

National Unique Patient Identifier in HIV/AIDS Healthcare in Kenya

Authors: Gonza Omoro¹, and Maureen Awuor¹, Dr. Amos Omamo²

Affiliation: ¹Ph.D Business Information Systems Students, Jaramogi Oginga Odinga University of Science and Technology(JOOUST), ²Lecturer, Jaramogi Oginga Odinga University of Science and Technology(JOOUST), School of Informatics and Innovation Systems.

Corresponding Author: Gonza Omoro (gonza.omoro123@gmail.com)

Keywords: Electronic Medical Record, Unique Patient Identifier, Birth Certificate Number, National Identity Number, Data warehouse.

Introduction

Providing high quality Human Immunodeficiency Virus (HIV) health care requires high quality accessible data on individual data and clinic encounter and visits. These data can also drive decision making by health stakeholders, national programs and funding agencies. Kenya through National AIDS Sexually Transmitted Diseases Control Program (NASCOP) has identified and recommended the use of selected Electronic Medical Records (EMR) in the provision of HIV/AIDS treatment services in the health facilities (NASCOP, 2006). However depending on the limitations of resources not all facilities are using the EMRs, some of the facilities are using paper based clinical forms to collect patients' data. EMR has shown tremendous benefits in the delivery of healthcare (NASCOP, 2016), notably the improved integrity of the data collected and reported, provision of clinical decision support systems (CDSS). Implementing Partners in the HIV/AIDS programs are putting up plans to scale up the use of EMR in this sector. One of the major obstacles is identification of patients across different health facilities in Kenya. Each health facilities provide her own patient identification, even though NASCOP has provided some standard guidance of patient registration in the health facility, this has not been fully implemented in all facilities. HIV treatment and management requires continuity of the therapy, with the data systems, information exchange and sharing of historical patient medical information, which is critical for continuity of patients' care, is not possible since facilities are autonomous in nature. This study proposed a National Unique Patient Identifier (NUPI) to be implemented in the national level health sector. This initially is considered for facilities which

implement web based EMR hosted at the national level. This will ease of patient data exchange across facilities.

Methods

We searched National AIDS Sexually Transmitted Diseases Control Program (NASCOP, 2016) EMR implementation guidance in Kenya to establish the proposed frameworks. We also searched MEDLINE, PubMed, CINAHL to find out how patients' identification is addressed in the developed and the developing countries like Kenya. We described the evolution of Electronic Medical Records in Kenya and how Patients identification has evolved over the years as indicated in the National EMR guidance. We also described the consequences that has been caused by absence of unique identification as patients move from one health facility to the other. We then described our proposed model of using national birth certificate numbers to uniquely identification of HIV patients. Patients will be registered into the web based EMR in the health facilities using any of these documents. Patient won't need now to remember the many numbering formats from facilities but only their national ID numbers or their birth certificate numbers. This data will routinely be pushed to the central national data warehouse. Questionnaire was developed to collect stakeholders' views of the proposed model. The data was analyzed in tables.

Results

One hundred per cent of the respondents use some unique facility generated patient identifiers in their facilities. They however unanimously agreed that this had led to mis-appropriation of patient diagnosis and treatment due to the non-uniform identification format. 100% of the respondents agreed that unique patient identifier consisting of the national Identity card number or a birth certificate number would eliminate the challenges currently faced with this problem. These model will perfectly fit data exchange between facilities and also the national warehouse, it will only apply for facilities running a web based Electronic Medical Records hosted at the national data warehouse.

Conclusion

Having gone through the findings from the secondary data and also the primary results from the survey, this study strongly advocate for a national unique patient identifier that consists of the national Identity card number or the national birth certificate number. These are unique numbers that each Kenyan citizen acquires automatically at birth and also upon reaching the adult age of eighteen upon registering for the national identity card. This models has a number of strengths, namely, uses existing identifier as part of the solution, relatively easy to implement, low cost of implementation, does not require a Central Trusted Authority, eliminates the effort, time and investment that will be required for developing and implementing a new identifier. This model when implemented in the web based Electronic Medical Records data exchange will greatly be improved across health facilities within the country.