

Improving health care service delivery in public health facilities by use of an integrated e- health system for optimal management of patients' throughput

The challenge of communicable and non-communicable diseases is placing a heavy burden on health and social care systems in the developing nations (Kenya included). Currently, public healthcare systems have scarce resources to provide high-quality care and service delivery. In response to these challenges posed by both chronic and acute diseases, new models of, or approaches to, health care delivery needs to be designed to achieve efficient, timely, cost-effective and better coordination of services across the continuum of care required by people with diverse diseases. Integrating services is a necessary part of improving patient care and efficiently using scarce resources. Public Health care facilities are often characterized by long queues (long wait time and delay), which are mainly due to disease burden, inefficiency and scarcity of resources. Other studies have been able to address the challenge of patients' flow within a health facility by applying different technologies like Real Time Location System (RTLS). This study main focus however is on understanding patients' flow requirements and the application of an integrated e-health system within a healthcare facility. This is envisaged, to help ease these long queues, use optimally the scarce resources, improve patients' satisfaction and hence improved revenue flow. An integrated e-health system that is patient centered; timely, efficient, and cost-effective, results into an improved well managed and coordinated healthcare service delivery.