HIM Functions in Healthcare Quality and Patient Safety. Appendix C: HIM's Role in Data Capture, Validation, and Maintenance

A critical component of AHIMA's draft HIM Core Model, a robust description of the functions and opportunities open to current and future HIM professionals, is capture and maintenance of health data.[1] HIM professionals are encouraged to assume a leadership role in outlining how data are captured and maintained according to current code sets and data dictionaries. This requires establishing working relationships with IT professionals and helping to define and standardize electronic data criteria and terminology.

It is only with joint HIM–IT efforts that critical data elements contained in the electronic health record will be identified and responsibility can be assumed by the HIM professional for the integrity of the data.

With the number of different organizational systems that capture patient information, patient identity management is a critical HIM role. Managing the master patient index (MPI) or other patient identifier system is necessary to ensure an organization's ability to understand its patient population and its own performance, both for internal and external reporting.

Patient information that is spread across multiple records can distort measures of patient severity and overall risk of mortality. Correcting errors consumes time; however, not correcting errors in patient identifiers causes mistakes that can trigger issues such as medical record number (MRN) sharing in a healthcare facility. Sharing a patient identifier or MRN can potentially cause misdiagnosis and adverse events such as medication allergies and even death.

For example, patient A and patient B have the same MRN due to an error when assigned. They have the same name and birthday. Their medical records are mixed in the EHR system or in the paper chart. Patient A has hypertension and diabetes, on the other hand, patient B doesn't have these problems.

When patient B goes to the hospital, he/she will be considered to have diabetes if there is not any additional testing performed. In addition, patient B may have some unnecessary lab tests or have wrong medications administered. The outcome may do harm to both patient A and patient B. Therefore, reducing common errors such as misspelling a patient's name, Social Security number, and date of birth is a requirement of high quality outcomes and patient safety.[3]

One of the principal challenges for HIM professionals is translating clinical data criteria and terminology into an HIM language while maintaining the clinical accuracy of the data. This task can only be managed by working side by side with a team of physicians, nurses, and clinicians. This multidisciplinary approach for achieving the best quality of clinical data will have far-reaching effects within a healthcare organization as well as the entire healthcare delivery system.

The role of HIM is to identify how the data is to be captured and ensure that it can be identified through a standardized nomenclature or code set. Data that is accurately representative of clinical patient outcomes can be studied, trended, and used to improve clinical protocols, develop evidence-based medicine practices, and improve preventive and population health. Ultimately, patient safety and the quality of patient care are improved.

Maintaining the data also includes creating and implementing safeguards such as setting up a formal disaster recovery processes. Data must be stored in a back-up system for disaster and emergency situations. The disaster recovery process is critical to prevent the loss of records and to ensure that care providers are able to make decisions even during down time or during a natural disaster.

Every organization must have a comprehensive disaster recovery plan that protects patient safety, secures health information from damage, ensures stability in continuity of care activities, and provides for orderly recovery of information.[4] HIM professionals can refer to a variety of federal and accreditation requirements when developing a disaster recovery plan.

The HIPAA security rule requires health plans, healthcare clearinghouses, and healthcare providers that maintain or transmit health information electronically to provide reasonable and appropriate administrative, technical, and physical safeguards to ensure the integrity and confidentiality of protected health information and protect the information against any reasonably anticipated threats or hazards to its security, integrity, unauthorized use, or disclosure.[5]

As the data gatekeepers, HIM professionals should possess the knowledge to run defined reports, have the ability to analyze data within the reports, and ensure the reliability of the data. With this knowledge and ability, HIM professionals will help determine outcomes and make a difference in all departments within the organization.

HIM Role in Data Retrieval, Analysis, and Output

Another component of AHIMA's draft HIM Core Model is establishing data analysis and reporting practices and procedures and the analysis, transformation, and reporting of health information.

Many external forces have tried to influence healthcare quality through regulations, legislation, accreditation, and reimbursement. The ability to measure the quality of patient care accurately and efficiently is central to physician attempts to:

- Provide excellent care
- Improve patient outcomes
- Improve infection rates
- Prevent serious adverse events
- Control near misses
- Standardize treatment using evidence based medicine

Other efforts have led HIM professionals to master statistical process techniques and utilize classic principles of reducing variability and thinking as a system of care that uses defined processes and clinical outcomes measurements.

With the adoption of electronic health records, HIM professionals are in a unique position to evaluate the documentation residing in the EHR and other source systems that feed data into the enterprise-wide data warehouse. In order to become an integral part of patient safety and quality initiatives, organizations should ask themselves the following questions regarding their data capture, validation, and maintenance activities:.

- Is valid, accurate, and reliable data being provided? If yes, how is it being provided?
- Does HIM play a role in quality management and performance?
- Has HIM become proficient in understanding how to establish the true dimensions of a problem, using retrospective data analysis, and chart review?
- Has HIM observed actual work processes in the overall effort to improve quality of care and workflow processes?
- Has HIM analyzed concurrent data and moved quickly to actionable solutions?
- Has HIM solved problems as close to the actual process as possible?
- Does HIM provide continuous feedback and education to those that need to know?
- Does the organization have a data quality committee that routinely asks for and looks for reporting of EHR documentation that is accurate, timely, and concise and that follows the many regulations, legislative mandates, and national efforts to decrease compensation based on outcomes of patient care and treatment?
- Does HIM have knowledge of all source systems within the organization that either feed data or pull data from the EHR and eventually end up in the enterprise-wide data warehouse?
- Does HIM know how to correct an error in the EHR and ensure that all source systems have also corrected the error?
- Does HIM monitor and report the status of unsigned orders, pended notes, and incomplete documentation in the EHR? Does HIM track and trend the data, reporting the data to the medical staff and ancillary professionals?
- Is HIM a member of the clinical information intelligence committee whose efforts center on building and linking all of the data source systems into the organization's enterprise data warehouse? Does HIM help develop and identify key clinical indicators to measure conditions (e.g., diabetes, septicemia and heart failure) and ultimately standardize order sets and documentation templates that assist providers in caring and treating for their patients? Are they part of the efforts to link the organizational data to the state and national health information exchange and ultimately to the Nationwide Health Information Network?
- Does the organization have applications for sharing data with other healthcare organizations within the state or region?
- Does the organization have applications for patients to utilize a personal health record? Do patients have access to their EHR? Is HIM a part of the educational and marketing efforts to reach out to patients?

Clinical decision support reminders are an example of an area where HIM professionals can play a major role. These reminders notify care providers with alerts such as medication allergies, food allergies, or lab test overlap. The organization's expectations of computerized physician order entry system functionality are key components for success.

For example, if an organization expects to decrease medication errors such as drug-to-drug interactions through the computerized physician order entry system, it must ensure the system allows for alerts when a potential contraindication has been identified.[6] Reminders are also important to reduce the in-house infection rate, death rate, and the cost of compensation and risk management expense. Balancing these reminders is key to ensuring that alerts are actionable, target the right types of clinicians, and do not overwhelm providers with too many alerts. Ongoing methods should be in place to analyze the alert outcomes and maintain a method of adding, revising, and retiring alerts based on this analysis.

Risk management is defined as the administrative and managerial process of planning, organizing, leading, and controlling the organization's activities to minimize the adverse effects of accidental loss through risk control and/or the restoration of those losses through risk financing as effectively as possible at the least possible cost.[7] According to the Joint Commission's Hospital National Patient Safety Goals, best practices that hospitals should follow to improve patient safety include:

- Identify patients correctly
- Improve staff communication
- Use medicines safely
- Prevent infection
- Check patient medicines
- Identify patient safety risks
- Prevent mistakes in surgery[8]

All of these areas will require the ability to capture data correctly and consistently and to subsequently provide analysis and reporting on the effectiveness of the program.

Notes

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