



E-Services for Community Health Volunteers in Sierra Leone's Healthcare Management Systems, 2006

Mohammed Foday^{1,2}, Sahr Kamara^{3,4}

¹ Department of Software Engineering, Fourah Bay College, University of Sierra Leone

² Department of Software Engineering, Ernest Bai Koroma University of Science and Technology

³ Ernest Bai Koroma University of Science and Technology

⁴ Department of Cybersecurity, Fourah Bay College, University of Sierra Leone

Published: 28 December 2006 | **Received:** 01 October 2006 | **Accepted:** 27 November 2006

Correspondence: mfoday@aol.com

DOI: [10.5281/zenodo.18831139](https://doi.org/10.5281/zenodo.18831139)

Author notes

Mohammed Foday is affiliated with Department of Software Engineering, Fourah Bay College, University of Sierra Leone and focuses on Computer Science research in Africa.

Sahr Kamara is affiliated with Ernest Bai Koroma University of Science and Technology and focuses on Computer Science research in Africa.

Abstract

This study addresses a current research gap in Computer Science concerning "E-Services for Access to Healthcare Management Systems by Community Health Volunteers in Sierra Leone" in Sierra Leone. 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. "E-Services for Access to Healthcare Management Systems by Community Health Volunteers in Sierra Leone", Sierra Leone, Africa, Computer Science, short report This work contributes a formal specification, transparent assumptions, and mathematically interpretable claims. Model estimation used $\hat{\theta} = \underset{\theta}{\operatorname{argmin}} \{ \sum_i \ell(y_i, f\theta(\xi)) + \lambda \|\theta\|_2^2 \}$, with performance evaluated using out-of-sample error.

Keywords: *African geography, Community health volunteers, E-services, Healthcare management systems, Information technology integration, Participatory approaches, Rural healthcare delivery*

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