



# Reliability Assessment of Community Health Centre Systems in Ghana Through Randomized Field Trials,

Nkansah Afriyie<sup>1</sup>, Yirenkyi Amoako<sup>2</sup>, Achamany Asare<sup>3</sup>

<sup>1</sup> Department of Public Health, University of Cape Coast

<sup>2</sup> Department of Pediatrics, University of Professional Studies, Accra (UPSA)

<sup>3</sup> University of Professional Studies, Accra (UPSA)

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**Correspondence:** [nafriyie@aol.com](mailto:nafriyie@aol.com)

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### Author notes

*Nkansah Afriyie is affiliated with Department of Public Health, University of Cape Coast and focuses on Medicine research in Africa.*

*Yirenkyi Amoako is affiliated with Department of Pediatrics, University of Professional Studies, Accra (UPSA) and focuses on Medicine research in Africa.*

*Achamany Asare is affiliated with University of Professional Studies, Accra (UPSA) and focuses on Medicine research in Africa.*

### Abstract

Community health centres in Ghana have been established to improve access to healthcare services, but their reliability remains a concern. Randomized field trials were conducted at four community health centres across Ghana over one year. Data on service delivery efficiency, patient satisfaction, and operational costs were collected using a structured questionnaire and financial records. The reliability score for the studied health centres was found to be 82%, with significant variation observed in patient wait times (mean reduction of 30% after intervention). The randomized field trials provided valuable insights into the operational efficiency of community health centres, identifying areas needing improvement. Further research should focus on implementing standardised protocols and training programmes to enhance service delivery consistency. Community Health Centres, Reliability Assessment, Randomized Field Trials, Ghana Treatment effect was estimated with  $text \{ logit \} (\pi) = \beta_0 + \beta_1 X_i$ , and uncertainty reported using confidence-interval based inference.

**Keywords:** Geography, Africa, CommunityHealth, Systems, Sustainability, Evaluation, RandomizedControlledTrial

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