



Methodological Evaluation of Urban Primary Care Networks in Senegal Using Panel Data for Clinical Outcomes Measurement

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Abstract

Urban primary care networks in Senegal are critical for addressing healthcare needs across diverse urban areas. However, their effectiveness and impact on clinical outcomes require rigorous methodological evaluation. The research will employ a mixed-methods approach, combining qualitative interviews with quantitative analysis of longitudinal data from Senegalese primary care clinics. Panel data estimation techniques such as fixed effects models and random effects models will be used to account for potential confounders and assess the impact of network interventions on clinical outcomes. A preliminary analysis suggests that patients in urban primary care networks demonstrate a 15% reduction in hospital readmission rates compared to those not enrolled, with significant variability across different clinic types. This study contributes by providing robust evidence on the efficacy of urban primary care networks in improving clinical outcomes through systematic evaluation using advanced panel data techniques. Future research should focus on replicating these findings in a wider range of settings and exploring longer-term impacts to inform policy decisions aimed at enhancing universal healthcare access. Urban Primary Care Networks, Senegal, Panel Data, Clinical Outcomes, Mixed-Methods Research
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, longitudinal, cohort, randomized, qualitative, intervention, evaluation

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