Final Metrics
## Predicting Sepsis in ICU Patients
By Aisling Casey – 05/19/2021

No model proved useful in classifying sepsis patients. Here I present the parameters & testing data results for one of the models, a logistic regression model that attempted to classify whether a patient had sepsis or not.
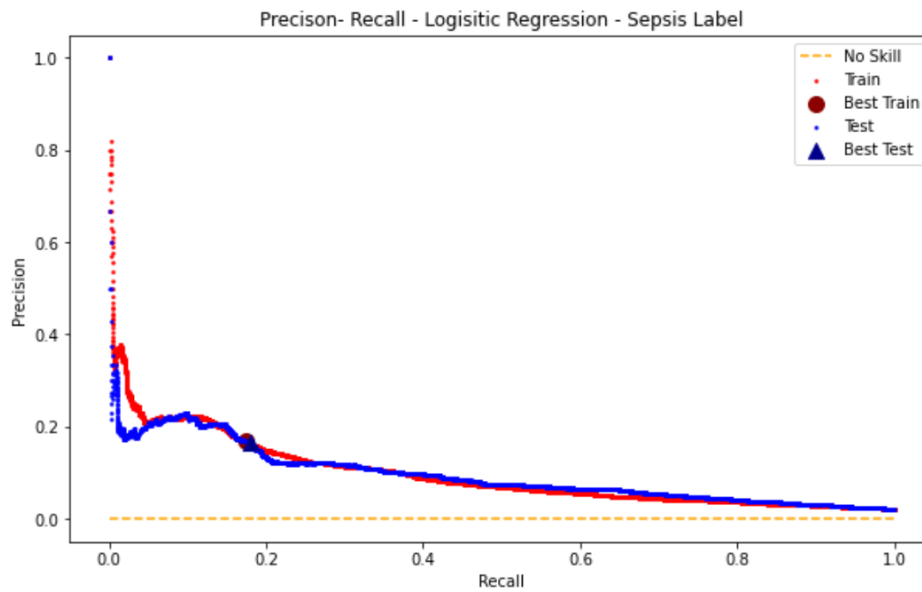
Model Parameters

Logistic Regression Model

'C': 1,
'class_weight': None,
'dual': False,
'fit_intercept': True,
'intercept_scaling': 1,
'l1_ratio': None,
'max_iter': 1000,
'multi_class': 'auto',
'n_jobs': None,
'penalty': 'l2',
'random_state': None,
'solver': 'lbfgs',
'tol': 0.0001,
'verbose': 0,
'warm_start': False

Results

Precison- Recall - Logisitic Regression - Sepsis Label
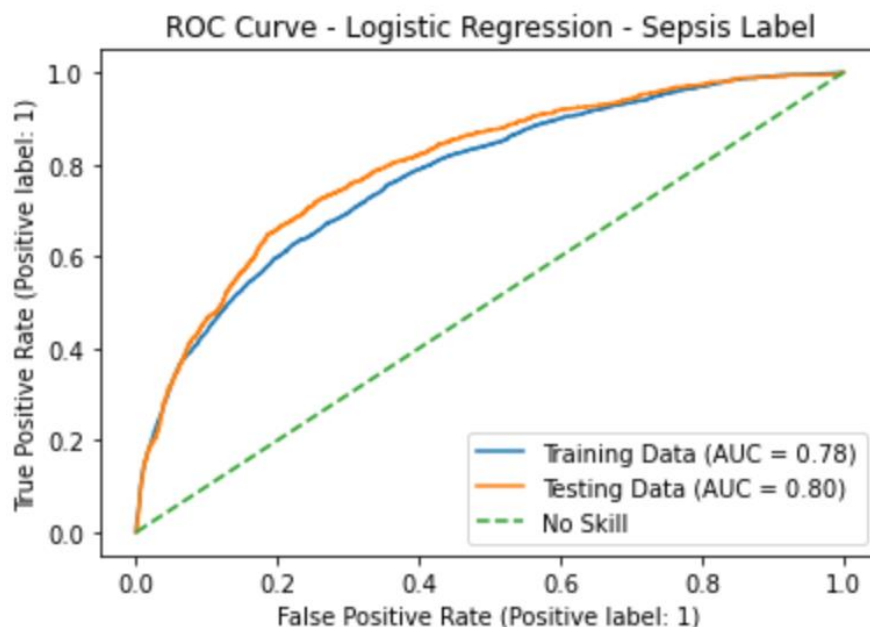
Classification Report – Testing Data

	precision	recall	f1-score	support
0	0.98	0.97	0.98	57984
1	0.12	0.22	0.16	1116
accuracy			0.95	59100
macro avg	0.55	0.60	0.57	59100
weighted avg	0.97	0.95	0.96	59100

Note: The optimal probability threshold according to F1 score has been set, which in this case is 0.101.

Confusion Matrix – Testing Data

	Actual 0	Actual 1
Predicted 0	56151	1833
Predicted 1	865	251

Note: The optimal probability threshold according to F1 score has been set, which in this case is 0.101.