A technological infrastructure assessment framework for telemedicine adoption in Kenyan level four hospitals

Telemedicine is the use of telecommunication and information technologies in order to provide clinical health care at a distance, it helps eliminate distance barriers and can improve access to medical services that would often not be consistently available in distant rural communities, many health professionals leave Kenya to find posts abroad, this results to a severe shortage of medical workers across the country. According to the World Health Organization, Kenya has just one doctor and only 12 nurses/midwives for every 10,000 people. Some of the level four hospitals lack specialized doctors therefore they are being forced to employ nurses who come in to assist in treatment of the patient. The use of telemedicine can sound costly but in the current environment of shortage of healthcare professionals, greater incidence of chronic conditions and rising healthcare costs may call for further research and telemedicine can come in to assist solving this problem. The aim of this paper is to establish the current status of telemedicine in level four hospitals and assess their technological infrastructure in order to identify the challenges that might be faced by these hospitals upon adopting telemedicine. The paper accomplishes its objectives by conducting an online review of the assessment of technological infrastructure of Kenyan level four hospitals, the telemedicine status and challenges faced by telemedicine adoption. It found that there is Lack of adequate technological infrastructure, lack of a change management plan, no business model, limited buy-in from practitioners, high staff turnover, limited e-Readiness, low bandwidth and inappropriate software. The findings of this paper can help improve the telemedicine adoption status which in turn improves the health of the community and population living around these hospitals by bringing more services, medical professionals sharing ideas and more importantly a tool to save a life.