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DAT 375 Module 2 Journal

Data Analysis for a Hospital Internal Study

The problem we are aiming to analyze and solve is what are the common injuries within the last 10 years for those who are in the age group: “Infant/Child” and compare it to the most common injuries within the previous 10 years for the same age group. The data I would have to isolate and extract to produce results for the hospital’s internal study are the age, the diagnosis, the date of diagnosis, and the gender. These data would be obtained from electronic medical records (EMR) and electronic health records (EHR) (Dash, 2019). EMR is a digital version of a patient’s chart and is more extensive comparing to EHR. That is because EHR is used to share with other providers. (*EMR vs EHR: What’s the Difference?,* 2017)

There are questions I would like to identify before proceeding with the analysis:

* The age group: “infant/child”, what are the ages that considers to be in that age category in the hospital?
* What would it require for me to be able to have access to those records to comply to HIPAA and not violate any regulations?

I would also expect there will be an abundance of data. It would require time and research to extract all of the data needed for this study (for example, 10 years’ worth of data from 2012-2022 and 10 years’ worth of data from 2002-2012 to compare it to) and on top of that, there are numerous of patients coming and going each day. I would have to narrow it down to the age group we are focusing on, determine whether all the data are in the data warehouse or if I have to extract multiple data from different sources, and be aware of HIPAA regulations and data privacy regulations (*The Importance of Healthcare Data Analytics in EMR*). Obtaining 20 years’ worth of data has me wondering, when did the hospital start using electronic records? Will some of the files not be available due to the time era or possibly be lost over the years? What is the purpose of obtaining the common injuries for the last 10 years and comparing it to the 10 years before it?

References:

Dash, S., Shakyawar, S. K., Sharma, M., & Kaushik, S. (2019, June 19). *Big Data in Healthcare: Management, Analysis and Future Prospects* . SpringerOpen. Retrieved May 15, 2022, from <https://journalofbigdata.springeropen.com/articles/10.1186/s40537-019-0217-0#citeas>

*EMR vs EHR: What’s the Difference?* USF Health. (2017, February 15). Retrieved May 15, 2022, from <https://www.usfhealthonline.com/resources/health-informatics/ehr-vs-emr/#:~:text=It's%20easy%20to%20remember%20the,of%20the%20patient's%20overall%20health>.

*The Importance of Healthcare Data Analytics in EMR*. Cprime Studios. Retrieved May 15, 2022, from <https://cprimestudios.com/blog/importance-healthcare-data-analytics-emr>