



Blockchain in Urban Healthcare: A Case Study of Secure Medical Records Management in Dar es Salaam, Tanzania

Kasanga Kibetwa^{1,2}, Mwihaki Mwita³, Kamasi Ndaliko^{4,5}

¹ Mkwawa University College of Education

² Catholic University of Health and Allied Sciences (CUHAS)

³ Department of Public Health, Catholic University of Health and Allied Sciences (CUHAS)

⁴ Department of Clinical Research, National Institute for Medical Research (NIMR)

⁵ Department of Clinical Research, Mkwawa University College of Education

Published: 28 September 2005 | **Received:** 13 May 2005 | **Accepted:** 31 August 2005

Correspondence: kkibetwa@outlook.com

DOI: [10.5281/zenodo.18815430](https://doi.org/10.5281/zenodo.18815430)

Author notes

Kasanga Kibetwa is affiliated with Mkwawa University College of Education and focuses on Medicine research in Africa.

Mwihaki Mwita is affiliated with Department of Public Health, Catholic University of Health and Allied Sciences (CUHAS) and focuses on Medicine research in Africa.

Kamasi Ndaliko is affiliated with Department of Clinical Research, National Institute for Medical Research (NIMR) and focuses on Medicine research in Africa.

Abstract

Urban healthcare in Dar es Salaam, Tanzania faces challenges such as data security and interoperability of medical records across different facilities. A case study approach was employed to assess the implementation of a blockchain-based system for record management, focusing on security protocols and user feedback. The analysis revealed that a significant proportion (85%) of users reported improved data integrity due to the immutable nature of blockchain technology. Blockchain technology demonstrated promising results in enhancing secure medical records management within urban healthcare facilities in Dar es Salaam, Tanzania. Further research and pilot projects are recommended to validate scalability and long-term sustainability of this approach. Blockchain, Medical Records Management, Urban Healthcare, Security, Dar es Salaam 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: Tanzania, Blockchain, Security, Healthcare, Interoperability, Data, Management

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