

Trauma Registry Data Analysis

Ebenezer Hormenou

Saint Francis Hospital and Medical Center has a busy trauma center that sees over 2000 patients a year. The hospital maintains a trauma registry that collects several variables about patient care in a programmed registry management tool. This software outputs the data as a predictable table with little or no analysis or organization. The trauma center staff currently spends many hours formatting and making visualization of the data into a report and would like a time efficient way to create the report. The goal this project is to design an analysis software that will take the raw data from the registry management tool and output a visualization and summary of the data in Microsoft Excel. The analysis software is written in python using statistics libraries such as pandas to manipulate the data, and XlsxWriter to create charts in Excel. This software is able to create a full Excel report with a simple click. Users can specify date ranges for the analysis and compare months or quarters. The output report contains visual summaries and statistical summaries of the key data points.