Evaluating Alerts and Triggers: Determining Whether Alerts and Triggers Are Part of the Legal Health Record

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Electronic health records (EHRs) have received a lot of attention since the Obama administration committed $19 billion in stimulus funds to encourage hospitals and healthcare facilities to digitize patient data and make better use of information technology. The clinical decision support (CDS) systems in EHRs that prompt alerts and decision-making triggers are seen as a key method for improving healthcare delivery.

However, the technology is still in its infancy, and best practices are still emerging. There is no legal precedence as to whether these types of alerts should be included as part of the provider's legal medical record. Therefore, each individual organization must decide for itself.

Legal Record or Not?

Most EHRs include CDS systems. Clinical decision support system triggers are part of the software developed for the EHR. They are not created during the regular course of business, but rather are software-driven.

Clinical decisions regarding patient treatment may be determined based on alerts. As such, documentation of actions taken based on the alert should be included as part of the legal health record. Organizations should develop policies on how to document the accepted or rejected alert.

Organizations that consider CDS triggers or alerts part of their legal health record need to define if all triggers are part of the record or just the clinical decision support triggers. For example, alerts for patient appointment reminders may not be considered part of the legal health record, but alerts for drug-drug interaction may be.

HIM professionals should assist their organizations in reviewing the applicable regulations, guidelines, standards, or laws to determine if the clinical decision support system should be considered part of the legal health record.

Studies show that if used properly, CDS triggers can improve patient care. As the functionality is used more and becomes more sophisticated, it is up to the HIM professional to understand what triggered the alert, where the alert resides, and how to know if it was accepted or rejected.

Setting Alerts

A review of drug safety alerts in a 2006 study found that alerts were overridden 49 to 96 percent of the time.[1] The study indicated that lack of information, unclear information, and unnecessary workflow disruptions led physicians to ignore, misinterpret, and mishandle drug alerts.

Allowing physicians to customize CDS drug alert triggers can improve compliance with alerts. However, 88 percent of alerts in one study were ignored because physicians determined the benefits of not accepting the alert outweighed the risks; the drug problem presented by the alert was already known; or the alert was not considered clinically relevant.[2]

CDS triggers should be evidence-based, validated, and accepted by the organization prior to use. HIM professionals in conjunction with their organizations must determine what clinical decision support triggers will be used, maintained, updated, and archived.

CDS triggers also can be created in the health maintenance section of the EHR to deliver reminders. The organization should answer the following questions when setting up CDS triggers:

- Whose decisions are being supported?
- What information is being presented?
- When is it presented?
- How is the information presented to users?
- Will the trigger influence physician behavior, or is it so elementary that it does not add value?

Challenges and Liability

Setting up CDS triggers is challenging. CDS triggers cannot be considered the standard of care if physicians consider all of them unimportant. They are not beneficial if physicians bypass them because they are too frequent.

Many organizations turn off alerts. Clinical decision triggers that are turned off or are overridden may be difficult to explain to a judge or jury during litigation.

"Alert fatigue" occurs when physicians receive so many alerts that they begin to ignore them. Cassi Birnbaum, RHIA, CPHQ, director of health information and privacy officer at Rady Children's Hospital of San Diego, says there is concern of alert fatigue at her organization. Rady Children's Hospital is judicious in choosing which CDS triggers cause a hard stop that require physician action. It focuses on CDS triggers that may cause a sentinel event if the CDS trigger did not fire.

Organizations may want to consider a similar approach, activating only the alerts with hard stops that are considered urgent and providing another means for flagging less threatening items.

Other challenges exist when setting relevant CDS triggers. Duplicate order checking (e.g., what appear to be duplicate orders, such as a CBC ordered every six hours) and multiple CDS alerts triggered on patients in the ambulatory care setting may cause the provider frustration when the treatment course is valid.

Some organizations find that even among physicians opinions differ on what CDS triggers should be set.

Audits, Education, and Training

Organizations must determine if the CDS trigger and action are captured in an audit trail. This may be relevant information for legal purposes.

If the CDS trigger is captured, HIM professionals need to review what information is documented. The audit should clearly show which clinical decision support system triggered the alert and what action was taken, including any that were bypassed. Some EHR systems do capture the CDS trigger and the action taken at the metadata level.

Organizations must also track all CDS alerts and changes to the CDS alerts, ensuring they are updated, maintained, and archived. Organizations may want to consider creating matrices of what CDS alerts were active during a specific time frame, including information on when triggers are updated or eliminated.

Rady Children's Hospital is currently in the process of writing policies around clinical decision support triggers and alerts. Organizations that lack such policies and guidelines should consider doing the same.

Although alert training for physicians is often included in EHR training, at this time across various organizations, there do not seem to be consequences for physicians ignoring alerts or failing to document the information in the medical record. Only the CDS alerts with hard stops force the physician to take an action.

Guidelines for Prompts and Alerts

When evaluating EHR systems, including prompts, alerts, messaging, and tasking, organizations should require that the system:

- Has user-definable means for establishing and modifying user prompts, alerts, and reminders
- Captures author, date, time, and configuration of parameters for prompts, alerts, and reminders

Source: Gelzer, Reed, and Patricia Trites. *How to Evaluate Electronic Health Record (EHR) Systems*. Chicago, IL: AHIMA, 2008.

Notes

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