IMPLEMENTATION OF ELECTRONIC MEDICAL RECORDS IN KENYAN PUBLIC HOSPITALS: CHALLENGES AND OPPORTUNITIES

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SYNOPSIS

An Electronic Medical Record (EMR), a computer system composed of the clinical data repository, clinical decision support, controlled medical vocabulary, order entry, and pharmacy module has become a growing subject of debate in the world today. While EMRs hold great promise, few studies have been conducted on their implementation and outcome. Despite the fact that Kenya has made tremendous steps in Information Communication Technology (ICT) as demonstrated by the growing number of telephone lines, Internet Service Providers (ISPs), the number of Internet users, broadcasting stations, mobile phones and the growing competition by mobile service providers, and development of National EMR standards, there has been no noticeable penetration of ICT in public hospitals. To unearth the issues surrounding implementation of EMR in Kenyan Public hospitals, this study aimed at exposing technical and socio-economic challenges during pre-implementation, implementation, and post-implementation stages in Kenya. It also examined opportunities for EMR which can be utilized to improve healthcare. Towards this end, the study employed a descriptive approach to systematically study and describe the existing medical records management systems, the available electronic infrastructure, attitudes towards EMR and the expected EMR by-products. Structured and unstructured inquiry methods were used to collect quantitative and qualitative data from a sample of 685 (Strategic Managers, Doctors, Nurses and Health records and Information Officers) drawn from Moi Teaching and Referral Hospital, Kenyatta National Hospital, Rift Valley, Embu and Nyeri Provincial General Hospitals, Naivasha District hospital and Thika, Level 5 Hospital, and Meru Level 5 Hospital. Data was analyzed to determine the respondents’ view on the procedures that were followed during EMR implementation, the existing EMR functionalities, user satisfaction with EMR output, and to look for EMR implementation trends and patterns. The key findings of the research included low consideration of financial strategies for EMR funding and sustainability, low utilization of existing national EMR standards, a disconnect between strategic managers and EMR users especially in the area of user involvement, Low EMR impact on healthcare services, and low reliability of EMR as evidence, maintenance of authentic records and lack of other records management functions such as appraisal, disposal and permanent retention of records among others. Based on the findings, the study recommends more sensitization on National EMR standards at both strategic and users level to ensure EMR quality, appropriate involvement of users and all stakeholders in all stages of implementation to enhance requirements analysis, ownership of system and utilization. The study also recommends before and after studies in health facilities implementing EMRs in order to ensure early corrective measures and control of the implementation process.