

Abstract

In an era of tremendous advancements in the health care domain, in both quality and quantity of service, incorporation of computers, digital medical devices and healthcare related software applications demands resilient computer networks. Further to this, the need for long term planning, policies and standards in the designing and implementation of such networks is little disputed. In the light of such knowledge, the government of Sri Lanka has initiated the drafting of the National eHealth Strategic Plan, the National eHealth Policy and the National eHealth Standards & Guidelines for Sri Lanka. This work was aimed at providing recommendations on policy, standards and guidelines for a feasible, actionable and sustainable computer Network Architecture for the State Health Sector of Sri Lanka. The ultimate goal of such recommendations is to ensure that the computer network shall possess the emergent properties of maximum efficiency, interoperability, reliability, scalability and security.

The methodology used in this endeavour was four folded; stakeholder identification and requirement elicitation , analysis of the existing electronic information systems in the curative health institutes of Sri Lanka, computerised literature survey to extract best practices from around the globe relating to computer networks in healthcare and a comprehensive SWOT analysis on the ground situation in relation to networking.

The results after careful analysis revealed an invaluable insight to international standards specific to healthcare networking, best practices and policies which can be adapted beforehand, to achieve resilient connectivity with seamless data exchange.

Key words: eHealth, Healthcare, Policy, Standards, Computer Networks, Networks, Architecture, Sri Lanka