Final Results

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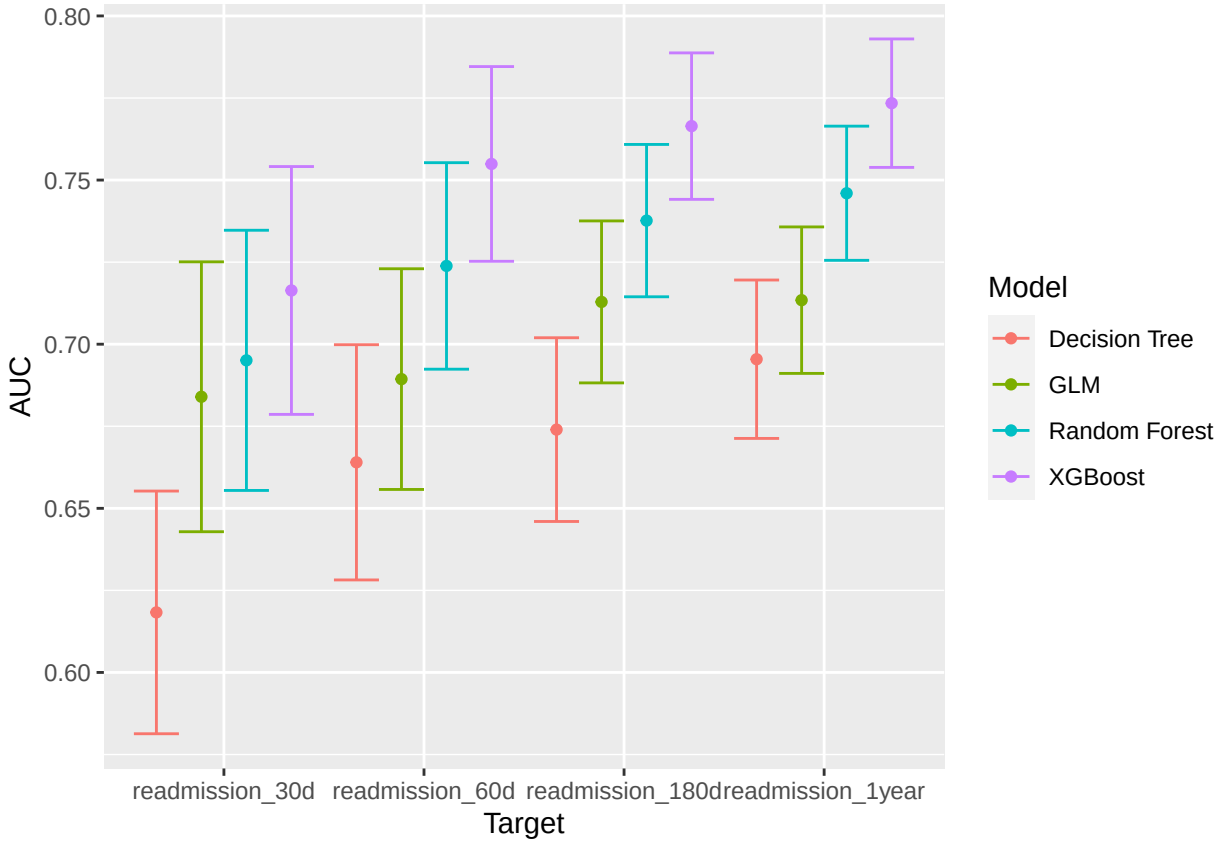
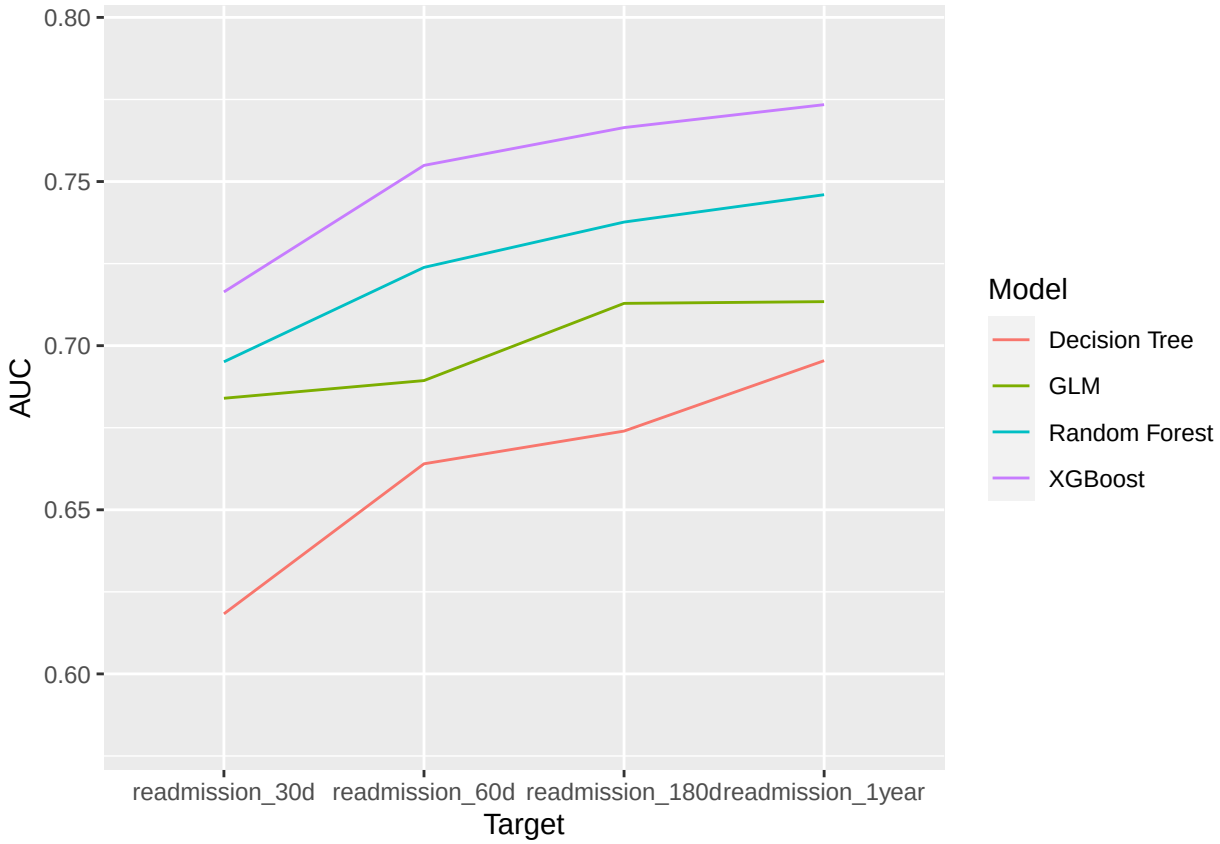
```
library(tidyverse)
library(kableExtra)
```

```
niceFormatting = function(df, caption="", digits = 2, font_size = NULL){
  df %>%
    kbl(booktabs = T, longtable = T, caption = caption, digits = digits, format = "latex") %>%
    kable_styling(font_size = font_size,
                  latex_options = c("striped", "HOLD_position", "repeat_header"))
}
```

```
path <- "../EDA/auxiliar/performance"

df <- tibble()

for (file in list.files(path)){
  df <- df %>% bind_rows(readRDS(file.path(path, file)))
}

df <- df %>%
  mutate(Target = factor(Target, levels = c('readmission_30d',
                                            'readmission_60d',
                                            'readmission_180d',
                                            'readmission_1year')))

df %>%
  ggplot(aes(x = Target, y = AUC, ymin = `Lower Limit`,
             ymax = `Upper Limit`, color = Model)) +
    geom_point(position = position_dodge(width=0.9)) +
    geom_errorbar(position = position_dodge(width=0.9))
```




```
df %>%
  ggplot(aes(x = Target, y = AUC, ymin = `Lower Limit`,
             ymax = `Upper Limit`, group = Model, colour = Model)) +
    geom_line()
```



```
df %>%
  niceFormatting()
```

Table 1:

Model	AUC	Lower Limit	Upper Limit	Target
XGBoost	0.77	0.74	0.79	readmission_180d
GLM	0.71	0.69	0.74	readmission_180d
Decision Tree	0.67	0.65	0.70	readmission_180d
Random Forest	0.74	0.71	0.76	readmission_180d
XGBoost	0.77	0.75	0.79	readmission_1year
GLM	0.71	0.69	0.74	readmission_1year
Decision Tree	0.70	0.67	0.72	readmission_1year
Random Forest	0.75	0.73	0.77	readmission_1year
XGBoost	0.72	0.68	0.75	readmission_30d
GLM	0.68	0.64	0.73	readmission_30d
Decision Tree	0.62	0.58	0.66	readmission_30d
Random Forest	0.70	0.66	0.73	readmission_30d
XGBoost	0.75	0.73	0.78	readmission_60d
GLM	0.69	0.66	0.72	readmission_60d
Decision Tree	0.66	0.63	0.70	readmission_60d
Random Forest	0.72	0.69	0.76	readmission_60d