

### Feature engineering: recursive feature elimination

Recursive feature elimination (RFE) works by discarding the covariate with lowest importance from the initial feature set. The model is then re-trained with the resulting feature subset and this process is repeated until a specified number of minimum features to retain is reached. For each iteration of the algorithm the accuracy of the obtained classifier is recorded in order to identify which subset of features delivers maximum performance. This procedure is performed separately on the three training set considered in the analysis framework (See Prediction time windows in the Methodology section), therefore, a different set of feature is considered in each of the validation procedures.