

Health information systems applications



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Health Information Systems/applications

Topic: Health Information Systems/applications Monaural stethoscope can be considered as the maiden application of technology in medicine, in less than two centuries technology has secured a commanding position in almost all specialties of medicine. Researchers and practitioners in medicine have claimed that information systems in healthcare boost efficiency (Chaudhry, et al., 2006), reach, quality and safety of health care services. Telemedicine / eHealth, mHealth systems, Hospital Information Systems, Picture Archival and Communication Systems can be seen as applications of information systems in healthcare, they not only provide efficient access and sharing of crucial information but they also empower almost all the stakeholders associated with this domain of high social relevance, these stakeholders include health care delivery system, clinicians, patients and regulators. Systems like mHealth, ePrescription, Personal Monitoring Networks, eDisease Management etc enhance accessibility and sharing of essential information, universal standards like HL7, DICOM, ICD & LOINC etc. are enhancing the interoperability of information systems in healthcare. Medicine being safety and security critical domain, the need for having well organized and structured system to manage information is of immense importance. But it is intriguing to note that adoption of information systems in health care did not pick up at once, there have been many reasons those impeded adoption of information systems in healthcare. The reasons were specific to all actants from provider to consumer of health care services; security and interoperability for a health care delivery system; reimbursement, data ownership and security for clinicians; confidentiality of health information for

patients. But in the recent past the information systems have gained ground in healthcare and they have proved to be very effective. This is so because the information systems have become more user friendly, users have now realized the importance of information systems, the information systems are gradually becoming interoperable. International agencies like WHO, ITU, NEMA etc have worked towards universal health information system standards and these standards have injected lot of confidence into the clinicians and medical administrators for making use of information systems based applications in healthcare. I personally feel that Wireless and Mobile Computing is the most important system. This is so because wireless and mobile computing are the building blocks of mHealth – an upcoming application of information systems in healthcare. Key reasons for such a claim is that for consulting one's physician, mHealth will not only save time, efforts and money but will enable timely referral and consultation. The costs of these systems are reducing consistently and time is not far when, every one will be a mHealth user quite on the lines of mobile telephony.

Bibliography Chaudhry, B., Wang, J., Wu, S., Maglione, M., Mojica, W., Roth, E., et al. (2006). Systematic Review: Impact of Health Information Technology on Quality, Efficiency, and Costs of Medical Care. *Annals of Internal Medicine* , 144 (10), 742-752.