Healthcare activities from anywhere anytime

eHealth by Healthcare Utility Services

The most important reason why eHealth is so essential in today's healthcare industry, is to transform healthcare into evidence-based physician practice of medicine, whose main objectives are improving the quality of patient care, reducing cost and errors, and increasing broad based access to quality care. The physician practice management needs to cater to the needs of "connected" healthcare society to provide the benefits available to users for accurate diagnosis, timely delivery of care and to optimize information and communication technologies as an enabler of progress in the patient care. Creating an unified and integrated system of electronic health record (HER) to be accessed by all major stakeholders (doctor, patient, lab, pharmacy, provider, payer and policy makers) becomes a critical and fundamental foundation for practice of evidence based medicine.

The main drivers of eHealth include:

- Increasing expectations of the best care available and accessibility of quality care
- Increasing mobile healthcare professionals
- Growing need for a patient-centric healthcare that enables patients active participation in managing the care
- Rising demand for home care and service , remote diagnosis for aging population and chronic diseases
- The need for efficiency and managing escalating costs in healthcare, such as reducing duplicate tests, and minimizing errors.

eHealth enhances healthcare delivery by connecting and helping collaboration with providers, patients, payers and other in the healthcare ecosystem. EHealth includes solutions for patient disease management, physician-to-physician, physician-to-patient, physician-to-lab, physician-to-pharmacy, provider-to-payer communication and collaboration using patient EHR. eHealth is vision for healthcare ecosystem that ensures the highest quality care for the greatest number of people at a cost that will be sustainable over time.

Current Situation:

Most Developed countries have already started implementing EHR solutions to improve the quality and safety of patient care and system efficiency. eHealth is moving in a

direction of evidence-based practice of medicine in a connected environment: digitization of health information for interoperable EHR, Web-based solutions for seamless transfer of patient record, collaboration among stake holder over internet, integration of existing systems for a cost-effective way of implementing eHealth, user participation in healthcare, and remote diagnosis, consultation and monitoring of patients through telehealth programs.

Why eHealth:
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eHealth means the deployment of ICT in the healthcare industry to enable more effective and efficient care. eHealth covers communication of information between patients and doctors, transmission of data between institutions, and peer-to-peer communication between patients, physicians, and/or healthcare providers, payers. eHealth comprises EHRs, health information networks, telemedicine, mobile device, health portals. eHealth improves the quality of healthcare by better informing both healthcare professional and patients. Patient details can be easily accessible and sharable so that diagnosis and treatment can take place in a timely fashion with accuracy and at any point of care.

Benefits:

- It improves the effectiveness of care delivery
- It ensures the quality and safety of patient care by minimizing errors and improving the diagnosis
- It eliminates the redundant tests and procedures, thereby reducing the overall cost of the treatment
- It allows patient to become informed and educated consumers of care.
- It improves care delivery to remote and rural health centers.
- It increases the capability for managing public health in a complete geography.
- It increases speed and accuracy in disease detection

Challenges:

Firstly, eHealth requires more commitment and leadership, and active participation of healthcare community, provider. Secondly, eHealth systems must be interoperable, secure and user-friendly. In order to achieve ubiquitous and pervasive healthcare, eHealth system must be able to host increasingly large amount of data that need to be made available securely and timely at any point of time and from anywhere and any device. Another significant obstacle is the slow cultural change in the provider community. Many practicing physicians are not accustomed to creating and adopting electronic healthcare records.

Another critical challenge is the partial and fragmented implementation if eHealth initiative. Cost and lack of standards and semantic interoperability have created the problem of ad hoc developments that may ultimately raise the cost if eHealth implementation.

The problems created by ad hoc and uncoordinated implementation include the following.

1. Partial implementation that have not yet reached full maturity will incur further costs of updating or replacing existing system.
2. Uncoordinated development undermines the very benefits of eHealth such as elimination of redundancies and reduction of errors.

From the point of view of country taking on the EHR other challenges exists

- Equal access for both public and private providers, including general practitioners
- Privacy and security framework
- Lack of higher technology that needs to include non-text data such as digitized radiology images and x-rays
- Performance at the clinical level that needs to include clinical workflows (e.g. physician practice management, basic disease management, eReferrals, clinical quality monitoring and adverse drug reaction management), leadership, governance and change management

eHealth in SaaS (Software as a Service)

The Software as a Service (SaaS) delivery model has been steadily growing as high-speed Internet access becomes a standard and as the healthcare industry looks for ways to streamline its operations. The shift from boxed software to Web-based software allows clinics and hospitals to perform essential daily tasks, like scheduling, faster and easier with increased flexibility.

Web-based software and cloud computing are fast becoming the standard way of doing business across most industries today. Anticipating these technological shifts, vendors – some over a decade ago – began developing programs to give the healthcare industry the software they needed as a service using a standard Web browser. Instead of loading the software on to a personal computer and saving the information there, this new service securely stores all the information in a database on remote servers.

Rapid Clinic Adoption: Many clinics quickly adopted this new SaaS delivery model. Some of the reasons they shared for choosing this type of application include:
- Instant access from any computer with Internet access anytime, anywhere

- The ability to create, maintain, and publish a call schedule electronically from any location

- Eliminates the worries and time spent backing up data

- Automatically installed upgrades and patches

A broad range of clinics moved to SaaS packages, but they would send electronic schedules to hospitals only for them to be printed and placed it in a three-ring binder.

Hospitals Save Time: Hospital SaaS software gives hospital telecom centers and emergency departments the ability to easily and more effectively manage on-call information. This new technology allows hospitals to interact with each specialty's on-call schedule within the entire medical community.

Hospitals particularly appreciate when clinics update and maintain their own calendars themselves. This not only saves hospitals time but also ensures the schedules are accurate and current. There are several key results hospitals that have experienced with the SaaS on-call management process:
- Improved patient care with better access to accurate on-call information.

- Increased physician satisfaction, particularly by eliminating the wrong doctors being called in the middle of the night.

IT Made Easy: For both clinics and hospitals, SaaS gives them more control while reducing their overall risk. They no longer need to make large up-front monetary investments for the software and rely on IT staff to manage it. This allows organizations of all sizes to make buying decisions faster and know that they always have the technology they need to create, publish, and maintain the schedules necessary to deliver quality patient care.