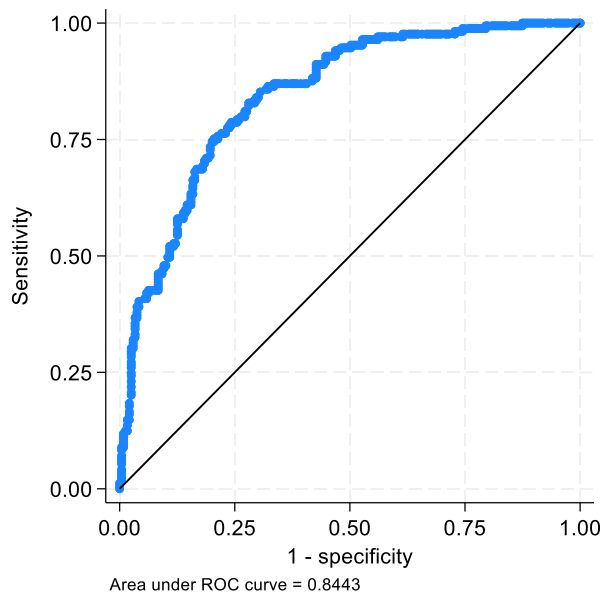## S22 Appendix. Goodness of fit: CPAP subgroup model

There were 408 observations with 321 covariate patterns in this dataset. The Pearson chi-square goodness of fit test indicated no problems with the fit of the model (p=0.30). As a precaution due to the somewhat closeness of the observations and the covariate patterns, the Hosmer-Lemeshow test was also conducted and also indicated not problems with the fit of the model (p=0.70).

The area under the Receiver Operating Characteristic (ROC) curve suggested the model had excellent discriminatory powers (0.84).

Area under ROC curve = 0.8443

Plots of the predicted values showed fairly clear separation of the outcome groups in terms of estimated probabilities from the model.