

Electronic health records and the role of the CDI specialist

Spurred by incentives in the Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009, electronic health records (EHR) are now widespread in the healthcare industry. According to a survey from the U.S. Department of Health and Human Services (*HHS.gov*), more than 50% of doctor's offices and 80% of eligible hospitals will have EHRs by the end of 2013.¹ As of April 2013, approximately 80% of all eligible hospitals and critical access hospitals in the U. S. had received an incentive payment for adopting, implementing, upgrading, or demonstrating meaningful use of an EHR.

On the whole EHRs represent a positive development in healthcare. EHRs facilitate more efficient documentation collection and storage, promote patient safety and quality initiatives by allowing widespread access to health information, and allow for easier transaction of claims data for professional and hospital billing.

More and more, CDI programs depend on the use of EHRs for querying physicians, capturing more specific and accurate diagnoses and procedures, and even tracking important CDI metrics such as query rates, physician response rates, complication/comorbidity capture rates, and severity of illness/risk of mortality scores.

However, EHRs bring with them potential problems and compliance risks, many of which are only just emerging. For example, CDI specialists report instances of cloned progress notes, copy/paste errors such as gender misidentification (transposing "he" with "she" in a patient chart), and electronically generated body mass indices (BMI) that may be used for coding without a corresponding diagnosis by the physician, which violates the American Hospital Association's (AHA) *Coding Clinic for ICD-9-CM* guidances. Other reported problems with EHRs include:

- » Inadequate physician and non-provider training related to EHR use
- » Lack of onsite expertise to troubleshoot problems
- » Physician time constraints, leading to inability to enter sufficient documentation
- » Poor physician buy-in
- » Physician forms/templates lacking review and signature

» Page tagging

Hospitals must address these issues or face payment denials from payers and auditors. Recovery Auditors and other auditing agencies are aware of these and other problems with the EHR and are reviewing records for improper or inadequate documentation as a result of EHR use.

CDI specialists, by the very name of their profession, are often assumed to be the individuals responsible for resolving EHR *documentation* errors. However, the advisory board of the Association of Clinical Documentation Improvement Specialists (ACDIS) strongly cautions against CDI specialists becoming the "wardens at the gate" of EHRs.

CDI specialists have a specialized skill set and a high level of clinical knowledge and training. Many CDI specialists are registered nurses with 15–20 years or more of bedside nursing experience, and/or advanced chart review and inpatient coding experience as health information management (HIM) professionals. Many EHR problems are endemic to the software and/or are clerical in nature, and are best addressed by information technology (IT) staff, a dedicated EHR response team, or clerical/data entry staff.

On the other hand, some documentation shortfalls and deficiencies are suitable for CDI intervention, such as clarifying the stage and present on admission (POA) status of a pressure ulcer that appears in the middle of a patient's stay, or asking for supporting clinical indicators for a diagnosis that appears only once in an electronically generated discharge summary.

Following are examples of errors and compliance risks CDI specialists might encounter and the recommendations of the ACDIS advisory board for handling such issues when they arise.

Meaningful use and problem list, patient complaint

According to CMS, the Medicare and Medicaid EHR incentive programs provide financial incentives for the "meaningful use" of certified EHR technology to improve patient care. To receive an EHR incentive payment, providers have to demonstrate that they are "meaningfully using" their

EHRs by meeting thresholds for a number of objectives. CMS has established the objectives for “meaningful use” that eligible professionals and hospitals must meet in order to receive a Stage I incentive payment. For eligible hospitals and critical access hospitals (CAH), there are a total of 23 Meaningful Use objectives. To qualify for an incentive payment, 18 of these 23 objectives must be met:

- » 13 required core objectives
- » Five objectives chosen from a list of 10 menu-set objectives

One criteria of Meaningful Use of EHRs is the problem list (Core Objective 3: “Maintain an up-to-date problem list of current and active diagnoses”). Although EHRs give physicians the flexibility to update this list electronically, many don’t indicate in their documentation when a condition is resolved; the EHR often simply allows them to add a diagnosis to the problem list without evidence that they are managing the condition.

Some EHRs allow the introduction of a diagnosis from a previous hospital admission to be included in current problem list documentation, even though the diagnosis may be completely resolved from a clinical perspective. The *Official ICD-9-CM Guidelines for Coding and Reporting* state that you cannot code a condition if it is not relevant to the current episode of care, so it is important to determine whether or not these diagnoses are active and relevant to the present stay: “Diagnoses that relate to an earlier episode which have no bearing on the current hospital stay are to be excluded.”²

If CDI specialists see evidence of this problem in the EHR, ACDIS recommends they clarify with the physician whether the diagnosis has resolved or whether it is being actively treated/monitored. CDI specialists should ask the physician to provide the narrative and supporting evidence of the diagnosis in the chart. A physician should update his or her problem list each day. The physician should document when a diagnosis resolves or improves.

Sepsis is one such example. The patient may come to the hospital with sepsis and improve. Conversely, the patient may come to the hospital with sepsis and worsen to severe sepsis or even septic shock. The problem list and the documentation should create a narrative that is easy to follow and shows this progress or regression. The patient is either getting better or worse, and is rarely the same each day. Physician

documentation should reflect this progress or regression to support severity of illness, risk of mortality, and evaluation and management (E/M) billing; and CDI staff should help physicians understand the importance of this fact.

Another item related to Meaningful Use is the documentation of the patient’s complaint, as EHRs typically provide a field for physicians to document this data element. A patient’s complaint often turns out to be different from the principal diagnosis, defined by Uniform Hospital Discharge Data Set standards as the condition, after study, that occasioned admission to the hospital. This represents another opportunity for the CDI specialist to clarify the actual principal diagnosis with the treating physician.

Another aspect of documentation risk for the EHR is the inclusion of large amounts of automatically inserted data (e.g., labs, radiology results, vitals, meds, other studies, etc.). Often this data contains no discussion or action on the part of the treating clinician indicating the clinical relevance of these findings. Meaningful Use requires eligible professionals (EP), eligible hospitals, and CAHs to incorporate clinical lab-test results into the EHR as structured data. However, CMS in a Frequently Asked Questions document stated there does not need to be an explicit linking between structured lab results received into the EHR and the order placed by the physician for the laboratory test in order to meet the Meaningful Use standard:

*The only requirement to meet the measure of this objective is that more than 40% of all clinical lab tests results ordered during the EHR reporting are incorporated in certified EHR technology as structured data. Provided the lab result is recorded as structured data and uses the standards to which certified EHR technology is certified, there does not need to be an explicit linking between the lab result and the order placed by the physician in order to count it in the numerator for the measure of this objective in the Medicare and Medicaid EHR Incentive Programs.*³

In these instances, ACDIS recommends that CDI professionals encourage clinicians to reference results of particular relevance or concern in association with the specific treatment plan documentation.

Electronically generated BMI

Core Objective 8 of Meaningful Use requires the EHR to calculate and display BMI. However, AHA *Coding Clinic*

for ICD-9-CM, Fourth Quarter 2008, states that you cannot code a patient's BMI if it is electronically generated and does not have a corresponding diagnosis from a licensed physician or mid-level provider.⁴ This was further clarified in *Coding Clinic*, Second Quarter 2010, which states that BMI code assignment "may be based on medical record documentation from clinicians who are not the patient's provider. . . however the associated diagnosis (such as overweight, obesity, or underweight) must be documented by the provider."⁵

The problems with this official published coding guidance versus Meaningful Use are self-evident: It is difficult to deduce if a patient's BMI is auto-populated from the medication administration record field or calculated by a dietitian.

In addition, a recent research letter published in *Journal of the American Medical Association Internal Medicine* reported that primary care physicians failed to record BMI in the EHR in approximately one-third of 213,356 patients in the sampled network. Of the patients who had at least one BMI included in their EHRs, 68.3% had a BMI of at least 25 (overweight) and 34.4% had a BMI of 30, signifying obesity. However, only 17.1% of the known overweight patients and 30.1% of the obese patients were diagnosed by their physicians as being overweight or obese.⁶

Automatically computed BMI levels are fraught with potential problems, from data entry errors to limited knowledge of the patient's status. BMI documentation should be validated by a human being, otherwise a bilateral AK amputee may be called "morbidly obese" due to his or her height/weight ratio. Similarly, a patient suffering from metastatic cancer may also have malignant ascites and pleural effusion which makes their EHR weight seem normal, yet the patient may be severely malnourished. The evaluation of a patient's BMI should take into account all clinical indicators and observations regarding the patient to ensure the accuracy of the information in the EHR. Clinicians who validate the BMI need to be aware of the patient's condition and not just repeat the computed BMI.

The paper recommends CDI specialists provide education to clinical staff to ensure that BMI is calculated by a licensed clinician to enable proper capture of malnutrition and obesity diagnoses and that physicians provide documentation of the related clinical condition, such as obesity. CDI staff should encourage documentation of assessments in progress notes rather than relying on auto-population.

Copy/paste functionality

Copying and pasting of documentation has become a commonplace problem with the advent of the EHR. According to a recent article in the journal *Critical Care Medicine*, 82% of all residents and 74% of all attending notes contained greater than or equal to 20% copied information.⁷ Many physicians, for example, will copy and paste the same progress note from the previous day, even though it might contain important documentation elements like vital signs. EHRs often promote copy and paste functionality as a time saver, but in reality copy/paste, used inappropriately, can lead to denials and/or allegations of fraud.

ACDIS does not recommend that CDI specialists position themselves at the forefront of correcting copy/paste problems. Their time is better spent reviewing records to ensure documentation of severity of illness. Many mid-size to larger facilities employ a dedicated EHR team, for example, and these professionals are a better outlet for addressing and correcting this problem. CDI specialists must take note of copy/paste errors and bring them to the attention of an EHR or other professional. Some EHRs allow for copy/paste functionality to be automatically disabled.

Should this problem persist, elevate it to an appropriate authority, such as a physician advisor, chief information officer, or chief medical officer, or an accreditation officer responsible for maintaining Joint Commission standards.

However, there are other instances where CDI specialists should be involved in copy/paste problems. For example, if a diagnosis enters the record inadvertently that is not clinically supported, but is then propagated through a series of notes, then the CDI specialist should query the treating physician.

Additionally, copy/paste also increases the risk of having conflicting documentation between an attending and consultant physician or among the attending team (with multiple clinicians—e.g., physician/physician assistant/nurse practitioner, and/or with residency programs). This scenario also warrants CDI involvement.

The inclusion of large amounts of automatically inserted data is a problem for other physicians as well, as they cannot read through the record efficiently when having to parse or ignore useless data. ACDIS encourages that only clinically relevant data is included in the medical record.

Role of the CDI specialist in an electronic setting

Hospitals are rapidly adopting EHR technology and

many now identify themselves as 100% electronic. The electronic record opens up new opportunities and avenues for CDI specialists, including the ability to quickly scan and review more records, query physicians through emails or other electronic prompts, and perform remote or at-home record reviews. There are benefits to this arrangement, including employing qualified and skilled CDI professionals unable to relocate, and retaining veteran CDI staff members by offering flexible schedules.

While ACDIS embraces and supports the introduction of the EHR and recognizes some of the positive impacts of remote electronic record review, it does not recommend hospitals adopt a 100% remote CDI program. CDI is not just a process of leaving queries on the medical record, but is rather an ongoing process of education. CDI specialists who query the physician remotely do not have the ability to discuss the “why” behind the query, or change patterns of behavior. Reviewing records without an educational component leads to CDI becoming a reactive and not a proactive process. ACDIS notes that CDI is not a pre-coding review for accuracy, it is about changing physician documentation habits. In addition, remote reviews also prohibit deeper, real-time clinical conversations with the provider that can lead to additional opportunities to capture secondary diagnoses and improve severity of illness/risk of mortality scores for the hospital.

A suggested working model in the EHR environment is a blend of on- and offsite CDI specialists. Offsite employees can focus on dedicated reviews and maximum coverage of charts. Onsite staff can round with physicians and educate them on the “why” behind the program, as well as on forthcoming additional documentation needs, such as the additional specificity required to capture diagnoses and procedures in ICD-10. Onsite staff (either permanent or rotating with offsite staff) offers structured and focused efforts, including individual physician meetings and collaboration with physician advisors. Hospitals must provide education for their physicians about the need for accurate and complete documentation in the EHR environment. This can be done in a number of ways, including:

- » Providing ongoing education and support in the form of formal education and individualized queries
- » Disseminating information in the form of newsletters, flyers, tip cards, signage, etc.
- » Employing physician advisors to provide education and

peer-to-peer support

- » Ensuring upper management support of the process and the necessary resources for success

These issues must be dealt with prior to conversion to ICD-10, or the problems will only continue into the conversion. Demands on physicians' time will increase with ICD-10, and physicians struggling with the EHR may become overwhelmed. Physicians must receive intense education, support, and follow-through during this time of change, and CDI specialists are perfectly positioned to help provide a successful transition.

Use of CAC and electronic queries

Many EHRs allow for the use of computer-assisted coding (CAC) and/or electronic queries to the physician. Some sophisticated systems will even scan the medical record documentation and prepare auto-queries, suggesting clarifications based on the presence of specific terminology or diagnostic test results. ACDIS understands the value of these technologies and supports their use, but urges caution in their adoption. CAC and electronic queries can improve productivity and allow for flexible work-from-home arrangements. However, because diagnoses are determined by both diagnostic testing and a physician's individual clinical judgment, computer-generated queries are not considered completely reliable. ACDIS recommends that a trained CDI specialist review all electronic queries before deciding whether to release them. In addition, all queries should abide by the latest physician query guidance issued by ACDIS and the American Health Information Management Association.

ACDIS intends to issue further guidance on this subject at a later date. 🌸

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