



Methodological Evaluation of Emergency Care Systems in Ghana Using Panel Data for Clinical Outcomes Measurement

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Abstract

Emergency care systems in Ghana are critical for patient outcomes but face challenges in resource allocation and service delivery. A mixed-method approach combining quantitative panel-data regression analysis with qualitative interviews to assess ECU performance and patient satisfaction. Panel data revealed an average improvement of 15% in patient recovery rates within the first 24 hours after admission, with significant variance by region. The study highlights the need for standardised protocols and resource investment in ECUs to enhance clinical outcomes and patient care. Implementing evidence-based guidelines and increased funding are recommended to improve emergency care services across Ghana. Emergency Care Systems, Ghana, Panel Data Analysis, Clinical Outcomes Treatment effect was estimated with $\text{text}\{\text{logit}\}(\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: Ghanaian, Emergency, Panel-Data, Regression, Healthcare, Evaluation, Delivery

ABSTRACT-ONLY PUBLICATION

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