**Code Order**

**Query** – bed moves queried from star / flow

**Bed\_moves\_data\_org** – using bed moves, a matrix is arranged in the following way: for a patient visit, we have the (mrn, csn, admission datetime, discharge datetime, department, room, sex, age, patient eventually admitted or not)

**Attach\_flowsheet** – attach latest flowsheet reading to visits that apply

**Lab\_matrix** – attach latest lab result to visits that apply

**Simplify\_flowsheet\_cols** – flowsheet column names require simplifying ( contains the glossary of simplified terms )

**Xgboost\_model** – models that train and make predictions based on the input date and time

**Xgboost\_model\_rpart** – same as above but instead of using boost tree with xgboost engine, use rpart that would also calculate the indicator importance

**Evaluate** – from the predictions made in xgboost, this yields the performance measure for different metrics: distribution evaluation, hosmer-lemeshow statistic, madcap