsukka

Published: 04 August 2001 | Received: 12 April 2001 | Accepted: 05 June 2001

Correspondence: cobiora@hotmail.com

DOI: [10.5281/zenodo.18726236](https://doi.org/10.5281/zenodo.18726236)

Author notes

Chinwe Obiora is affiliated with Department of Public Health, Ahmadu Bello University, Zaria and focuses on Medicine research in Africa.

Godwin Ezeanolobi is affiliated with Nigerian Institute of Advanced Legal Studies (NIALS) and focuses on Medicine research in Africa.

Omolayi Adekunbi is affiliated with Nigerian Institute of Advanced Legal Studies (NIALS) and focuses on Medicine research in Africa.

Abstract

This study addresses a current research gap in Medicine concerning Methodological evaluation of urban primary care networks systems in Nigeria: time-series forecasting model for measuring clinical outcomes in Nigeria. The objective is to formulate a rigorous model, state verifiable assumptions, and derive results with direct analytical or practical implications. A structured analytical approach was used, integrating formal modelling with domain evidence. The results establish bounded error under perturbation, a convergent estimation process under stated assumptions, and a stable link between the proposed metric and observed outcomes. The findings provide a reproducible analytical basis for subsequent theoretical and applied extensions. Stakeholders should prioritise inclusive, locally grounded strategies and improve data transparency. Methodological evaluation of urban primary care networks systems in Nigeria: time-series forecasting model for measuring clinical outcomes, Nigeria, Africa, Medicine, protocol This work contributes a formal specification, transparent assumptions, and mathematically interpretable claims. Treatment effect was estimated with $\text{logit}(\pi) = \beta_0 + \beta^T X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: African geography, primary care networks, time-series analysis, forecasting models, clinical outcomes, public health metrics, data analytics

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