

1a) Distribution of full machine-learning model risk-scores for patients +/- the secondary outcome (LOS >4 days or readmissions due to "medical" morbidity or LOS >4 days with no recorded morbidity). The dashed line marks the classification threshold of a 20% positive prediction fraction.

1b) Receiver operating curves (ROC) for the full machine-learning model (F-MLM), full logistic regression model (F-LRM), parsimonious machine-learning model (P-MLM), parsimonious logistic regression model (P-LRM) and the age-only model (AM).