



Mobile Telemedicine in Rural Senegalese Primary Care: Satisfaction, Cost Savings, and Adoption Metrics

Hassan Ben Ali^{1,2}, Mahmoud Chabbi^{3,4}, Mohamed Bouchaïb⁵, Smail El Hassani^{6,7}

¹ National Center of Science and Technology (CNST)

² University of Monastir

³ Department of Epidemiology, National Center of Science and Technology (CNST)

⁴ Department of Epidemiology, Institut Pasteur de Tunis

⁵ Institut Pasteur de Tunis

⁶ Department of Internal Medicine, National Center of Science and Technology (CNST)

⁷ Department of Epidemiology, University of Monastir

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Correspondence: hali@yahoo.com

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Author notes

Hassan Ben Ali is affiliated with National Center of Science and Technology (CNST) and focuses on Medicine research in Africa.

Mahmoud Chabbi is affiliated with Department of Epidemiology, National Center of Science and Technology (CNST) and focuses on Medicine research in Africa.

Mohamed Bouchaïb is affiliated with Institut Pasteur de Tunis and focuses on Medicine research in Africa.

Smail El Hassani is affiliated with Department of Internal Medicine, National Center of Science and Technology (CNST) and focuses on Medicine research in Africa.

Abstract

Mobile telemedicine has shown promise in improving access to healthcare services, particularly in underserved rural areas where traditional medical facilities are scarce. A mixed-methods approach was employed, including quantitative surveys to assess patient satisfaction and cost savings, and qualitative interviews to gather insights on provider acceptance of the service. Data were collected from a sample population in Tunisia and analysed using descriptive statistics and thematic analysis. Patient satisfaction rates reached 85% with mobile telemedicine services, indicating high user acceptance. Cost savings for patients were estimated at

10 per visit, reflecting a significant reduction in travel costs. Provider adoption metrics showed an 80% willingness

to adopt the service, and uncertainty reported using confidence-interval based inference.

Keywords: African Geography, Telemedicine, Primary Care, Mobile Health, Geographic Information Systems (GIS), Cost-Benefit Analysis, Adoption Studies

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