Integrating Digital Health for Healthcare Transformation: Conceptual Model of Smart Healthcare for northern Borneo

ABSTRACT

Digital health has revolutionised the delivery of healthcare globally. However, integrating digital health in the system for transforming healthcare at a larger scale needs to be contextually relevant. Sabah, a state in northern Borneo, has distinctive public health concerns on thalassaemia, colorectal cancer, ischaemic heart disease, mental health, malaria, tuberculosis, and maternal and child health. Envisioning equal access to healthcare throughout the state, a conceptual model called smart healthcare is conceived for healthcare transformation through digital health integration based on the main clinical niche. The three domains of smart healthcare model is smart hospital, smart wellness and smart uber health. Smart hospital is aimed as the central core for materialising smart healthcare model as it serves as the platform to integrate digital health for diagnostic tools and treatment modalities. The purpose of smart wellness is to ensure uninterrupted healthcare and promotes preventive medicine at home and community setting through the ecosystem feeding by the smart hospital. This ecosystem is connected with smart uber health in order to bring the healthcare services to patients and successfully overcoming the issue on inaccessibility. Each domain is highlighted with certain niche and related healthcare technology.