Data Collection Plan

Tomilola Nero

Grand Canyon University

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Data collection is a well-designed plan that is used to gather both baseline and clinical data to help the clinician make a diagnosis and recommend a treatment. In the given scenario, a child present has a head injury and the Glasgow scale is 14 or more. However, the child is not vomiting and not showing signs of aggressive signs of severe head injury. The hospital policy does not allow a physician to order a Computerized Axial Tomography (CAT) for the patient. A Glasgow scale is an important tool that is used to rule out the possibility of head injury (BrainLine, 2018). Additionally, the scale shows the highest score and symptoms of increased Intra Cranial Pressure (ICP). The paper seeks to discuss the significance of the data collection plan related to the case scenario.

When collecting personal data, it is important to consider health informatics regulations and standards. Healthcare providers are required to protect the patient’s privacy. Medical practitioners are required to protect the information of the patients as a way of maintaining patient trust (Allinson & Chaar, 2016). Some data elements that could be pulled from electronic health record include administrative and billing data, progress note, patient demographics, vital signs, medication, immunization dates, medical histories, allergies, lab and tests results, and radiology images. Some questions that I need to ask the patient include:

* Are your immunizations up to date?
* Do you have any food or drug allergies?
* Has anyone in your family suffered from head injury?
* Do you have a health insurance cover?

The various forms of tools for data analytics in the healthcare setting include financial operational and clinical data. These tools are used for decision-making and coordinating care for individual patients. Knowledge discovery and data mining model (KDDM) is one of the most preferred methods for clinical data collection since it can be used to access and leverage huge repositories efficiently as well as analyzing sophisticated nonlinear relations(Nelson 2018).It is important to consider health informatics regulations and standards when gathering personal data. Electronic health records contain both unstructured and coded data. Mechanical learning (ML) models can also be used in clinical data collection. With this model, clinicians can predict the future and give life-saving results. The theory that can be used in this case study is the Blum Model Theory. Fundamentally, this theory is described as data as interpreted components such as an individual’s age, name, or weight. Information is described as processed data that has meaning. Additionally, knowledge results when information and data are identified and the relationship between the two identified. It is imperative to include the variable that identifies changes in evaluation throughout the hospital stay. Whenever the child’s condition changes during the process, the team will be able to treat it accordingly. For instance, severe headache, deterioration of consciousness or vomiting may call for urgent CT scan and further treatment.

The collected data will improve the situation of the patient. Particularly, the collected data will create a holistic view of the patient, personalize the treatments, and improve the treatments. Collection of data will also improve communication between the patient and the healthcare provider hence improving the health outcomes. When reporting, it is vital to protect the patient’s identity. The identity of the patient can be protected by ascertaining a unique identifier for every patient. For instance, each patient should be represented in a certain code rather than using their names.

The data collection plan should be submitted to the chief marketing officers to ensure that the physicians are complying with the practice. If the child becomes stable and the clinical data shows no need for CT scan, the physician should adhere to the hospital policy. Every doctor should comply with the order to prevent financial obligation that may place the organization in an income imbalance.

References

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