

Predicting Heart Attacks (Random Forest)

- Predicting whether a patient has a heart attack for each of the cost buckets using the random forest algorithm



Bucket	Random Forest
1	49.63%
2	55.99%
3	58.31%

Incorporating Clustering

- Patients in each bucket may have different characteristics



Predicting Heart Attacks

- Perform clustering on each bucket using $k=10$ clusters
- Average prediction rate for each cost bucket

Cost Bucket	Random Forest without Clustering	Random Forest with Clustering
1	49.63%	64.75%
2	55.99%	72.93%
3	58.31%	78.25%