



UNIVERSITY OF NAIROBI

SCHOOL OF COMPUTING AND INFORMATICS

Use of mobile phones in the provision of HIV/AIDS-related health care and information in Kenya: An implementation framework based on Nairobi and its environs.

BY

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Information Systems of the University of Nairobi.*

DECLARATION

This research project, as presented in this report, is my original work. To the best of my knowledge, this research work has not been carried out before or previously presented to any other education institution in the world for similar purposes.

Signature.....

Date.....5/9/2011.....

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This project has been submitted in partial fulfillment of requirements for the Master of Science in Information Systems of the University of Nairobi with my approval as the University supervisor.

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ABSTRACT

HIV/AIDS has placed a very big burden on the health system in Kenya with 1.5 million people living with HIV in Kenya and up to 80,000 people dying from the disease annually. The Kenyan government's free antiretroviral (ARV) programme has reached more than 360,000 people in need of the life-prolonging therapy and this number is projected to rise to 540,000 by the end of 2011 and 770,000 by the end of 2013. Unless this momentum is accompanied by an equally aggressive treatment literacy campaign, widespread drug resistance could result. Adherence to antiretroviral therapy (ART) is one of the strongest predictors of progression to AIDS and death among people living with HIV/AIDS and near perfect (>95%) compliance is required for both immediate and long-term clinical success.

Kenya is still lagging behind in HIV treatment literacy and due to the overstretching of health personnel and facilities by the HIV crisis in Kenya, there is need for a better, cheaper, more available health information model that has been proved to have efficacy and can have a wide reach. Existing models are expensive and ineffective.

In Kenya there are 22 million mobile phone subscribers representing a penetration of 55.9 for every 100 inhabitants. The cost of owning and operating a mobile phone has drastically reduced over the years and this has made mobile phones the ICT of choice in Kenya. This research was seeking to establish the viability of using mobile phones as a HIV intervention option for Kenya and the form it should take.

The research was conducted through the use of questionnaires, interviews and documents review. A total of 222 valid questionnaires were completed by healthcare consumers and 118 by healthcare providers. The data was analyzed using SPSS statistical software. The results demonstrated that mobile phones are currently not being extensively used in the provision of healthcare services. They also established that both healthcare consumers and providers were of the opinion that ways should be found to provide healthcare services to HIV/AIDS patients using mobile phones. A number of concerns were raised, the major one being that of medical data security and protection of patients' privacy. A model for the provision of healthcare services to HIV/AIDS patients using mobile phones was developed based on the findings of the study.