Quality Data and Documentation for EHRs in Physician Practice

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In addition to documenting care and improving productivity, electronic health records (EHRs) in physician practices are expected to streamline coding and reimbursement and improve safety and quality of care through clinical decision support tools and data capture for reporting.

Because most healthcare is rendered in the ambulatory care setting, data and documentation from physician practices will increasingly be needed and used to populate health information exchanges and personal health records. Therefore, physician practices must take appropriate steps to build data and documentation quality into the design and use of EHRs if they are to serve these multiple and varied purposes.

This practice brief explores the issues and user practices that can affect data and documentation quality in the EHR. It outlines recommendations for addressing those issues and practices with the ultimate goal of maintaining or improving the quality of patient care provided. Data and documentation quality—or that which has maintained its integrity through completeness, consistency, accuracy, and timeliness—are used interchangeably, acknowledging that each impacts the other.

How Data Capture Affects Quality

Data are captured in EHRs using four methods:

- Entering data directly, including templates or screens completed by the user
- Scanning handwritten documents
- Transcribing text reports created by using dictation or speech recognition
- Interfacing or feeding data from other information systems such as laboratory systems, radiology systems, blood pressure monitors, or electrocardiographs

Each method has inherent strengths and weaknesses that can have an impact on data quality.

Direct data entry is often considered by nonphysicians to be the most desirable data capture method because it produces discrete, structured data that can easily be analyzed and reported. Taking full advantage of direct data entry in the structured principle of “collect once and use many” requires the use of established data values. Data values are often enforced through the use of built-in edits, dropdown lists, and dialogue boxes (e.g., checkboxes) that require the user to make selections to capture data.

Clinicians frequently point out that this level of structure does not allow for describing the specifics of individual patients and their conditions. Individualization of each record is essential to the document and the provision of quality care.

Because this method may be less accurate or complete, it has the potential to negatively impact the quality of documentation. For example, structured data may be inadequate to present a valid picture of individualized medical history, examination findings, differential diagnosis with patient-specific descriptions of severity or probability, and conditions affecting treatment options.

In addition, clicking through multiple choices and entering free text to accommodate nuances can be slower than other methods.

It is important that all stakeholders determine collaboratively when and under what conditions structured data entry is appropriate. Ideally, use of structured data capture is leveraged for those situations in which clinical findings are relatively normal and direct data entry (free text), regardless of method (e.g., dictation, typing, handwriting), is encouraged for relatively complex situations.

Scanning or document imaging is often viewed as a transitional strategy until full EHR functionality is implemented. While this data capture method can have the inherent problem of illegibility, it facilitates completeness and integrity because, unlike the paper the information is recorded on, it is less likely to be misplaced or unavailable for supporting the creation of new documentation. Document imaging can also be used as a strategy for preservation of data in a static state for legal and business purposes.

Transcription of text reports can be faster and facilitate complete capture of information when documenting complexity. Use of dictation templates can help strike a balance between structure and flexibility, thereby facilitating quality of documentation. For the purpose of this article, a dictation template refers to a memory aide or reminder of the points needed in a dictated report.

Feeds from other information systems are an important method of data capture that facilitate completeness and accuracy if properly managed. However, as with any system, there will be errors.

Most systems generate an error report or error queue when data elements (e.g., names, patient numbers) do not match from one system to the next and thus do not transfer. Errors are then investigated and corrected manually.

Because such errors can occur as data are transferred from other information systems into the EHR, it is necessary to have dedicated technology and human resources to monitor, catch, and correct errors at the point of transfer. Mismanaged feeds can cause data errors to proliferate and cascade throughout systems. Properly managed, feeds from other information systems can support advanced analytics and decision support in the EHR.

All the data capture methods mentioned can reinforce and support one another in the event of failure. For example, a fallback to handwritten documentation can later be entered via document scanning or dictation when the system is recovered. Business continuity planning, policies, and procedures for healthcare documentation in the event of systems failure are essential for data and documentation quality.

Quality Documentation for Patient Care

Health information's primary use is in providing quality patient care. A primary attribute of the EHR is its ability to facilitate quality care through the use of clinical decision support. However, the absence of complete and relevant documentation in the EHR makes it impossible to take advantage of this functionality. An example of this is the use of e-prescribing.

The lack of a problem list that provides data related to clinical conditions, allergies, and medication history makes it difficult, if not impossible, for physicians to receive meaningful drug-drug, drug-allergy, and drug-condition alerts and reminders, thereby negating the significant benefits of patient care safety, quality, and cost effectiveness.

If adequate clinical information is not entered into the EHR to satisfy built-in assessments, alerts will trigger more easily and thus more frequently, resulting in "alert fatigue." The alerts will likely be ignored or turned off altogether. In this instance the quality of data and documentation directly affects how the system is used or not used.

Documentation at the point of care must be of sufficient quality to support healthcare decisions as well as other key uses including compliance, external reporting, and revenue cycle management.

Quality Documentation for Compliance

Although their intent may be to promote and manage accurate data entry, EHRs may lead users to create documentation that reflects services not actually rendered or conditions not actually present. Examples include EHRs that encourage "overdocumenting" to bill for a higher level of care; defaulting information from previous entries into successive notes; and using notes that are "cloned" from previous entries either within or between different patient records.

These practices run a significant risk of potential fraud and abuse charges. HIM professionals are knowledgeable of these risks and can advise during EHR design and implementation.

System documentation and the timing and timeliness of documentation affect compliance. Time and date stamps leave little doubt about when events occur. If an EHR is set up to automatically queue the bill when the patient checks out of the clinic and the documentation is not complete at that point, it could be alleged that medical necessity was not established because documentation must be sufficiently complete at the time of billing for the service to support the medical necessity of the billing.

Another example of system functionality that may raise questions is the use of "auto-authentication" or mass sign-offs on encounter notes, test results, and other materials requiring attention that hit the physician's inbox. If the signature is intended to indicate the physician's review and approval of the material, the accompanying time and date stamp will show that this could not have been possible—multiple documents will be stamped with the exact same time.

The ability to create quality data and documentation while saving time and gaining efficiency and productivity is a key goal for clinicians using an EHR. HIM professionals must not lose sight of this goal and must help balance this user goal with the goal of compliant documentation.

Appropriate workflow analysis, operating policies and procedures, and user education are key in achieving data and documentation quality for compliance in the EHR. These requirements are similar in traditional paper-based documentation. However, electronic practice requires that the design and use of the EHR ensure that documentation is not compromised.

EHR Documentation: A Physician's Perspective

Public and private policy initiatives for medical practices to adopt electronic health records (EHRs) have been building since the Institute of Medicine's 1999 and 2001 publications "To Err Is Human" and "Crossing the Quality Chasm."

The latter publication categorizes EHR implementations as only a first step in the evolution of information technology for improved quality and increased patient safety. It notes that widespread EHR implementation will help gather meaningful information that can then be used to develop a new set of systems and tools that will promote healthcare advances.

While physicians certainly concur with health system goals for quality care and patient safety, most do not perceive a problem with these issues in their practices. They also face significant barriers due to cost.

Current statistics show unacceptably high rates of dissatisfaction and failed implementations, decreased practice productivity for significant periods of time, and the realization that "[f]or outpatient practices…approximately 90% of the financial benefit accrues to payers and purchasers, though physicians must make the investment."[1,2,3]

Additionally, although interoperability with laboratories, hospitals, radiology centers, and pharmacies provides significant benefit to medical practices, for many physicians this alone is not sufficient to justify purchase and adoption.

Meeting Physician Needs

In order to successfully implement EHRs, physicians must identify and address the medical record features required to create value for their medical practices. This requires fulfilling five medical practice goals focused on physicians' primary concern when using EHRs:

- Reducing the costs associated with operating a paper medical records system
- Providing immediate access to all patient records at all times
- Solving the E/M compliance challenge
- Providing a high quality history and physical with improved documentation
- Improving practice productivity

Of these five goals, all but the first have the potential to improve the quality of data and documentation. The last three demand data entry features that will be usable, efficient, and compliant while helping physicians promote quality patient care and create meaningful individualized medical record documentation.

When physicians cite the issues that lead to dissatisfaction or failure with EHRs, they inevitably point to the challenges they experience with software designs that fail to meet these criteria for documentation. The magnitude of this challenge has recently been underscored by the 2007 report from the Office of the National Coordinator for Health Information Technology titled "Recommended Requirements for Enhancing Data Quality in Electronic Health Record Systems."

The report cites significant concern with potential adverse consequences for physicians using several of the standard data entry features provided by many of the current EHR systems. It states that "[t]hese tools include the use of defaults, templates, copying, and others. These are legitimate benefits of using an automated system and can be extremely helpful if used correctly; however, the tools can also open the EHR [system] up to fraud or abuse."[4]

In 2007 AHIMA passed a resolution advocating that "organizations developing or implementing EHR systems take steps to ensure that the functionality of their EHR system supports quality care, valid documentation, and data integrity" and that "HIM professionals with expertise in data capture methods, compliance and data quality management actively participate in the EHR system selection, design and development process."[5]

It is imperative that medical practices embrace this same perspective, accepting EHRs only when they meet compliance and quality criteria and benchmarks for effective design and functionality. Practices must also ensure effective physician training for using well-designed systems in order to achieve individualized and compliant clinical documentation.

Notes

1. Charette, Robert. "What Happened to Do No Harm?" *CIO Magazine.* April 1, 2006. Available online at www.cio.com/.
2. Dick, Richard S., Elaine B. Steen, and Don E. Detmer, eds. *The Computer-Based Patient Record: An Essential Technology for Health Care,* revised ed. Washington, DC: National Academies Press, 1997.
3. Ash, Joan, and David Bates. "Factors and Forces Affecting EHR System Adoption: Report of a 2004 ACMI Discussion." *Journal of the American Medical Informatics Association* 12 (2005): 8–12.
4. Office of the National Coordinator for Health Information Technology. "Recommended Requirements for Enhancing Data Quality in Electronic Health Record Systems." May 2007. Available online at www.rti.org/pubs/enhancing_data_quality_in_ehrs.pdf.
5. AHIMA Physician Practice Council. "Resolution on Quality Data and Documentation in the EHR." Approved by the House of Delegates October 2007. Available online in the FORE Library: HIM Body of Knowledge at www.ahima.org.

Quality Documentation for Quality Reporting

All providers face challenges and frustrations in collecting and reporting data for performance measurement. The problems stem from inefficiencies associated with performance measurement; variations among performance measurement systems; organizational and cultural issues; and technological barriers, economic pressures, and competing priorities.[1] Despite these daunting issues, physician reimbursement is increasingly tied to reporting against quality indicators and pay-for-performance programs. The trend makes EHR technology and quality data essential.

Procedures must ensure that data are of the highest quality and are available to support not only quality measurement, but also public and population health, clinical research, health information exchange, and patient use of personal health records. In order to do this, practices should:

- Identify and understand their high-volume services and diagnoses and ensure that data pertinent to quality indicators are captured in the EHR.
- Ensure data and documentation are audited on an ongoing basis for completeness, consistency, and accuracy. This may include some of the same qualitative and quantitative methods hospitals have used for decades to ensure completeness of medical records. Actual EHR reporting capabilities can be used to support ongoing auditing, which must be followed up with action plans for addressing improvements.
- Ensure that coded data elements in the system are up to date and accurate. This includes CPT and ICD codes, provider IDs, patient identification, and look-up tables.

HIM professionals understand how to analyze data and documentation quality and can be indispensible to physician practices striving to ensure that their EHRs provide full benefits.

AHIMA's Position on Data Quality and Documentation in EHRs

In October 2007 AHIMA's House of Delegates approved the "Resolution on Quality Data and Documentation in the Electronic Health Record," as written by AHIMA's Physician Practice Council. The resolution affirms that "EHR systems are an important tool and provide a significant opportunity to improve documentation and patient care when properly designed and used," but they may also "contain design features and functions that can potentially contribute to suboptimal quality of healthcare data and documentation."

The resolution challenges HIM professionals to apply their skills and knowledge in data capture methods, compliance, performance measurement, revenue cycle management, and data quality management and to collaborate with physicians, IT professionals, and others to ensure data and documentation quality in the EHR.

Source: AHIMA Physician Practice Council. "Resolution on Quality Data and Documentation in the EHR." Approved by the House of Delegates October 2007. Available online in the FORE Library: HIM Body of Knowledge at www.ahima.org.

Revenue Cycle Management

Inaccurate data in the EHR will affect the revenue cycle. A high level of accuracy in data quality will benefit many areas, including appropriate reimbursement. The reporting of correct CPT, HCPCS, and ICD-9-CM codes, along with any necessary modifiers, may be captured in the EHR and transmitted to the practice management system, billing system, or outsourced billing company. Ideally, the data entered into the EHR should transfer seamlessly to the correct fields for claims submission. Unfortunately, this is not always the case when integrating systems.

Coders follow official coding guidelines, yet payers may stipulate exceptions to the guidelines, such as with the Bureau of Workers' Compensation and state-specific Medicaid requirements. For example, the proper code for a normal vaginal delivery with antepartum and postpartum care is 59400. This global service may be separated by the assignment of different CPT codes within the maternity care subsection of the CPT book for the delivery and antepartum and postpartum care.

Unfortunately, some Medicaid agencies do not recognize the global delivery service and require that an individual office visit evaluation and management code be assigned for each antepartum visit. Although these requirements are documented by the payers, it offers a unique challenge in the EHR environment for the quality of data captured. These exceptions not only drive proper reimbursement, but they also offer an added complexity for proper data capture and reporting.

Claims rejections and denials may be a result of poor data in the EHR. Claim editors or scrubbers can be helpful, but they add another layer to integration issues. Revenue cycle experts act as the agents for investigation and potential resolution of claims problems. It is the revenue cycle expert that analyzes the claims data and produces meaningful reports to explain the financial status of the practice. Additionally, statistical formulas are calculated based upon the data from the EHR. When the integrity of the data is influenced, then the result is inaccurate and results in ineffective financials.

Another example of the value of quality data is in the individual fields of the EHR. The billing system or outsourced billing company may require individual fields for claims processing that are not paralleled in EHR fields. For example, the basic field of "treating provider" may have different meanings in an EHR and billing system. This is especially the case when the treating provider is a nurse practitioner, clinical nurse specialist, certified nurse midwife, or physician assistant.

In this scenario, the nurse practitioner may be treating the patient, yet the claim may be billed under the physician's National Provider Identifier (NPI) number if incident-to requirements are met. The EHR may list the nurse practitioner as the treating provider, yet the billing system may require the physician as the treating provider.

Conversely, if the nurse practitioner is acting in collaboration with the physician and billing services under the nurse practitioner's NPI number, then the nurse practitioner would be the treating provider. To make the issue more complex for EHR vendors, incident-to and collaboration rules may vary by payer and may be different from state to state. Although incident-to is a Medicare rule, some commercial payers may also abide by this policy.

Another dimension in the complexity of the revenue cycle is Medicare's shared-split visit rules. There are specific restrictions to the place of service where shared-split visits may be assigned, along with the restrictions to the CPT codes, which are included in the shared-split visit benefit for Medicare beneficiaries. An effective EHR should be able to accommodate specific alerts in the data capture sections for a patient visit.

A final example of EHR data quality and the revenue cycle involves the necessary data fields for correctly billing a consultation. Two of the many requirements for consultations are documenting the ordering provider and the reason for the ordered consultation. If the EHR has only one of these fields, then the documentation does not support the necessary fields for accurately reporting a consultation. The results are potential risks in compliance and sanction possibilities.

Revenue cycle experts offer the assurance for accurate reimbursements. A properly developed EHR will assist in the financial analyses, revenue cycle statistics, claims processing, and ultimately in the correct reimbursement to practices for the services they perform.

Personal Health Records and Health Information Exchange

Personal health records (PHRs) and health information exchange are two technologies currently in their infancy, but both have the potential to support healthcare improvement through the power of information sharing. The expanded exchange of information between physician offices and other healthcare organizations will increase the need for quality data and functional standards.

Practices require policies regarding the use of information received and sent to PHRs and health information exchanges. These policies will need to address issues such as privacy and security, data integrity, and liability. For example, policies regarding what constitutes the practice's legal health record and how to handle requests for amendments and corrections are just two issues that benefit from HIM expertise.

Recommended Practices

Quality data and documentation within the EHR are nonnegotiable attributes. As discussed, there are many factors that affect data and documentation quality. One of the main factors is the method of data capture. Whether the method is documentation scanning, dictation, or template, the practice requires a quality documentation plan that includes policies and procedures, training practices and requirements, and education to provide both general and explicit knowledge on the relevance of documenting and coding and its relationship to quality.

Quality begins with the EHR design process (evaluation and customization), and that process starts early. It is in those initial phases that HIM professionals make critical contributions to the decisions that ultimately affect the quality outcome. For example, the request for proposal that the practice distributes to potential vendors should clearly identify data and quality specifications and expectations.

Workflow offers another example. HIM professionals manage the data within EHRs, thus managing how the data go in and come out. HIM professionals have the knowledge and experience to identify workflow patterns and the ability to ensure that

quality data capture transitions from the paper system to the electronic one. HIM input here is a must.

A final example among many is testing. All systems, updates, workflow patterns, and anything having to do with the EHR and documentation must be tested by HIM professionals in cooperation with the physicians who will use the system. Together they verify that medical care workflow and information workflow will ensure that quality goals are achieved.

Policies and procedures are critical to the success of any organizational plan, and they are essential for quality documentation. At a minimum, the following issues should be considered during policy and procedure development:

- Data capture methods—identify which methods are permitted for use and who is permitted to use them. Identify when each method is permitted for use.
    - For example, the use of structured data capture should be confined to the documentation of positive or negative responses to questions about past history/family history/social history and the review of systems. It also provides appropriate documentation of normal findings of asymptomatic components of the physical examination, as well as documentation of diagnostic procedures ordered, complexity of data reviewed, the three components of risk, and the nature of the patient's presenting problem(s). However, the use of free-text narrative is mandatory for E/M compliance, establishment of medical necessity, and meaningful and accurate clinical documentation related to the history of present illness, details of positive responses to questions about the past history/family history/social history and review of systems, description of abnormal and pertinent normal physical examination findings, clinical impressions, and treatment options. Such narrative documentation may be entered into an electronic history and physical by means of typing, dictation, or legible handwriting that is either transcribed or entered by digital pen with additional proofreading.
- Compliant documentation—determine when a record is complete. Set the expectations for turnaround time and documentation completion.
- Auditing—design an auditing program that ensures completeness, accuracy, and consistency. Auditing should be completed on a regularly scheduled basis and at random. The audit program will ensure that data are captured accurately and that documentation quality is at an optimum. Key data elements to audit include key indicators, review of progress notes, signatures, and medications, among others. Make sure that what is documented is true to what was actually diagnosed and treated.
- Evaluation and maintenance—maintain current code sets. Codes such as ICD-9 and CPT change annually, and some change more frequently. HIM professionals must be included in testing changes before they go live to the rest of the users. HIM professionals have the understanding and experience to verify that systems (e.g., scrubbers, billing) are accurately functioning. They will also ensure that processes for submitting data are precise.
- Legal health record—define the legal health record. Establish which components and whose documentation make up the practice's legal health record. Identify who can make changes to the legal health record and when they are permitted.
- Privacy and security—establish how the integrity of the documentation will be safeguarded.

Creation and implementation of policies and procedures go hand in hand with the training that enforces them. Physicians and staff members should understand that once entered, data appear in many places in the EHR, which magnifies the need for accuracy and care. Users who understand how data are used and for what purposes will help align the expectations of quality documentation with user responsibilities.

An essential part of training is educating. Providers who understand and have knowledge of how data can affect coding will appreciate the goals of quality documentation. Providing ongoing education to providers about the significance of documentation and coding will maintain a high level of quality and compliant data capture and documentation practices.

The principles for ensuring quality data and documentation have not changed. However, EHRs require different tactics. They require the development of new workflows that support efficient and effective use of the technology.

Maintaining data quality also will require insight to meet the challenges technology brings, such as interoperability and variations in quality measurement systems. It will require time, resources, and commitment.

A key outcome to quality data and documentation are the reports generated from it. Reliability and confidence in the reporting and analysis functions of the EHR are only as strong as its users. Clinicians, reception, HIM professionals, IS professionals, billing staff, coders, and anyone else involved in the use of the EHR have valuable input in EHR implementation and the quality initiatives that go with it. It is not something that is achieved by one or few, but by a collaborative effort of many.

Note

1. Kallem, Crystal, and David Gans. "Aligning the Demands for Performance Data." *Journal of AHIMA* 78, no. 10 (Nov.-Dec. 2007): 56–60.

References

AHIMA e-HIM Personal Health Record Work Group. "The Role of the Personal Health Record in the EHR." *Journal of AHIMA* 76, no. 7 (Jul.-Aug. 2005): 64A–64D.

AHIMA e-HIM Workgroup on Assessing and Improving Healthcare Data Quality in the EHR. "Assessing and Improving EHR Data Quality." *Journal of AHIMA* 78, no. 3 (Mar. 2007): 69–72.

AHIMA EHR Practice Council. "Developing a Legal Health Record Policy." *Journal of AHIMA* 78, no. 9 (Oct. 2007): 93–97.

AHIMA Physician Practice Council. "Resolution on Data Quality and Documentation." Approved by the House of Delegates October 2007. Available online in the FORE Library: HIM Body of Knowledge at www.ahima.org.

Burrington-Brown, Jill. "The Emergence of Personal Health Records." *Practice Highlights* (May/June 2006). Available online at www.iowamedical.org.

Fahrenholz, Cheryl Gregg, and Stacie Buck. "PHRs in Physician Practices." *Journal of AHIMA* 78, no. 4 (Apr. 2007): 71–75.

Grzybowski, Darice. "Data Quality: The Impact on Healthcare and HIM." AHIMA's 75th Anniversary National Convention and Exhibit Proceedings, October 2003. Available online in the FORE Library: HIM Body of Knowledge at www.iowamedical.org.

Trites, Patricia, and Reed Gelzer. *How to Evaluate Electronic Health Record (EHR) Systems*. Chicago: AHIMA, 2007.

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