



A review on current challenges and purpose of Electronic Health Records

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Abstract : This review is based on current challenges and purpose of electronic health records in health practices. The literature on how to use Electronic Health Records (EHR) in hospitals is very different. Creating an outlook of the current status of EHR executing in hospitals is the objective of this study. Also to obtain general conclusions and advice for implementers. Articles were divided into common problems and solutions. This review was conducted on empirical research of implementation of EHR. It is seen that EHR systems have over the years improved hospitals performance with a focus on management and research components, this study programmed created to provide students with in-depth theoretical knowledge, practical skills, and methodological competence in the field of digital health. Graduates will be prepared to assume leadership roles and lead the global transition of healthcare to a digital model.

Index Terms - Electronic health records, electronic medical records, components, implementation, benefits, and challenges.

1.INTRODUCTION

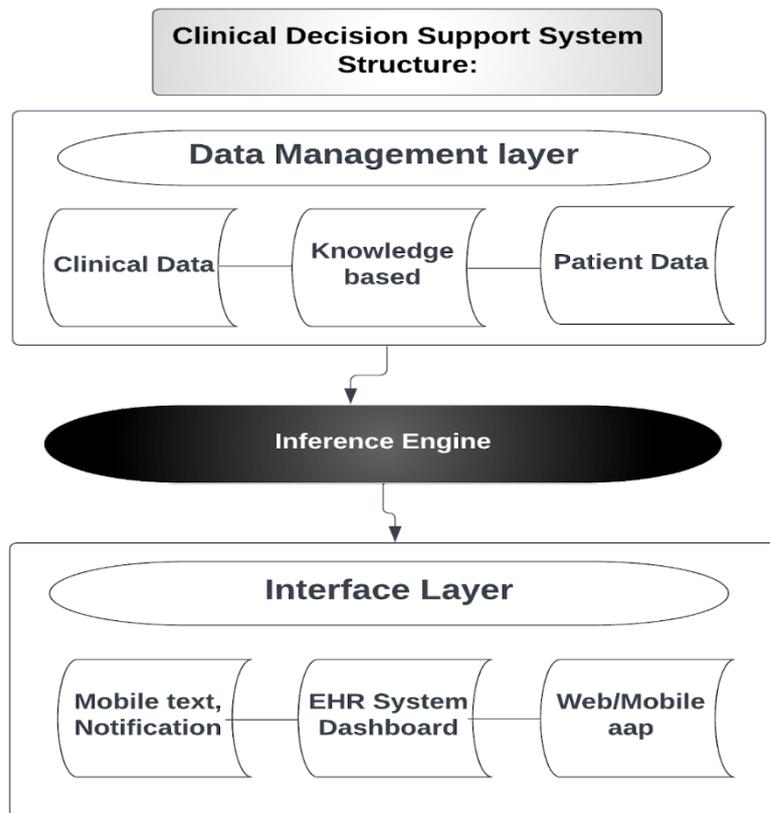
These EHR records may be transferred across different healthcare systems or settings. Records are exchanged via additional data networks and trade, such as network-connected, corporate information systems[1]. Among the data that may be found in EHRs are billing details, enumeration, medical history, prescription and allergy information, vaccination status, laboratory test results, radiographic pictures, etc[2]. E.H.R. have long been praised as being crucial to raising the bar for medical care[3]. By merging several types of clinical data from the system's health records, clinicians have been able to identify and classify people with chronic diseases. By altering the data and analytics, E.H.R. can enhance the quality of treatment by avoiding the hospitalization of high risk patients[4]. E.H.R. tech. is designed to consistently keep data and track a patient's condition. Furthermore, it allows for unfettered contact of the patient and the medical expert while ensuring "privacy and security".[5]

2.HISTORY

The era of E.H.R. began in the 1960s. Only the large hospitals used them, and for scheduling and billing. Around the same time, a new approach (still on paper) started to pop up. This "problem-oriented" method, which provides more data about patients, eventually gave rise to the electronic medical records.[6] This method marked a development in medical transcription. In the past, medical records often simply contained a patient's diagnosis and the care they received.

3.DATA COMPONENTS OF EHR:

1. Records of appointment
2. Admission nursing note
3. Daily charting
4. Physical assessment
5. Physical assessment,
6. Diagnosis, tests, procedure, treatment,
7. Nursing care plan,
8. Laboratory data and radiology report,
9. Discharge history.[7]



4.COMPONENTS OF E.H.R.

4.1 Clinical Decision Support System Structure:- It is a programme module that aids physicians in making decisions at the time of therapy. The idea is not brand-new in the healthcare industry. Its major objective is to assist medical practitioners by making it easier to analyze patient data and use that information to aid in diagnosing patients. This method equips doctors and primary care providers with the knowledge they need to improve the care level they gave to their patients.[8]

4.2 Computerized Physician Order Entry System (C.P.O.E.):- This tech. empower doctors to order medicines, diagnosis procedure, consultation, and other goods and services electronically.

- Features of C.P.O.E.=
 1. Direct entry of orders by doctors;
 2. Working using a digital interface;
 3. Standardization/structure

One of CMS's requirements, C.P.O.E. implementation, aims to ensure that E.M,Rs are actively integrated into patient care and workflow, not only implemented.

Example = Drugs,Radiology,Physical therapy,etc.[13]

4.3 Health Information Exchange (H.I.E.):- H.I.E., is the process of sharing patients' health info. to various organizations.[9] H.I.E. used to streamline the exchange of medical data across doctors or other medical staff as part of a health care restructuring effort.[14] The sharing of clinical data may enhance efficiency, quality of treatment, coordination of care, and patient safety[15],support public health initiatives[16], and decrease mortality and medical expenses.[17]

- H.I.E. benefits include:
 1. Decreases medication and medical error, which provides a means of improving the safety of patient care.;
 2. Help patient in their own care
 3. Increases effectiveness by removing pointless paperwork.[18]

5.BENEFITS OF E.H.R.

They assist in providing better treatment to patients and ensure that there is automation of a range of duties for the clinic. Additionally, they let doctors interact with one another improbably and in real time, ensuring that working is the latest, complete and faultless file. They may be configured to match the demands of your medical business and are also quite durable.

Other benefits are quick percolation to patient records,increased potency of treatment, patient portal grants patients with access to medical data,potential therapeutic alternatives are recommended, boosts patient-physician communication,more intricate patient information. They are an alternative to paper medical records.

1. At the point of care, provide patients complete, exact, and latest information;
2. Provides quick access to patient record access;
3. Transferring digital information between patients and other medical providers;
4. Directing medical professionals in safer delivery, reduce medical error;
5. The ease of health care, and allow more reliable prescribing:[5]

6. CHALLENGES OF E.H.R.

EHR implementation is an extravagant affair. The selection implementation, optimization is strenuous in terms of planned capital budget investment. Some staff oppose the idea of implementing EHRs in establishments. Additionally some medical professionals are skeptical of the efficacy of privacy protocols.

Exporting paper-based paper to digital records is a logistical challenge for the personnel, data entry may become tiresome and time consuming owing to the chunks of paper describing hundreds of patient medical histories and records. This implementation is most difficult for the hospitals. Lack of proper communication and planning, limitation of technical resources, interoperability are the major challenges faced.

7. FUTURE IMPLICATIONS

For a number of very important reasons, EHR have the potential to enhance the healthcare sector. Interoperability exists right away. Patients and medical professionals can now access health records from anywhere. To facilitate communication and offer relevant medical data, EHR can be shared between medical settings. As long as their medical records follow them, patients can visit a variety of healthcare institutions with assurance. Humans will still get sick and require medical care, at least up until the point when we all transfer our mind into robots, which is a subject for another essay in 3023. In the approaching years, you should keep an eye out for the following trends in electronic health records.

8. CONCLUSION

In Spite of having potential benefits, implementation is hampered by barriers and constraints, the most common of which is economic constraints, technical limitations, standard limits organizational constraints, attitudinal constraints-individual behavior. Many studies show the reluctance to change is a more critical barrier than other restrictions in the implementation of EHRs.

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