Abstract

Health Management Information Systems (HMISs) initiatives in Kenya have traditionally been donor-driven with minimal, if any, organizational input in their design. This has consequently led to predictable failures due to lack of sustainability of these initiatives upon donor pullout. The objectives of the study were to investigate the design, implementation and operation of Medboss computerized system at Mbagathi County Hospital in Kenya. Medboss is a locally developed computerized HMIS software, specifically designed for government hospitals in Kenya. However, private hospitals have also adapted it. A descriptive case study research design was conducted in the month of August 2015. The target population was sixty staff members who use Medboss, out of the sixty, thirty two participated in the study. Semi-structured questionnaires and key interview guides were used to collect data. Ten key informants, involved in the design and implementation of the system were interviewed. Questionnaires were used to collect data from twenty two health workers on their knowledge of the factors affecting the operation of the system. Collected data was analyzed using descriptive statistics and multiple regression analysis. Results: Design, implementation and
Towards a Well-functional Computerized Health Management Information System: A case of Mbagathi County Hospital, Kenya

Operationalization revealed 73.3% effect on functionality of HMIS. Design was found to significantly influence functionality of HMIS, with a coefficient of 0.815. The coefficient of implementation of HMIS was 0.703, which was equally significant. Operationalization had the least influence on functionality of HMIS with a coefficient of 0.412. Recommendation: Establish a fully functional computerized system. Develop an HMIS policy for the Hospital that documents its vision, mission and objectives therefore implementation will be based on the policy. Fully implement the remaining modules of the system, such as, pharmacy, nursing, human resource, logistics management, and special clinics to enable well-functioning in the operation of the system. Invest more in IT infrastructure in order to enjoy the full benefits of the current system.

References


**Index Terms**

Computer Science  
Biomedical

**Keywords**

HMIS, Medboss, Mbagathi, Design, Implementation, Operation, ICT