Abstract

An electronic health record system or a medical record will make medical practitioners more efficient in their practice. The system includes all the medical data of a patient in a single record, it also guides the treatment process by incorporating evidence based guidelines that can easily be updated, it also serves to reduce medical errors and will ensure that right patients receive right dosage via the right route and at the right time.

The EHR system will make the four phases of healthcare that include: prediction, diagnosis, treatment and monitoring more effective. From the medical records of patients the doctors will be able to predict the reoccurrence of a condition on a patient, this will make the diagnosis process easier and more accurate, once a patient is diagnosed with a particular condition the treatment process will also be effective, the prescription will be accurate and the dosage will be administered efficiently to the patient. The EHR data can also be used effectively to monitor and manage patients, Hebda& Czar (2009).

Phases of HIT systems

Requirements planning

The first phase of the Healthcare Integrated IT solution will be requirements planning. In this phase the physicians should analyze their needs when it comes to the EHR system. The needs assessment will include for example, the amount of data that the system will be able to hold, this should be derived from the number of patients served by the their health facility. The requirements planning is based on the challenges the physicians have faced before when it comes to managements of the patients caused by lack of medical records about the patients.
EHR design

At this phase the physicians should establish the design of their EHR system, this will depend on the degree of automation they will need their system to have. A system is run by component units which include the hardware component and human factors. This is the phase at which they can evaluate the cost of the system.

Construction phase

This stage utilizes expertise to code the software which will be used by the system. The physician should guide the IT experts in coming up with the algorithms of their desired electronic health record, by assisting them write the programs in human language according to their needs and requirements. The IT experts will then codify the program into machine language.

Cut over phase

This is the implementation phase of the EHR system. At this phase the physicians should train the users of the EHR system, install the system and completing the necessary documentation, for example converting the manual data into an electronic form. The cut over may be done in various ways: Direct cutover is where the old system is put into a halt immediately and the new system is immediately implemented. This cut over methods is undesirable because the new system may have bugs which need to be identified and rectified, the physicians should avoid this cut over methodology.

The second method is parallel running where the old manual system is run side by side with the new EHR system, this way effectiveness of the system can be improved by identifying and removing bugs. They can also choose the gradual cutover which combines the direct cutover methodology with the parallel running methodology. They can also consider the pilot
methodology whereby the new system is tried in some departments and if it works in them, can then be embraced by the whole organization, Conn (2010).

**Key members of the steering committee**

The steering committee will be composed of the physicians themselves and heads of different units in the respective units of the health facility. The heads of units will provide information on their needs and essentially what should be included in the EHR system. Change which does not include all the stakeholders in an organization will most definitely awry. If the physicians design the EHR system by themselves they may not exhaust all the components that will be required for the EHR system to work effectively. The importance of including all the units in the spearheading committee will therefore be for the purpose of ensuring all the needs of the facility have been addressed while designing the EHR system, Susman (2010).

**The importance of needs assessment**

The needs assessment will enable the physician come up with the best EHR system that suits their facility. Take for example if the choose to get the system off the counter, the acquired system may not have the necessary attributes for running the health facility. Needs assessment will enable them design the best system for their needs. The needs should be derived from the daily operations of the health facility, from this they will be able what difficulties they encounter in operations, it could be for example the lack of adequate data to effectively attend to the patients, from this need, the system should therefore have the capacity to hold enough patients data to enable them meet all the needs of their clients. An arbitrary adopted system will not address the needs of the physicians, hence the need for needs assessment to establish the best design for their system, Mahoney & Ward (2010).

**Key elements to be include in the needs assessment**

The important component of the needs assessment should first the client base that the facility
serves currently, if the number is expected to rise in future, this should be included in determining the system design. The size of the organization should also be included in the needs assessment; the number of employees which will be served by the system should be included in the system’s design.

The physicians should also consider whether there is adequate skill for running the system. Another important aspect which should not be left out is the cost of the system, all the necessary resources should assessed to avoid making the system a white elephant project, Abdelhak, Grostick & Hanken (2012). Once the system is in the implementation phase, the physicians should ensure that the other systems which may be in use in the agency are compatible with the new system, if they are not, they need to be modified to be able to work with the new EHR system.

References


