Computer systems and how they work in healthcare

Health & Medicine

Full Paper Network Type Latest technology in information systems improves the ability to support the health equity challenges. Improper treatment of patients can lead to loss of life. Lots of patients lost their life due to late detection of the disease or being treated late. The network infrastructure of a typical healthcare comprises of centralized administration on a star topology framework. The integration is based on an intra-room network including computing devices that are communicatively coupled with the primary computer device (HEALTHCARE COMPUTER SYSTEM WITH INTRA-ROOM NETWORK). Likewise, computing devices consists of vital signs monitor, devices for patient bed, IP cameras, motion sensors etc. The type of devices is dependent on facilities provided. In order to access healthcare systems, a user-friendly web portal is available for the staff to administer and monitor patient and staff activities. These web portals are used extensively in a metropolitan area network or wide area network to link staff and resources where required. Furthermore, the most prevalent health care systems in USA named as " esri", navigates via a web portal in order to ' geographically' monitor and analyze service issues in hospitals (Largest U. S. health care system links staff and resources). Potential Health Care The integration of wireless technology in healthcare systems has significantly triggered the health care with rapid responses to the patient. The information required for any particular disease is easy, as online doctor is now common and is accessible by anyone connected to the Internet. Similarly, mobile technology provides SMS based alerts for patient appointments, booking, medication reminder, disease symptoms, dietary information etc. Furthermore, RFID systems connect the network wirelessly

for automating patient monitoring and track treatment from which they are suffering. Instead of documenting patient wealth information that is also time consuming, RFID systems enable instant access to the information by simply scanning tags. The patients will receive quick response of the health care services because the doctor may get all the information related to a patient in seconds. Patients can review the treatment history by scanning the tag. The treatment history includes what care has already been provided and what treatment they need next. This feature will increase the productivity of a doctor (Health-care tracking systems). Health Care Provider Needs The requirements for a health care professional are associated with; Shielding patient privacy, Abide by regulations, Improving Information Technology efficiency, Business alliance Controlling costs Future Improvements The integration of healthcare technologies in the cell phone is more beneficial rather than taking the patient to the hospital. For instance, doctor can give medication and instruction to the patient as soon as the doctor detects any uncertain event. However, the monitoring of pulse rate via cell phone is not in the picture, again, there are many diseases that can be cured at the initial stage by only curing them by monitoring the heart rate or blood pressure. The role of information technology is to provide a priority based calling whenever there is an emergency “ Health Call” in order to secure the transmission channel of the doctor and the patient. Hence, the integration of health care system in the cell phone with the required mechanism to detect blood pressures and heart rates can significantly save lives of millions. References HEALTHCARE COMPUTER SYSTEM WITH INTRA-ROOM NETWORK Retrieved 2/10/2011, 2011, from http://www.

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