ELECTRONIC MEDICAL RECORDS IMPACT CENTRAL SERVICES

LEARNING OBJECTIVES
1. Outline objectives for implementing an electronic medical record system
2. Identify two instances where an electronic medical record system can impact Central Service procedures
3. Identify actions that maximize the contributions of Central Service personnel to quality patient care
4. Address potential disadvantages of an electronic medical record system

THE MAJOR GOAL OF THE ELECTRONIC MEDICAL RECORD (EMR) is to improve the quality of healthcare in the U.S. The concept of the EMR was staunchly supported by President George W. Bush, who provided government funding to help develop the healthcare information technology (IT) system. He set a goal in 2004 that would require adoption of the EMR within 10 years; today, the utilization of EMRs has now become a reality. Currently, healthcare facilities are polishing their IT products of choice and attempting to demonstrate meaningful use of the EMR system.

OBJECTIVE 1: OUTLINE OBJECTIVES FOR IMPLEMENTING AN ELECTRONIC MEDICAL RECORD SYSTEM
An electronic medical record (EMR) is a digital version of a paper chart that contains all of a patient’s medical history from one healthcare provider; it is mostly used by the providers to track a patient’s diagnosis and treatment. EMRs are an integral component of electronic health records (EHRs) that include a more comprehensive patient history and go beyond the data collected in the provider’s office.

EHRs are designed to contain and share information from all providers involved in a single patient’s care. EHR data can be created, managed and consulted by authorized providers and staff from across more than one healthcare organization. Unlike EMRs, EHRs also allow a patient’s health record to move with the individual, even across state lines, to other healthcare providers, specialists, hospitals and nursing homes.

EMRs improve the quality of patient care by enabling more enhanced information sharing about a patient’s treatment regimens among the physicians.

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and other caregivers who assist in this endeavor. All authorized care providers can have immediate, up-to-date information regarding a patient’s medications, allergies and test results, including radiological studies. This, in turn, prevents expensive duplication of tests and X-rays that would otherwise be required as the patient received treatments from different providers.

An EMR is also more beneficial than traditional paper records because it allows providers to:
- Track data over time
- Identify patients who are due for preventive visits and screenings
- Monitor how patients measure up to certain parameters, such as vaccinations and blood pressure readings

Shared medical information helps provide a simpler, more evidence-based disease management process. Immediate responses to patients’ needs are also possible, even when the physician is off-site. Orders for patient care can be entered at any time and from any physician location where the EMR can be accessed, including a physician’s computer, laptop, tablet or smartphone. The patient benefits from an EMR system with a smoother, faster and less expensive recovery.

Healthcare facilities were challenged to demonstrate “meaningful use” of EMR systems by documenting how they improve patient care. Note: Facilities generate a higher level of financial reimbursement from Medicare and Medicaid accounts based on their “meaningful use” activities, so a patient and facility “win-win situation” has been created.

**OBJECTIVE 2: IDENTIFY TWO INSTANCES WHERE AN ELECTRONIC MEDICAL RECORD SYSTEM CAN IMPACT CENTRAL SERVICE PROCEDURES**

Central Service (CS) is instrumental to patient care and, as such, can be directly affected by a facility’s EMR system. While CS personnel may not have direct access to the patient information in the EMR, a patient’s physician may enter orders that impact CS operations. For example, a patient may need immediate surgery. When the order for surgery is entered, a message is electronically routed to CS, and CS personnel must assemble the necessary supplies for the case. A case cart may need to be prepared and delivered to surgery or, alternatively, a CS technician may only be required to send the appropriate instrumentation needed for the case.

Perhaps a nurse has noted in the EMR that the patient is developing a skin breakdown (pressure ulcer). The physician responds by ordering a
specialty bed designed to minimize skin pressure and heal the skin faster. Again, a message is electronically transmitted to the CS department where personnel must respond by delivering the specialty mattress surface or place an order with the appropriate vendor for the requested specialty bed.

Some EMR systems require an electronic response documenting receipt and implementation of the order. When this is the case, all CS personnel who may interact with the EMR must receive appropriate training related to this and any other related responsibility. Applicable CS technicians will require basic computer education as a prerequisite for learning about this specific application.

EMR systems may also notify CS personnel about patients’ admissions and discharges. The former alerts them to the utilization of “admission packs” that include a wash basin, water pitcher, soap and other amenities that are typically stored in the nursing units. In some facilities, par inventory systems for admission packs are maintained, and decreases based on patient admissions will indicate when replacement of supplies is necessary. When this process is utilized, supply delivery can be streamlined; this, in turn, saves time and effort.

**OBJECTIVE 3: IDENTIFY ACTIONS THAT MAXIMIZE THE CONTRIBUTIONS OF CENTRAL SERVICE PERSONNEL TO QUALITY PATIENT CARE**

CS personnel make many contributions to quality patient care. Everyday actions help demonstrate a commitment to providing quality care, such as the provision of properly cleaned and assembled surgical trays and patient care supplies stocked in adequate numbers. Other examples include monitoring and responding to surgical orders received in a timely manner and maintaining extensive and complicated inventories of expensive surgical instruments and instrument packs.

CS personnel should establish and maintain ongoing communication with the facility’s EMR team. Members of this team may not initially recognize how CS is impacted by the EMR or how CS can help improve patient care; however, EMR systems are evolving and tweaks and upgrades that are implemented in the future may make it more difficult for CS personnel to provide assistance if their input was not requested as revisions were considered.

Numerous challenges can be overcome when CS personnel are valued members of the EMR team. For example, a CS technician may notice that there are no electronic orders on a night that is usually very busy. Instead of thinking this is just an exceptionally quiet night, the CS technician contacts his or her supervisor who then notifies the IT liaison or department to request an investigation.

CS personnel cannot provide quality patient care if the lines of communication do not function correctly. For example, the EMR system provides electronic surgeon preference cards. The best CS technicians do not just complain or resign themselves to using cards that do not recognize critical CS concerns. Instead, they volunteer to work with the EMR team to update and maintain these cards and help ensure that information about all changes for charges has been transmitted to the CS department on a timely basis. They also verify that appropriate surgical supplies have all the necessary reorder numbers and appropriate billing numbers attached.

A second example of CS personnel improving communication might occur as the facility considers a new-and-improved hip nail implant. Assume all orthopedic surgeons really like this new system, but information about it was never properly loaded into the EMR system. This error, in turn, could result in no or improper patient charges. Billing reviews of the electronic patient charge record and surgical implant log can be a CS and/or surgery team responsibility because team members are knowledgeable about products used for specific procedures. If this system was in place, the pricing error would be quickly discovered.

Another example might occur after a product change for Foley catheter kits is implemented, and CS personnel notice there is no charge on appropriate procedure bills for the kits. The reviewer would contact the IT department to verify that all changes for charges have been applied. Errors of this kind can be quickly and easily corrected and can yield a significant financial impact for the facility.

**OBJECTIVE 4: ADDRESS POTENTIAL DISADVANTAGES OF ELECTRONIC MEDICAL RECORD SYSTEMS**

A very significant healthcare goal, improved quality healthcare, is possible to attain when an EMR is properly designed and utilized; however, there are sometimes disadvantages or drawbacks with the process. First, it is crucial to select the EMR package that best suits the needs of the physicians and the facility.

*Note: There are several systems from which to select and, while they all have the same goal, they do not all work alike.*

After the best system is selected (hopefully with input from the CS Manager and Materiels Manager), the system must be implemented. The implementation process is very expensive, as is the procurement of necessary computer hardware and software. Someone must install all of the components necessary to utilize the EMR program, and educators must then train every person who will utilize the system. Support personnel
are those users who keep the system running, up to date and available for use. This includes IT personnel, the business office (admissions and financial) users and selected others. Finally, end users, including doctors, nurses, lab personnel and those representing Dietary Services, CS and Radiology must be paid for classroom time incurred to learn how to use the EMR. System costs continue as new EMR versions are developed and implemented, and as related purchase, installation and training expenses are incurred.

CS personnel must address the important challenge to remain involved with the evolution of EMR systems. Protecting patient information is paramount. Being mindful of location and nearby listeners is vital when CS personnel use oral communication devices. Repeating patient names and room numbers in a crowded elevator is a violation of the Health Insurance Portability and Accountability Act (HIPAA) laws. Everyone must be vigilant in protecting patient information.

One additional disadvantage of EMR systems involves planned or unplanned times when the system is inoperable. In smaller facilities (those with fewer than 200 beds), this challenge is typically manageable with adequate telephone and staff coverage; however, in larger or multi-campus facilities, significant operating and communication challenges may arise. Plans to address EMR system downtimes must be developed and then implemented; this provides another opportunity for CS personnel to provide input as an integral member of the healthcare team.

IN CONCLUSION
EMR systems were launched to improve healthcare in the U.S. Part of this improvement effort involves the real-time utilization of information gathered to care for each specific patient. CS personnel play an important role in this endeavor as they receive orders electronically and then provide required surgical sets or other patient care equipment. Delivery of routine supplies to patient care areas based on electronic information provided at times of admissions and discharges improves timely replacement of supplies. CS professionals who play an active role with implementation and maintenance of the EMR will be pivotal in helping ensure that CS continues to participate in providing quality patient care.

REFERENCES

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