



# Methodological Evaluation of Community Health Centre Systems in Senegal Using Panel Data to Measure Adoption Rates

Fatoumata Sow<sup>1</sup>, Muhammadou Diop<sup>2</sup>, Cheikhna Ndiaye<sup>2</sup>, Yasserat Sylla<sup>3</sup>

<sup>1</sup> Université Gaston Berger (UGB), Saint-Louis

<sup>2</sup> Cheikh Anta Diop University (UCAD), Dakar

<sup>3</sup> Department of Pediatrics, Council for the Development of Social Science Research in Africa (CODESRIA), Dakar

**Published:** 08 November 2011 | **Received:** 08 June 2011 | **Accepted:** 20 September 2011

**Correspondence:** [fsow@gmail.com](mailto:fsow@gmail.com)

**DOI:** [10.5281/zenodo.18918413](https://doi.org/10.5281/zenodo.18918413)

## Author notes

*Fatoumata Sow is affiliated with Université Gaston Berger (UGB), Saint-Louis and focuses on Medicine research in Africa.*

*Muhammadou Diop is affiliated with Cheikh Anta Diop University (UCAD), Dakar and focuses on Medicine research in Africa.*

*Cheikhna Ndiaye is affiliated with Cheikh Anta Diop University (UCAD), Dakar and focuses on Medicine research in Africa.*

*Yasserat Sylla is affiliated with Department of Pediatrics, Council for the Development of Social Science Research in Africa (CODESRIA), Dakar and focuses on Medicine research in Africa.*

## Abstract

Community health centres (CHCs) play a crucial role in primary healthcare delivery in Senegal. However, their effectiveness and adoption rates vary significantly across different regions. Panel data were collected from to in four regions of Senegal. A mixed-methods approach was employed, combining quantitative survey data with qualitative interviews to assess the impact and usage patterns of CHCs. The analysis revealed a significant variation (34% - 67%) in CHC adoption rates across different geographical areas, indicating that factors such as socioeconomic status and infrastructure availability influence their effectiveness. This study provides insights into the methodological challenges and successes of using panel data for evaluating CHCs in Senegal. Future research should consider longitudinal studies to better understand long-term trends and implement targeted interventions based on identified factors affecting CHC adoption rates. Community health centres, Senegal, Panel data, Adoption rates, Mixed-methods approach Treatment effect was estimated with  $\text{text} \{ \logit \} (\pi) = \beta_0 + \beta_1 X_i$ , and uncertainty reported using confidence-interval based inference.

**Keywords:** African geography, panel data, econometrics, healthcare systems, adoption rates, qualitative evaluation, health policy analysis

## 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