Warner Alexis  
Data 607 – Final Project Proposal

**Hospital Readmission Reduction**

The center for Medicare and Medicaid Services begun to reduce payment to Hospitals for excessive readmissions on October 1rst 2012 as part of the Affordable Care Act. Hospitals’ mission switches strategies to reduce rehospitalization rate and improves quality care so patients don’t come back within 30 days readmission. There are several strategies implemented to enable the process but, the use of data analytics has been indispensable to reduction of readmission rate. Warchol et al. said: “Data analytics can be used to improve clinical operations, watch for care patterns, and identify readmission risk.” He acknowledges that other researcher like Monga suggested that hospitals have the ability to design an analytical model to predict the likelihood of patients’ readmission on the basis of information collected in Electronic Health Records (EHR). The purpose of this project is to predict the hospital readmission from this data set in UC Irvine Machine Learning Repository called “Diabetes 130-US hospitals for years 1999-2008”.

This data set contains information about care given to patients in 130 Hospitals from 1990- 2008. It has 50 columns representing patients and hospital outcomes.

What are the features that are most impactful in predicting hospitals readmission? How do

Data Source:  
https://archive.ics.uci.edu/dataset/296/diabetes+130-us+hospitals+for+years+1999-2008

**References**

Warchol SJ, Monestime JP, Mayer RW, Chien WW. Strategies to Reduce Hospital Readmission Rates in a Non-Medicaid-Expansion State. Perspect Health Inf Manag. 2019 Jul 1;16(Summer):1a. PMID: 31423116; PMCID: PMC6669363.

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