Title of Article: Robust E-Health Communication Architecture for Rural Communities in Developing Countries.

Author(s): Idachaba F.E and Idachaba M.E.


Abstract: The lack of access to quality healthcare and the lack of sufficient manpower, especially doctors, in rural areas is a major healthcare challenge faced by dwellers in rural communities in most developing countries. The intervention of governments, which range from the introduction of training programs aimed at producing health workers from schools of health technology and nursing to the recalling and deployment of retired nurses to rural areas, has still not been able to generate the desired improvement in healthcare delivery, as outbreaks of epidemics are still being reported in such areas. This work presents an E-Health architecture which utilizes low cost sensors and communication devices to link the doctors in the urban areas with the patients in rural areas enabling doctors-patients interaction. The system enables accurate and timely diagnosis of the patients and facilitates proper treatment plans. It also incorporates an epidemic alert which enables the tracking of diseases and the early detection and control of epidemics.