

**Info & Knowledge Management**

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**Introduction**

Wrong data might be a significant threat to patients therefore it’s a big responsibility for healthcare personnel to maintain data integrity and accuracy. This paper presents data integrity and security issues along with a plan and strategies to prevent this issue.

**Data integrity and security issues**

With the introduction of Electronic Medical Records (EMR)in healthcare, healthcare professionals have encountered challenges along with benefits, these challenges can reduce healthcare systems efficiency increasing the risk of patient harm or death (Goulet et al., 2015). These errors are but not limited to entering information in a different patient chart, inconsistent technology, difficulty tracking patient information, and recurrent ineffective alerts. The best way towards patient safety is to identify failures that have led to errors and then fix systems to the failure to protect patients from errors, preventing clinicians from making errors. When there is duplication of addresses and names in an organization, it can be hard to keep the data consistent. There are only a few constraints in name and column due to their nature and the greatness of data variation. When there is an addition of the problem, it can be difficult to detect due to data inconsistency making it hard to know until someone complains if there is a need to match data between databases. (Harrington, 2016) It’s pretty common in the healthcare field where healthcare workers have to encounter unresponsive, confused patients with no family members present at the time of arrival. Sometimes they need life-saving measures and health care workers must start the treatment without any consent. The scenario presented introduces us to the patient whose mental status is altered making her unable to provide any information that resulted in medical data error related to data quality and integrity.

**A proposed plan to prevent medical errors**

According to the Joint Commission, In a scenario like this, where patient identity may not be verified a temporary name and a medical record number can be assigned that will prevent us from using the old information. Once a temporary name and medical number are assigned, this can be used for all orders including labs, medication, blood products, and many more. Once we have confirmed the formal identification of the patient, we should use the formal identification instead of the temporary one. Under HIPAA, a patient can amend medical records from their providers, and it depends upon the provider whether an amendment will be made or not Either way, the provider must respond to the request. Once the requested changes are made, the patient’s attorney can get a copy and rely upon them when submitting a claim to the insurance carrier or litigating a case. (John, 2022) Therefore when the records are shared among the providers there should not be room for any errors.

**Three strategies /Rationale to ensure data integrity.**

To prevent these types of errors, plans and policies need to be implemented when working with patient aliases that will respect patient privacy ensuring data integrity and accuracy.

For unresponsive patients, every organization should come up with a process that is based on individual safety promotion but not convenience or workflow. This process of Identifying patient safety will need to be communicated clearly with every staff. Most of our hospitals use EHR messages that are dictated by physicians and there are still some chances of transcription errors, for instance when mixing up numerical values or omission of some part of a medical term, there is also a chance where providers can dictate notes in the wrong patient chart when they are in a rush. Per AcroDocz, medical records include all relevant information in a chronology with the records hyperlinked and bookmarked. This should be then reviewed by the client to make sure that every information recorded in the medical records is accurate. When an error is identified, the client then can ask the healthcare personnel to update the records that accurately reflect the patient’s medical information

EHR should have software that ensures data integrity preventing fraud, abuse, waste, and not proper payments. Tamper resistance and auditable events that include audit log and encryption status, ability to see who changed the status, allowing limited users who can authorize that status, maximum security settings, ability to detect alteration in the audit log, and ability to timeout access when not used for a longer time can assist in improving data handling and integrity. Policies with clearly defined roles play a crucial role in preserving data integrity.

Continuous monitoring and auditing of EHR documentation will help in establishing clear channels for reporting errors in documentation. Training on policies related to proper use of EHR features that focus on accuracy and integrity. Training about the responsibilities of maintaining integrity and accuracy can be some of the strategies to preserve data integrity and accuracy.

Technology such as Firefox can be used to protect the information. Firefox can also be used both inside and outside to protect businesses from threats that will interfere with the network (Keshta & Odeh, 2020)

**Summary**

There are many reasons behind Data integrity compromise that we have discussed in this paper. Management of Data integrity is not an easy task mainly in the healthcare industry therefore new data integrity approaches are essential to preserve data integrity and accuracy.

**References:**

Harrington, J. (2016). Relational database design and implementation (4th ed.). Cambridge, MA: Morgan Kaufmann. Chapter 25, “Data Quality” (pp. 515)

John. (2022, February 23). Major types of medical record errors and how to address them. Organized Medical Documents for Law Firms.

<https://www.acrodocz.com/major-types-of-medical-record-errors-and-how-to-address-them/>

Keshta, I., & Odeh, A. (2020, August 4). Security and privacy of Electronic Health Records: Concerns and challenges. Egyptian Informatics Journal.

<https://www.sciencedirect.com/science/article/pii/S1110866520301365>

Two patient identifiers - understanding the requirements: Home care: National patient safety goals NPSG. The Joint Commission. (2022, August 20).

<https://www.jointcommission.org/standards/standard-faqs/home-care/national->