Final Project Proposal

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The goal of my final project is to predict whether an adult patient will have post-operative nausea and vomiting (PONV) after surgery that had an admission to the hospital during that encounter. The admission could be due to the surgery, or the surgery could be due to the admission. The dataset was built by a team connected to the anesthesia providers at one of our hospitals. The data set contains 19,503 observations and 227 variables in current state. I plan to use an elastic net to reduce that number greatly. There are many categorical variables like Primary\_Procedure\_Name, Patient\_Gender, Anesthesia\_Type, Isoflurane, Sevoflurane, Desflurane, MIPS\_Current\_Smoker, MIPS\_Elective\_Surgery, etc. The data set is largely Yes/No variables with lots of redundancy. Redundant variables will be removed.