

Tables - split

Eduardo Yuki Yada

Imports

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

Loading data

```
load('dataset/processed_data.RData')
load('dataset/processed_dictionary.RData')

columns_list <- yaml.load_file("./auxiliar/columns_list.yaml")

outcome_column <- params$outcome_column

if (outcome_column == 'general') {
  df <- df %>% mutate(general = 'All')
}

df[columns_list$outcome_columns] <- lapply(df[columns_list$outcome_columns], as.character)
df[columns_list$outcome_columns] <- lapply(df[columns_list$outcome_columns], as.integer)
```

Numerical variables

```
medianWithoutNA <- function(x) {
  median(x[which(!is.na(x))])
}

i = 0
for (column in columns_list$numerical_columns){
  df %>%
    group_by_at(vars(one_of(outcome_column))) %>%
    summarise('Mean' = mean(!sym(column), na.rm = T),
              'Min' = min(!sym(column), na.rm = T),
              'Median' = medianWithoutNA(!sym(column)),
              'Max' = max(!sym(column), na.rm = T),
              'Standard Deviation' = sd(!sym(column), na.rm = T),
              'N' = n(),
              'Missing' = sum(is.na(!sym(column)))) %>%
    ungroup %>%
    mutate(Min = ifelse(is.infinite(Min), NA, Min),
           Max = ifelse(is.infinite(Max), NA, Max)) %>%
    kbl(align = "l", booktabs = T, digits = 3, format = 'latex', label = i,
        caption = df_names %>% filter(variable.name == column) %>% .$field.label) %>%
    column_spec(1, bold = T, width = "8em") %>%
    row_spec(c(1) - 1, extra_latex_after = "\\rowcolor{gray!6}") %>%
    collapse_rows(1, latex_hline = "none") %>%
    kable_styling(latex_options = c("HOLD_position", "repeat_header")) %>%
    print
  i = i + 1
}
```

```
i <- i + 1
}
```

Table 1: Idade no momento do primeiro procedimento

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|-----|--------|-------|--------------------|-------|---------|
| train | 65.781 | 0 | 69.1 | 110.6 | 17.691 | 11036 | 0 |
| test | 65.212 | 0 | 68.7 | 103.9 | 17.960 | 4730 | 0 |

Table 2: Número de comorbidades

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 1.241 | 0 | 1 | 8 | 1.347 | 11036 | 0 |
| test | 1.275 | 0 | 1 | 8 | 1.365 | 4730 | 0 |

Table 3: Ano do procedimento 1

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|----------|------|--------|------|--------------------|-------|---------|
| train | 2010.602 | 1999 | 2010 | 2021 | 5.775 | 11036 | 0 |
| test | 2010.558 | 1999 | 2010 | 2021 | 5.815 | 4730 | 0 |

Table 4: Idade no Procedimento 1

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|-----|--------|-------|--------------------|-------|---------|
| train | 65.781 | 0 | 69.1 | 110.6 | 17.691 | 11036 | 0 |
| test | 65.212 | 0 | 68.7 | 103.9 | 17.960 | 4730 | 0 |

Table 5: Ano do procedimento 2

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|----------|------|--------|------|--------------------|-------|---------|
| train | 2013.025 | 1999 | 2013 | 2022 | 4.715 | 11036 | 7720 |
| test | 2013.221 | 1999 | 2014 | 2022 | 4.612 | 4730 | 3185 |

Table 6: Idade no Procedimento 2

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|-----|--------|-------|--------------------|-------|---------|
| train | 64.986 | 0.0 | 68.9 | 100.9 | 19.137 | 11036 | 7719 |
| test | 65.458 | 0.4 | 69.5 | 108.7 | 19.530 | 4730 | 3185 |

Table 7: Ano do procedimento 3

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|----------|------|--------|------|--------------------|-------|---------|
| train | 2014.256 | 1999 | 2015 | 2022 | 4.826 | 11036 | 9999 |
| test | 2014.475 | 1999 | 2015 | 2022 | 4.681 | 4730 | 4290 |

Table 8: Idade no Procedimento 3

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|-----|--------|-------|--------------------|-------|---------|
| train | 62.207 | 0.4 | 65.9 | 97.2 | 20.459 | 11036 | 9999 |
| test | 61.527 | 1.8 | 66.2 | 101.1 | 21.429 | 4730 | 4290 |

Table 9: Ano do procedimento 4

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|----------|------|--------|------|--------------------|-------|---------|
| train | 2014.442 | 2002 | 2015 | 2022 | 4.861 | 11036 | 10706 |
| test | 2014.497 | 2002 | 2015 | 2022 | 4.703 | 4730 | 4575 |

Table 10: Idade no Procedimento 4

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|-----|--------|------|--------------------|-------|---------|
| train | 59.786 | 6.3 | 63.0 | 97.7 | 21.108 | 11036 | 10706 |
| test | 59.282 | 1.9 | 65.8 | 96.9 | 23.626 | 4730 | 4575 |

Table 11: Ano do procedimento 5

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|----------|------|--------|------|--------------------|-------|---------|
| train | 2014.000 | 2003 | 2013 | 2022 | 4.211 | 11036 | 10907 |
| test | 2014.714 | 2005 | 2015 | 2021 | 4.136 | 4730 | 4667 |

Table 12: Idade no Procedimento 5

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|-----|--------|------|--------------------|-------|---------|
| train | 57.718 | 6.3 | 59.8 | 99.7 | 21.162 | 11036 | 10907 |
| test | 58.105 | 3.2 | 63.5 | 88.2 | 23.898 | 4730 | 4667 |

Table 13: Ano do procedimento 6

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|----------|------|--------|------|--------------------|-------|---------|
| train | 2014.644 | 2003 | 2014.0 | 2021 | 4.634 | 11036 | 10977 |
| test | 2014.955 | 2005 | 2016.5 | 2021 | 4.402 | 4730 | 4708 |

Table 14: Idade no Procedimento 6

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|-----|--------|-------|--------------------|-------|---------|
| train | 56.878 | 6.6 | 58.7 | 101.6 | 21.050 | 11036 | 10977 |
| test | 53.150 | 7.8 | 60.8 | 88.7 | 26.001 | 4730 | 4708 |

Table 15: Ano do procedimento 7

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|----------|------|--------|------|--------------------|-------|---------|
| train | 2015.409 | 2007 | 2015.5 | 2022 | 4.055 | 11036 | 11014 |
| test | 2016.200 | 2008 | 2018.0 | 2021 | 4.940 | 4730 | 4720 |

Table 16: Idade no Procedimento 7

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|------|--------|------|--------------------|-------|---------|
| train | 53.205 | 14.2 | 57.10 | 79.1 | 18.103 | 11036 | 11014 |
| test | 46.890 | 8.8 | 58.25 | 81.8 | 26.522 | 4730 | 4720 |

Table 17: Ano do procedimento 8

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|---------|------|--------|------|--------------------|-------|---------|
| train | 2016.50 | 2013 | 2016.5 | 2020 | 2.777 | 11036 | 11028 |
| test | 2011.75 | 2008 | 2010.5 | 2018 | 4.349 | 4730 | 4726 |

Table 18: Idade no Procedimento 8

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|------|--------|------|--------------------|-------|---------|
| train | 55.35 | 36.2 | 52.90 | 79.4 | 16.449 | 11036 | 11028 |
| test | 46.15 | 14.3 | 44.25 | 81.8 | 35.181 | 4730 | 4726 |

Table 19: Ano do procedimento 9

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|------|------|--------|------|--------------------|-------|---------|
| train | 2019 | 2016 | 2019 | 2022 | 4.243 | 11036 | 11034 |
| test | 2012 | 2009 | 2011 | 2016 | 3.606 | 4730 | 4727 |

Table 20: Idade no Procedimento 9

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|------|--------|------|--------------------|-------|---------|
| train | 39.600 | 36.6 | 39.6 | 42.6 | 4.243 | 11036 | 11034 |
| test | 40.033 | 15.0 | 22.9 | 82.2 | 36.730 | 4730 | 4727 |

Table 21: Ano do procedimento 10

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|------|------|--------|------|--------------------|-------|---------|
| train | 2019 | 2019 | 2019 | 2019 | NA | 11036 | 11035 |
| test | NaN | NA | NA | NA | NA | 4730 | 4730 |

Table 22: Idade no Procedimento 10

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|------|------|--------|------|--------------------|-------|---------|
| train | 39.7 | 39.7 | 39.7 | 39.7 | NA | 11036 | 11035 |
| test | NaN | NA | NA | NA | NA | 4730 | 4730 |

Table 23: Tempo entre o P1 e P2 (meses)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|-----|--------|-------|--------------------|-------|---------|
| train | 72.824 | 0 | 83.5 | 197.1 | 40.257 | 11036 | 7719 |
| test | 74.353 | 0 | 84.1 | 174.1 | 39.913 | 4730 | 3185 |

Table 24: Tempo entre o P2 e P3 (meses)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|-----|--------|-------|--------------------|-------|---------|
| train | 56.060 | 0 | 61.00 | 170.5 | 40.187 | 11036 | 9999 |
| test | 54.735 | 0 | 60.35 | 150.4 | 38.676 | 4730 | 4290 |

Table 25: Tempo entre o P3 e P4 (meses)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|-----|--------|-------|--------------------|-------|---------|
| train | 41.491 | 0 | 34.1 | 142.7 | 40.540 | 11036 | 10707 |
| test | 35.599 | 0 | 22.4 | 129.4 | 38.066 | 4730 | 4575 |

Table 26: Tempo entre o P4 e P5 (meses)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|-----|--------|-------|--------------------|-------|---------|
| train | 33.734 | 0.1 | 11.9 | 144.3 | 38.865 | 11036 | 10907 |
| test | 29.595 | 0.0 | 4.9 | 127.6 | 37.672 | 4730 | 4667 |

Table 27: Tempo entre o P5 e P6 (meses)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|-----|--------|-------|--------------------|-------|---------|
| train | 29.425 | 0.0 | 6.80 | 110.3 | 36.067 | 11036 | 10977 |
| test | 23.068 | 0.2 | 5.05 | 104.9 | 31.799 | 4730 | 4708 |

Table 28: Tempo entre o P6 e P7 (meses)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|-----|--------|-------|--------------------|-------|---------|
| train | 33.186 | 0.1 | 4.9 | 142.3 | 44.228 | 11036 | 11014 |
| test | 27.760 | 0.0 | 2.3 | 93.3 | 40.899 | 4730 | 4720 |

Table 29: Tempo entre o P7 e P8 (meses)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|-----|--------|------|--------------------|-------|---------|
| train | 28.975 | 0.2 | 18.40 | 80.9 | 31.896 | 11036 | 11028 |
| test | 2.000 | 0.3 | 0.65 | 6.4 | 2.938 | 4730 | 4726 |

Table 30: Tempo entre o P8 e P9 (meses)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|-----|--------|------|--------------------|-------|---------|
| train | 15.950 | 5.1 | 15.95 | 26.8 | 15.344 | 11036 | 11034 |
| test | 25.567 | 4.8 | 8.70 | 63.2 | 32.650 | 4730 | 4727 |

Table 31: Tempo entre o P9 e P10 (meses)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|------|------|--------|------|--------------------|-------|---------|
| train | 36.8 | 36.8 | 36.8 | 36.8 | NA | 11036 | 11035 |
| test | NaN | NA | NA | NA | NA | 4730 | 4730 |

Table 32: Número de Mudanças do tipo de DCEI

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.088 | 0 | 0 | 3 | 0.293 | 11036 | 7719 |
| test | 0.084 | 0 | 0 | 3 | 0.303 | 4730 | 3188 |

Table 33: Número de atendimentos

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 2.371 | 1 | 2 | 51 | 2.234 | 11036 | 0 |
| test | 2.402 | 1 | 2 | 32 | 2.194 | 4730 | 0 |

Table 34: Número da Admissão T0 (admissão índice)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 1.443 | 1 | 1 | 32 | 1.147 | 11036 | 0 |
| test | 1.415 | 1 | 1 | 17 | 1.060 | 4730 | 0 |

Table 35: Núm. de episódios de hospitalizações pós-procedimento

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.843 | 0 | 0 | 50 | 1.671 | 11036 | 0 |
| test | 0.912 | 0 | 0 | 25 | 1.721 | 4730 | 0 |

Table 36: Núm. de episódios de hospitalizações pré-procedimento

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.552 | 0 | 0 | 38 | 1.285 | 11036 | 0 |
| test | 0.515 | 0 | 0 | 16 | 1.130 | 4730 | 0 |

Table 37: Ano da admissão T0

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|----------|------|--------|------|--------------------|-------|---------|
| train | 2010.596 | 1999 | 2010 | 2021 | 5.775 | 11036 | 15 |
| test | 2010.549 | 1999 | 2010 | 2021 | 5.817 | 4730 | 5 |

Table 38: UTI durante a admissão T0

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|--------|--------------------|-------|---------|
| train | 1.642 | 0 | 0 | 191.95 | 6.950 | 11036 | 0 |
| test | 1.643 | 0 | 0 | 90.00 | 6.172 | 4730 | 0 |

Table 39: Diálise durante a admissão T0

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.014 | 0 | 0 | 28 | 0.486 | 11036 | 0 |
| test | 0.005 | 0 | 0 | 8 | 0.176 | 4730 | 0 |

Table 40: Readmissão em até 30 dias

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.037 | 0 | 0 | 1 | 0.190 | 11036 | 0 |
| test | 0.040 | 0 | 0 | 1 | 0.196 | 4730 | 0 |

Table 41: Readmissão entre 31 a 60 dias

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.057 | 0 | 0 | 1 | 0.231 | 11036 | 0 |
| test | 0.059 | 0 | 0 | 1 | 0.236 | 4730 | 0 |

Table 42: Readmissão entre 61 a 180 dias

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.094 | 0 | 0 | 1 | 0.292 | 11036 | 0 |
| test | 0.096 | 0 | 0 | 1 | 0.294 | 4730 | 0 |

Table 43: Readmissão em até 1 ano

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.126 | 0 | 0 | 1 | 0.332 | 11036 | 0 |
| test | 0.130 | 0 | 0 | 1 | 0.337 | 4730 | 0 |

Table 44: Tempo de seguimento total (anos)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|------|--------------------|-------|---------|
| train | 5.822 | 0 | 4.3 | 22.5 | 5.231 | 11036 | 0 |
| test | 6.015 | 0 | 4.6 | 22.6 | 5.260 | 4730 | 0 |

Table 45: Óbito intraoperatório

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|------|-----|--------|-----|--------------------|-------|---------|
| train | 0 | 0 | 0 | 1 | 0.016 | 11036 | 0 |
| test | 0 | 0 | 0 | 1 | 0.015 | 4730 | 0 |

Table 46: Óbito hospitalar (intraoperatório ou admissao T0)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|------|-----|--------|-----|--------------------|-------|---------|
| train | 0 | 0 | 0 | 1 | 0.016 | 11036 | 0 |
| test | 0 | 0 | 0 | 1 | 0.015 | 4730 | 0 |

Table 47: Óbito durante algum episódio de readmissão hospitalar

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.083 | 0 | 0 | 1 | 0.275 | 11036 | 0 |
| test | 0.083 | 0 | 0 | 1 | 0.276 | 4730 | 0 |

Table 48: Óbito em até 30 dias após a alta T0

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.005 | 0 | 0 | 1 | 0.07 | 11036 | 0 |
| test | 0.004 | 0 | 0 | 1 | 0.06 | 4730 | 0 |

Table 49: Óbito em até 180 dias após a alta T0

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.021 | 0 | 0 | 1 | 0.143 | 11036 | 0 |
| test | 0.021 | 0 | 0 | 1 | 0.143 | 4730 | 0 |

Table 50: Óbito em até 1 ano após a alta T0

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.033 | 0 | 0 | 1 | 0.179 | 11036 | 0 |
| test | 0.032 | 0 | 0 | 1 | 0.175 | 4730 | 0 |

Table 51: Óbito em até 2 anos após a alta T0

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.048 | 0 | 0 | 1 | 0.214 | 11036 | 0 |
| test | 0.047 | 0 | 0 | 1 | 0.212 | 4730 | 0 |

Table 52: Óbito em até 3 anos após a alta T0

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.058 | 0 | 0 | 1 | 0.234 | 11036 | 0 |
| test | 0.057 | 0 | 0 | 1 | 0.232 | 4730 | 0 |

Table 53: Óbito (status final)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.162 | 0 | 0 | 1 | 0.368 | 11036 | 0 |
| test | 0.159 | 0 | 0 | 1 | 0.366 | 4730 | 0 |

Table 54: Tempo de sobrevida (anos)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|------|--------------------|-------|---------|
| train | 4.037 | 0 | 2.6 | 20.1 | 4.066 | 11036 | 9799 |
| test | 4.194 | 0 | 2.8 | 19.7 | 4.190 | 4730 | 4202 |

Table 55: Diárias no serviço de Emergência na admissão T0

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.313 | 0 | 0 | 28 | 1.31 | 11036 | 4147 |
| test | 0.321 | 0 | 0 | 21 | 1.45 | 4730 | 1782 |

Table 56: Anticoagulantes orais

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|------|--------------------|-------|---------|
| train | 0.284 | 0 | 0 | 80.5 | 2.260 | 11036 | 2433 |
| test | 0.327 | 0 | 0 | 98.0 | 2.796 | 4730 | 1050 |

Table 57: Antiarrítmicos

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 3.609 | 0 | 0 | 844 | 18.375 | 11036 | 2433 |
| test | 3.963 | 0 | 0 | 445 | 19.413 | 4730 | 1050 |

Table 58: Antihipertensivo

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.468 | 0 | 0 | 349 | 5.311 | 11036 | 2433 |
| test | 0.469 | 0 | 0 | 160 | 5.462 | 4730 | 1050 |

Table 59: Betabloqueador

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 1.084 | 0 | 0 | 388 | 8.003 | 11036 | 2433 |
| test | 1.099 | 0 | 0 | 238 | 8.235 | 4730 | 1050 |

Table 60: IECA/BRA

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 8.792 | 0 | 2 | 393 | 20.036 | 11036 | 2433 |
| test | 9.091 | 0 | 3 | 530 | 21.987 | 4730 | 1050 |

Table 61: DVA

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|------|--------------------|-------|---------|
| train | 5.021 | 0 | 0 | 1044 | 28.735 | 11036 | 2433 |
| test | 5.127 | 0 | 0 | 606 | 29.755 | 4730 | 1050 |

Table 62: Digoxina

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.228 | 0 | 0 | 50 | 1.601 | 11036 | 2433 |
| test | 0.246 | 0 | 0 | 39 | 1.720 | 4730 | 1050 |

Table 63: Estatinas

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 5.083 | 0 | 0 | 421 | 16.537 | 11036 | 2433 |
| test | 5.225 | 0 | 0 | 340 | 16.592 | 4730 | 1050 |

Table 64: Diuretico

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|------|--------------------|-------|---------|
| train | 8.345 | 0 | 0 | 1290 | 44.514 | 11036 | 2433 |
| test | 8.785 | 0 | 0 | 1245 | 45.693 | 4730 | 1050 |

Table 65: Vasodilator

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|------|--------------------|-------|---------|
| train | 9.449 | 0 | 0 | 2408 | 52.969 | 11036 | 2433 |
| test | 7.901 | 0 | 0 | 1278 | 42.408 | 4730 | 1050 |

Table 66: Insuficiência cardíaca (ivabradina, levosimendan, milrinona, nesiritida, carvedilol)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 4.565 | 0 | 0 | 453 | 17.134 | 11036 | 2433 |
| test | 4.243 | 0 | 0 | 422 | 14.892 | 4730 | 1050 |

Table 67: Antagonista da Aldosterona (espironolactona)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 1.971 | 0 | 0 | 204 | 7.490 | 11036 | 2433 |
| test | 2.193 | 0 | 0 | 130 | 8.353 | 4730 | 1050 |

Table 68: Bloqueador do canal de calcio

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.466 | 0 | 0 | 281 | 6.862 | 11036 | 2433 |
| test | 0.966 | 0 | 0 | 509 | 14.036 | 4730 | 1050 |

Table 69: Trombolitico

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.001 | 0 | 0 | 1 | 0.026 | 11036 | 2433 |
| test | 0.001 | 0 | 0 | 3 | 0.059 | 4730 | 1050 |

Table 70: Antiplaquetario VO

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|------|-----|--------|-----|--------------------|-------|---------|
| train | 0 | 0 | 0 | 0 | 0 | 11036 | 2433 |
| test | 0 | 0 | 0 | 0 | 0 | 4730 | 1050 |

Table 71: Antiplaquetario EV

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.011 | 0 | 0 | 8 | 0.178 | 11036 | 2433 |
| test | 0.010 | 0 | 0 | 5 | 0.166 | 4730 | 1050 |

Table 72: Insulina

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.093 | 0 | 0 | 7 | 0.436 | 11036 | 2433 |
| test | 0.099 | 0 | 0 | 16 | 0.544 | 4730 | 1050 |

Table 73: Hipoglicemiante

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.356 | 0 | 0 | 90 | 2.940 | 11036 | 2433 |
| test | 0.366 | 0 | 0 | 63 | 2.601 | 4730 | 1050 |

Table 74: Hormonio tireoidiano

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|------|-----|--------|-----|--------------------|-------|---------|
| train | 0 | 0 | 0 | 0 | 0 | 11036 | 2433 |
| test | 0 | 0 | 0 | 0 | 0 | 4730 | 1050 |

Table 75: Broncodilador

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|------|-----|--------|-----|--------------------|-------|---------|
| train | 0 | 0 | 0 | 0 | 0 | 11036 | 2433 |
| test | 0 | 0 | 0 | 0 | 0 | 4730 | 1050 |

Table 76: Anticonvulsivante

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.843 | 0 | 0 | 390 | 9.798 | 11036 | 2433 |
| test | 0.966 | 0 | 0 | 334 | 12.279 | 4730 | 1050 |

Table 77: Psicofármacos (Ansiolítico/ antidepresivo/ antipsicótico)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 3.666 | 0 | 0 | 251 | 12.092 | 11036 | 2433 |
| test | 3.707 | 0 | 0 | 387 | 13.175 | 4730 | 1050 |

Table 78: Antibióticos

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|-----|--------|------|--------------------|-------|---------|
| train | 13.163 | 0 | 4 | 1626 | 57.573 | 11036 | 2433 |
| test | 13.860 | 0 | 4 | 1812 | 63.800 | 4730 | 1050 |

Table 79: Antifúngicos

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.292 | 0 | 0 | 104 | 3.142 | 11036 | 2433 |
| test | 0.249 | 0 | 0 | 122 | 3.432 | 4730 | 1050 |

Table 80: Antiviral

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.090 | 0 | 0 | 103 | 2.051 | 11036 | 2433 |
| test | 0.135 | 0 | 0 | 131 | 3.292 | 4730 | 1050 |

Table 81: Antiretroviral

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.009 | 0 | 0 | 32 | 0.488 | 11036 | 2433 |
| test | 0.007 | 0 | 0 | 20 | 0.334 | 4730 | 1050 |

Table 82: Quantidade de classes medicamentosas utilizadas

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 4.746 | 1 | 4 | 17 | 2.536 | 11036 | 3466 |
| test | 4.743 | 1 | 5 | 15 | 2.558 | 4730 | 1489 |

Table 83: Ventilação não invasiva

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.018 | 0 | 0 | 32 | 0.564 | 11036 | 1909 |
| test | 0.021 | 0 | 0 | 42 | 0.746 | 4730 | 825 |

Table 84: Instalação de CEC

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.011 | 0 | 0 | 2 | 0.108 | 11036 | 1909 |
| test | 0.013 | 0 | 0 | 1 | 0.112 | 4730 | 825 |

Table 85: Cirurgia Cardiovascular

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.058 | 0 | 0 | 9 | 0.389 | 11036 | 1909 |
| test | 0.051 | 0 | 0 | 6 | 0.335 | 4730 | 825 |

Table 86: Transplante cardíaco

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.001 | 0 | 0 | 1 | 0.038 | 11036 | 1909 |
| test | 0.002 | 0 | 0 | 1 | 0.045 | 4730 | 825 |

Table 87: Cirurgia Toracica

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.003 | 0 | 0 | 4 | 0.075 | 11036 | 1909 |
| test | 0.002 | 0 | 0 | 2 | 0.045 | 4730 | 825 |

Table 88: Outros procedimentos cirúrgicos (cir geral, gastrocir, plástica, uro, vascular)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.103 | 0 | 0 | 11 | 0.517 | 11036 | 1909 |
| test | 0.112 | 0 | 0 | 9 | 0.552 | 4730 | 825 |

Table 89: Traqueostomia

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.000 | 0 | 0 | 1 | 0.021 | 11036 | 1909 |
| test | 0.004 | 0 | 0 | 5 | 0.096 | 4730 | 825 |

Table 90: Intervenção coronária percutânea

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.009 | 0 | 0 | 3 | 0.114 | 11036 | 1909 |
| test | 0.015 | 0 | 0 | 4 | 0.161 | 4730 | 825 |

Table 91: Intervenção cardiovascular em laboratório de hemodinâmica (alcoolização septal, valvoplastia percutânea, stent em vasos pulmonares)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.006 | 0 | 0 | 3 | 0.112 | 11036 | 1909 |
| test | 0.009 | 0 | 0 | 3 | 0.127 | 4730 | 825 |

Table 92: Stent

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|------|-----|--------|-----|--------------------|-------|---------|
| train | 0 | 0 | 0 | 0 | 0 | 11036 | 1909 |
| test | 0 | 0 | 0 | 0 | 0 | 4730 | 825 |

Table 93: Angioplastia

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.001 | 0 | 0 | 1 | 0.031 | 11036 | 1909 |
| test | 0.002 | 0 | 0 | 2 | 0.053 | 4730 | 825 |

Table 94: Cateterismo

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.124 | 0 | 0 | 7 | 0.409 | 11036 | 1909 |
| test | 0.119 | 0 | 0 | 4 | 0.388 | 4730 | 825 |

Table 95: Eletrofisiologia

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.080 | 0 | 0 | 11 | 0.472 | 11036 | 1909 |
| test | 0.085 | 0 | 0 | 6 | 0.480 | 4730 | 825 |

Table 96: Suporte cardiocirculatório (ECMO, BIA, Bio-PUMP)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.059 | 0 | 0 | 177 | 2.564 | 11036 | 1909 |
| test | 0.216 | 0 | 0 | 535 | 9.205 | 4730 | 825 |

Table 97: Cateter venoso central

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.029 | 0 | 0 | 4 | 0.210 | 11036 | 1909 |
| test | 0.026 | 0 | 0 | 4 | 0.187 | 4730 | 825 |

Table 98: Drenagem de tórax (instalação /troca) e punção pericárdica ou pleural

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.005 | 0 | 0 | 6 | 0.107 | 11036 | 1909 |
| test | 0.006 | 0 | 0 | 3 | 0.105 | 4730 | 825 |

Table 99: Quantidade de procedimentos invasivos

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.492 | 0 | 0 | 197 | 3.089 | 11036 | 1909 |
| test | 0.663 | 0 | 0 | 554 | 9.635 | 4730 | 825 |

Table 100: Cardioversão/ Desfibrilação (sessão)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.006 | 0 | 0 | 5 | 0.123 | 11036 | 2490 |
| test | 0.006 | 0 | 0 | 4 | 0.117 | 4730 | 1076 |

Table 101: Transfusão de hemoderivados

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|------|-----|--------|-----|--------------------|-------|---------|
| train | 0.03 | 0 | 0 | 34 | 0.550 | 11036 | 1909 |
| test | 0.03 | 0 | 0 | 18 | 0.477 | 4730 | 825 |

Table 102: Interconsulta médica (Especialidades cirúrgicas, infecto, uro, nefro, psiquiatra, dermatol, alergista, oncologista, geriatra, etc)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.335 | 0 | 0 | 72 | 2.087 | 11036 | 1909 |
| test | 0.387 | 0 | 0 | 199 | 3.954 | 4730 | 825 |

Table 103: Equipe Multiprofissional (enf, fono, fisio, nutri, serviço social, psicologia)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 2.953 | 0 | 0 | 365 | 12.796 | 11036 | 1909 |
| test | 3.098 | 0 | 0 | 328 | 13.220 | 4730 | 825 |

Table 104: ECG

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 3.892 | 0 | 2 | 140 | 5.759 | 11036 | 1909 |
| test | 3.895 | 0 | 2 | 97 | 5.785 | 4730 | 825 |

Table 105: Holter

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.104 | 0 | 0 | 5 | 0.348 | 11036 | 1909 |
| test | 0.108 | 0 | 0 | 5 | 0.365 | 4730 | 825 |

Table 106: Teste de esforço

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.011 | 0 | 0 | 3 | 0.111 | 11036 | 1909 |
| test | 0.009 | 0 | 0 | 2 | 0.098 | 4730 | 825 |

Table 107: Espirometria / Ergoespirometria

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.005 | 0 | 0 | 2 | 0.072 | 11036 | 1909 |
| test | 0.003 | 0 | 0 | 2 | 0.062 | 4730 | 825 |

Table 108: Tilt Test

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.003 | 0 | 0 | 2 | 0.052 | 11036 | 1909 |
| test | 0.002 | 0 | 0 | 1 | 0.048 | 4730 | 825 |

Table 109: Polissonografia

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.002 | 0 | 0 | 2 | 0.048 | 11036 | 1909 |
| test | 0.001 | 0 | 0 | 1 | 0.032 | 4730 | 825 |

Table 110: Quantidade de exames por métodos gráficos

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 4.016 | 0 | 2 | 140 | 5.893 | 11036 | 1909 |
| test | 4.019 | 0 | 2 | 97 | 5.937 | 4730 | 825 |

Table 111: Exames laboratoriais (exames bioquímicos, exames hematologia/coagulação, anticorpos, dosagem sérica de fármacos)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|-----|--------|------|--------------------|-------|---------|
| train | 59.274 | 0 | 10 | 3474 | 167.706 | 11036 | 1909 |
| test | 58.926 | 0 | 10 | 2125 | 163.406 | 4730 | 825 |

Table 112: Culturas (hemocultura, cultura de secreções, urocultura e cultura de cateteres)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.296 | 0 | 0 | 25 | 1.145 | 11036 | 1909 |
| test | 0.286 | 0 | 0 | 21 | 1.118 | 4730 | 825 |

Table 113: Quantidade de exames de análises clínicas

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|-----|--------|------|--------------------|-------|---------|
| train | 59.570 | 0 | 10 | 3487 | 168.593 | 11036 | 1909 |
| test | 59.212 | 0 | 10 | 2133 | 164.255 | 4730 | 825 |

Table 114: Citologias

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.006 | 0 | 0 | 5 | 0.104 | 11036 | 1909 |
| test | 0.005 | 0 | 0 | 4 | 0.093 | 4730 | 825 |

Table 115: Biopsias (cardíaca, esterno, parede torácica, tumor em mediastino, pulmonar)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.014 | 0 | 0 | 10 | 0.237 | 11036 | 1909 |
| test | 0.017 | 0 | 0 | 8 | 0.299 | 4730 | 825 |

Table 116: Quantidade de exames histopatológicos

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.020 | 0 | 0 | 10 | 0.266 | 11036 | 1909 |
| test | 0.022 | 0 | 0 | 8 | 0.325 | 4730 | 825 |

Table 117: Angio RM

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.003 | 0 | 0 | 4 | 0.082 | 11036 | 1909 |
| test | 0.005 | 0 | 0 | 2 | 0.093 | 4730 | 825 |

Table 118: Angio TC

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.033 | 0 | 0 | 4 | 0.22 | 11036 | 1909 |
| test | 0.036 | 0 | 0 | 6 | 0.26 | 4730 | 825 |

Table 119: Angiografia

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.002 | 0 | 0 | 3 | 0.055 | 11036 | 1909 |
| test | 0.002 | 0 | 0 | 1 | 0.039 | 4730 | 825 |

Table 120: Aortografia

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.002 | 0 | 0 | 2 | 0.049 | 11036 | 1909 |
| test | 0.002 | 0 | 0 | 2 | 0.053 | 4730 | 825 |

Table 121: Arteriografia

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.001 | 0 | 0 | 1 | 0.023 | 11036 | 1909 |
| test | 0.001 | 0 | 0 | 2 | 0.036 | 4730 | 825 |

Table 122: Cavografia

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.007 | 0 | 0 | 1 | 0.081 | 11036 | 1909 |
| test | 0.008 | 0 | 0 | 1 | 0.090 | 4730 | 825 |

Table 123: Cintilografia

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.065 | 0 | 0 | 4 | 0.350 | 11036 | 1909 |
| test | 0.065 | 0 | 0 | 5 | 0.364 | 4730 | 825 |

Table 124: Ecocardiograma

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.529 | 0 | 0 | 24 | 1.197 | 11036 | 1909 |
| test | 0.544 | 0 | 0 | 22 | 1.227 | 4730 | 825 |

Table 125: Exames endoscópicos (EDA, colonoscopia, retossigmoidoscopia, broncoscopia)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.015 | 0 | 0 | 6 | 0.168 | 11036 | 1909 |
| test | 0.015 | 0 | 0 | 4 | 0.167 | 4730 | 825 |

Table 126: Flebografia

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.037 | 0 | 0 | 5 | 0.296 | 11036 | 1909 |
| test | 0.031 | 0 | 0 | 5 | 0.268 | 4730 | 825 |

Table 127: PET-CT

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.005 | 0 | 0 | 2 | 0.074 | 11036 | 1909 |
| test | 0.005 | 0 | 0 | 3 | 0.078 | 4730 | 825 |

Table 128: Ultrassom

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.172 | 0 | 0 | 14 | 0.779 | 11036 | 1909 |
| test | 0.171 | 0 | 0 | 14 | 0.764 | 4730 | 825 |

Table 129: Tomografia

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.158 | 0 | 0 | 12 | 0.645 | 11036 | 1909 |
| test | 0.154 | 0 | 0 | 15 | 0.679 | 4730 | 825 |

Table 130: Radiografias

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 2.985 | 0 | 2 | 192 | 7.209 | 11036 | 1909 |
| test | 2.901 | 0 | 1 | 148 | 6.799 | 4730 | 825 |

Table 131: Ressonancia magnetica

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.073 | 0 | 0 | 4 | 0.304 | 11036 | 1909 |
| test | 0.074 | 0 | 0 | 6 | 0.319 | 4730 | 825 |

Table 132: Quantidade de exames diagnóstico por imagem

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 4.089 | 0 | 2 | 232 | 9.003 | 11036 | 1909 |
| test | 4.013 | 0 | 2 | 166 | 8.603 | 4730 | 825 |

Table 133: Dieta enteral (frasco)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.020 | 0 | 0 | 111 | 1.240 | 11036 | 2491 |
| test | 0.072 | 0 | 0 | 115 | 2.484 | 4730 | 1077 |

Table 134: Dieta parenteral (frasco)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.001 | 0 | 0 | 3 | 0.048 | 11036 | 2491 |
| test | 0.001 | 0 | 0 | 5 | 0.083 | 4730 | 1077 |

Table 135: Bomba de infusão contínua (horas)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|------|--------------------|-------|---------|
| train | 0.886 | 0 | 0 | 1527 | 24.386 | 11036 | 2491 |
| test | 1.063 | 0 | 0 | 672 | 19.413 | 4730 | 1077 |

Table 136: Marca-passo temporário (por hora)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.147 | 0 | 0 | 180 | 2.934 | 11036 | 2491 |
| test | 0.183 | 0 | 0 | 102 | 3.207 | 4730 | 1077 |

Table 137: Número de procedimentos na admissão T0

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 1.014 | 1 | 1 | 5 | 0.136 | 11036 | 0 |
| test | 1.017 | 1 | 1 | 3 | 0.145 | 4730 | 0 |

Table 138: Número de procedimentos em até 30 dias

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.008 | 0 | 0 | 3 | 0.101 | 11036 | 0 |
| test | 0.008 | 0 | 0 | 2 | 0.089 | 4730 | 0 |

Table 139: Número de procedimentos em até 60 dias

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.009 | 0 | 0 | 3 | 0.102 | 11036 | 0 |
| test | 0.009 | 0 | 0 | 2 | 0.104 | 4730 | 0 |

Table 140: Número de procedimentos em até 180 dias

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.014 | 0 | 0 | 4 | 0.140 | 11036 | 0 |
| test | 0.010 | 0 | 0 | 3 | 0.108 | 4730 | 0 |

Table 141: Número de procedimentos em até 1 ano

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 0.011 | 0 | 0 | 3 | 0.122 | 11036 | 0 |
| test | 0.012 | 0 | 0 | 3 | 0.132 | 4730 | 0 |

Table 142: Quantidade de classes medicamentosas de ação cardiovascular

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|-------|-----|--------|-----|--------------------|-------|---------|
| train | 3.097 | 1 | 3 | 10 | 1.773 | 11036 | 4545 |
| test | 3.146 | 1 | 3 | 10 | 1.761 | 4730 | 1990 |

Table 143: Quantidade de medicamentos de ação cardiovascular

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|-----|--------|---------|--------------------|-------|---------|
| train | 43.997 | 0 | 9.5 | 5140.00 | 134.716 | 11036 | 2433 |
| test | 44.085 | 0 | 10.0 | 2089.25 | 129.299 | 4730 | 1050 |

Table 144: Quantidade de antimicrobianos (antibióticos e antifúngicos)

| split | Mean | Min | Median | Max | Standard Deviation | N | Missing |
|--------------|--------|-----|--------|------|--------------------|-------|---------|
| train | 13.454 | 0 | 4 | 1626 | 58.787 | 11036 | 2433 |
| test | 14.109 | 0 | 4 | 1812 | 64.748 | 4730 | 1050 |

Categorical variables

```
paste_matrix <- function(...,sep = " ",collapse = NULL){
  n <- max(sapply(list(...),nrow))
  p <- max(sapply(list(...),ncol))

  matrix(paste(...,sep = sep,collapse = collapse),n,p)
}
```

```
percent <- function(x) paste0("(", lapply(x, as.character), "%)")
```

```
addpercentage <- function(df, horizontal = FALSE){
  if (horizontal){
    x <- df %>%
      prop.table(margin = 1) %>%
      addmargins(FUN = list(Total = sum), quiet = TRUE) %>%
      round(2) * 100

    x[nrow(x),] <- " "
    x[-(nrow(x)),] <- lapply(x[-(nrow(x))], ], percent)
  } else {
    x <- df %>%
      prop.table(margin = 2) %>%
      addmargins(FUN = list(Total = sum), quiet = TRUE) %>%
      round(2) * 100

    x[, ncol(x)] <- " "
    x[, -(ncol(x))] <- lapply(x[, -(ncol(x))], percent)
```

```

}

y <- matrix(x, nrow = nrow(df) + 1)

df <- df %>%
  addmargins(FUN = list(Total = sum), quiet = TRUE)

df_final <- paste_matrix(df, y)
rownames(df_final) <- rownames(df)
colnames(df_final) <- colnames(df)
return(df_final)
}

transpose_columns <- c()

for (column in columns_list$categorical_columns){
  if (length(unique(df[[column]])) > 5) next

  variable_name <- df_names %>%
    filter(variable.name == column) %>%
    .$field.label

  abbreviated_name <- df_names %>%
    filter(variable.name == column) %>%
    .$field.label

  caption <- sprintf('Contingency table between %s and %s',
    str_replace(outcome_column, "_", " "),
    variable_name)

  if (column %in% transpose_columns){

    temp_table <- table(df[[column]],
      df[[outcome_column]],
      useNA = "ifany") %>%
      addpercentage(horizontal = TRUE)

    has_na <- df[[column]] %>% is.na() %>% sum > 0

    if (has_na){
      rownames(temp_table)[nrow(temp_table) - 1] <- "NA"
    }

    t <- temp_table %>%
      as.data.frame %>%
      rownames_to_column(var=abbreviated_name) %>%
      kbl(align = "c", booktabs = T, digits = 2, format = 'latex',
        caption = caption) %>%
      row_spec(length(unique(df %>% .[[column]] %>% replace_na("NA"))),
        hline_after = T) %>%
      collapse_rows(1, latex_hline = "none") %>%
      column_spec(4, border_right = T) %>%
      add_header_above(c(setNames(1, ' '),
        setNames(length(unique(df[[outcome_column]]),
          outcome_column))) %>%
        kable_styling(latex_options = c("HOLD_position", "repeat_header"))

  } else {
    temp_table <- table(df[[outcome_column]],
      df[[column]],
      useNA = "ifany") %>%

```

```

addpercentage

has_na <- df[[column]] %>% is.na() %>% sum > 0

if (has_na){
  colnames(temp_table)[ncol(temp_table) - 1] <- "NA"
}

t <- temp_table %>%
  as.data.frame %>%
  rownames_to_column(var=outcome_column) %>%
  kbl(align = "c", booktabs = T, digits = 2, format = 'latex',
      caption = caption, label = i) %>%
  row_spec(2, hline_after = T) %>%
  column_spec(length(unique(df %>% .[[column]] %>% replace_na("NA")))) + 1,
              border_right = T) %>%
  collapse_rows(1, latex_hline = "none") %>%
  add_header_above(c(' ' = 1,
                     setNames(length(unique(df[[column]])),
                               abbreviated_name))) %>%
  kable_styling(latex_options = c("HOLD_position", "repeat_header"))

}
print(t)
i <- i + 1
}

```

Table 145: Contingency table between split and Sexo

| split | Sexo | | Total |
|-------|-------------|-------------|-------|
| | 0 | 1 | |
| train | 5209 (70%) | 5827 (70%) | 11036 |
| test | 2240 (30%) | 2490 (30%) | 4730 |
| Total | 7449 (100%) | 8317 (100%) | 15766 |

Table 146: Contingency table between split and Doença cardíaca

| split | Doença cardíaca | | | | Total |
|-------|-----------------|-------------|-------------|-------------|-------|
| | 0 | 1 | 2 | NA | |
| train | 6453 (70%) | 811 (71%) | 2385 (69%) | 1387 (69%) | 11036 |
| test | 2703 (30%) | 332 (29%) | 1078 (31%) | 617 (31%) | 4730 |
| Total | 9156 (100%) | 1143 (100%) | 3463 (100%) | 2004 (100%) | 15766 |

Table 147: Contingency table between split and Classe funcional de IC (NYHA)

| split | Classe funcional de IC (NYHA) | | | Total |
|-------|-------------------------------|-------------|-------------|-------|
| | 1 | 2 | NA | |
| train | 4213 (70%) | 919 (68%) | 5904 (70%) | 11036 |
| test | 1782 (30%) | 427 (32%) | 2521 (30%) | 4730 |
| Total | 5995 (100%) | 1346 (100%) | 8425 (100%) | 15766 |

Table 148: Contingency table between split and Hipertensão arterial

| split | Hipertensão arterial | | Total |
|-------|----------------------|-------------|-------|
| | 0 | 1 | |
| train | 8361 (70%) | 2675 (70%) | 11036 |
| test | 3572 (30%) | 1158 (30%) | 4730 |
| Total | 11933 (100%) | 3833 (100%) | 15766 |

Table 149: Contingency table between split and Infarto do miocárdio prévio / Doença arterial coronariana

| split | Infarto do miocárdio prévio / Doença arterial coronariana | | Total |
|-------|-----------------------------------------------------------|-------------|-------|
| | 0 | 1 | |
| train | 10017 (70%) | 1019 (71%) | 11036 |
| test | 4306 (30%) | 424 (29%) | 4730 |
| Total | 14323 (100%) | 1443 (100%) | 15766 |

Table 150: Contingency table between split and Insuficiência cardíaca

| split | Insuficiência cardíaca | | Total |
|-------|------------------------|-------------|-------|
| | 0 | 1 | |
| train | 7122 (70%) | 3914 (69%) | 11036 |
| test | 3003 (30%) | 1727 (31%) | 4730 |
| Total | 10125 (100%) | 5641 (100%) | 15766 |

Table 151: Contingency table between split and Fibrilação / flutter atrial

| split | Fibrilação / flutter atrial | | Total |
|-------|-----------------------------|-------------|-------|
| | 0 | 1 | |
| train | 9404 (70%) | 1632 (68%) | 11036 |
| test | 3979 (30%) | 751 (32%) | 4730 |
| Total | 13383 (100%) | 2383 (100%) | 15766 |

Table 152: Contingency table between split and Parada cardíaca prévia/ Taquicardia ventricular instável

| split | Parada cardíaca prévia/ Taquicardia ventricular instável | | Total |
|-------|----------------------------------------------------------|-------------|-------|
| | 0 | 1 | |
| train | 9737 (70%) | 1299 (69%) | 11036 |
| test | 4136 (30%) | 594 (31%) | 4730 |
| Total | 13873 (100%) | 1893 (100%) | 15766 |

Table 153: Contingency table between split and Transplante cardíaco prévio

| split | Transplante cardíaco prévio | | Total |
|-------|-----------------------------|-----------|-------|
| | 0 | 1 | |
| train | 11027 (70%) | 9 (75%) | 11036 |
| test | 4727 (30%) | 3 (25%) | 4730 |
| Total | 15754 (100%) | 12 (100%) | 15766 |

Table 154: Contingency table between split and Valvopatias/ Prótese valvares

| split | Valvopatias/ Prótese valvares | | Total |
|-------|-------------------------------|-------------|-------|
| | 0 | 1 | |
| train | 10307 (70%) | 729 (69%) | 11036 |
| test | 4405 (30%) | 325 (31%) | 4730 |
| Total | 14712 (100%) | 1054 (100%) | 15766 |

Table 155: Contingency table between split and Endocardite prévia

| split | Endocardite prévia | | Total |
|-------|--------------------|------------|-------|
| | 0 | 1 | |
| train | 10945 (70%) | 91 (68%) | 11036 |
| test | 4688 (30%) | 42 (32%) | 4730 |
| Total | 15633 (100%) | 133 (100%) | 15766 |

Table 156: Contingency table between split and Diabetes melittus

| split | Diabetes melittus | | Total |
|-------|-------------------|-------------|-------|
| | 0 | 1 | |
| train | 9720 (70%) | 1316 (70%) | 11036 |
| test | 4170 (30%) | 560 (30%) | 4730 |
| Total | 13890 (100%) | 1876 (100%) | 15766 |

Table 157: Contingency table between split and Insuficiência renal crônica

| split | Insuficiência renal crônica | | Total |
|-------|-----------------------------|------------|-------|
| | 0 | 1 | |
| train | 10594 (70%) | 442 (71%) | 11036 |
| test | 4552 (30%) | 178 (29%) | 4730 |
| Total | 15146 (100%) | 620 (100%) | 15766 |

Table 158: Contingency table between split and Hemodiálise

| split | Hemodiálise | | Total |
|-------|--------------|-----------|-------|
| | 0 | 1 | |
| train | 11022 (70%) | 14 (74%) | 11036 |
| test | 4725 (30%) | 5 (26%) | 4730 |
| Total | 15747 (100%) | 19 (100%) | 15766 |

Table 159: Contingency table between split and Acidente Vascular Cerebral/ Acidente isquêmico transitório prévios

| split | Acidente Vascular Cerebral/ Acidente isquêmico transitório prévios | | Total |
|-------|--------------------------------------------------------------------|------------|-------|
| | 0 | 1 | |
| train | 10694 (70%) | 342 (69%) | 11036 |
| test | 4573 (30%) | 157 (31%) | 4730 |
| Total | 15267 (100%) | 499 (100%) | 15766 |

Table 160: Contingency table between split and Doença pulmonar obstrutiva crônica

| split | Doença pulmonar obstrutiva crônica | | Total |
|-------|------------------------------------|------------|-------|
| | 0 | 1 | |
| train | 10884 (70%) | 152 (71%) | 11036 |
| test | 4669 (30%) | 61 (29%) | 4730 |
| Total | 15553 (100%) | 213 (100%) | 15766 |

Table 161: Contingency table between split and Neoplasia em tratamento ou tratada recentemente (12 meses)

| split | Neoplasia em tratamento ou tratada recentemente (12 meses) | | Total |
|-------|------------------------------------------------------------|------------|-------|
| | 0 | 1 | |
| train | 10969 (70%) | 67 (59%) | 11036 |
| test | 4684 (30%) | 46 (41%) | 4730 |
| Total | 15653 (100%) | 113 (100%) | 15766 |

Table 162: Contingency table between split and Tipo de Procedimento 1

| split | Tipo de Procedimento 1 | | Total |
|-------|------------------------|-------------|-------|
| | 1 | 2 | |
| train | 7634 (70%) | 3402 (70%) | 11036 |
| test | 3278 (30%) | 1452 (30%) | 4730 |
| Total | 10912 (100%) | 4854 (100%) | 15766 |

Table 163: Contingency table between split and Tipo de Reoperação 1

| split | Tipo de Reoperação 1 | | | | Total |
|-------|----------------------|------------|-----------|--------------|-------|
| | 1 | 2 | 3 | NA | |
| train | 2729 (70%) | 651 (72%) | 22 (67%) | 7634 (70%) | 11036 |
| test | 1183 (30%) | 258 (28%) | 11 (33%) | 3278 (30%) | 4730 |
| Total | 3912 (100%) | 909 (100%) | 33 (100%) | 10912 (100%) | 15766 |

Table 164: Contingency table between split and Tipo de Procedimento 1 (merge: procedure type com reop type)

| split | Tipo de Procedimento 1 (merge: procedure type com reop type) | | | | Total |
|-------|--------------------------------------------------------------|-------------|------------|-----------|-------|
| | 1 | 2 | 3 | 4 | |
| train | 7634 (70%) | 2729 (70%) | 651 (72%) | 22 (67%) | 11036 |
| test | 3278 (30%) | 1183 (30%) | 258 (28%) | 11 (33%) | 4730 |
| Total | 10912 (100%) | 3912 (100%) | 909 (100%) | 33 (100%) | 15766 |

Table 165: Contingency table between split and Tipo de Dispositivo ao final do procedimento 1

| split | Tipo de Dispositivo ao final do procedimento 1 | | | | Total |
|-------|------------------------------------------------|-------------|-------------|------------|-------|
| | 1 | 2 | 3 | 4 | |
| train | 8606 (70%) | 1236 (70%) | 870 (69%) | 324 (73%) | 11036 |
| test | 3689 (30%) | 536 (30%) | 384 (31%) | 121 (27%) | 4730 |
| Total | 12295 (100%) | 1772 (100%) | 1254 (100%) | 445 (100%) | 15766 |

Table 166: Contingency table between split and Tipo de Dispositivo ao final do procedimento 1

| split | Tipo de Dispositivo ao final do procedimento 1 | | Total |
|-------|------------------------------------------------|-------------|-------|
| | 1 | 2 | |
| train | 9842 (70%) | 1194 (70%) | 11036 |
| test | 4225 (30%) | 505 (30%) | 4730 |
| Total | 14067 (100%) | 1699 (100%) | 15766 |

Table 167: Contingency table between split and Óbito intraoperatório 1

| split | Óbito intraoperatório 1 | |
|-------|-------------------------|-------|
| | 0 | Total |
| train | 11036 (70%) | 11036 |
| test | 4730 (30%) | 4730 |
| Total | 15766 (100%) | 15766 |

Table 168: Contingency table between split and Tipo de Reoperação 2

| split | Tipo de Reoperação 2 | | | | Total |
|-------|----------------------|-------------|------------|--------------|-------|
| | 1 | 2 | 3 | NA | |
| train | 2222 (68%) | 1008 (68%) | 85 (70%) | 7721 (71%) | 11036 |
| test | 1037 (32%) | 466 (32%) | 36 (30%) | 3191 (29%) | 4730 |
| Total | 3259 (100%) | 1474 (100%) | 121 (100%) | 10912 (100%) | 15766 |

Table 169: Contingency table between split and Tipo de Dispositivo ao final do procedimento 2

| split | Tipo de Dispositivo ao final do procedimento 2 | | | | | Total |
|-------|------------------------------------------------|------------|------------|------------|--------------|-------|
| | 1 | 2 | 3 | 4 | NA | |
| train | 2460 (68%) | 439 (68%) | 274 (71%) | 142 (70%) | 7721 (71%) | 11036 |
| test | 1163 (32%) | 203 (32%) | 113 (29%) | 61 (30%) | 3190 (29%) | 4730 |
| Total | 3623 (100%) | 642 (100%) | 387 (100%) | 203 (100%) | 10911 (100%) | 15766 |

Table 170: Contingency table between split and Óbito intraoperatório 2

| split | Óbito intraoperatório 2 | | Total |
|-------|-------------------------|--------------|-------|
| | 0 | NA | |
| train | 3317 (68%) | 7719 (71%) | 11036 |
| test | 1544 (32%) | 3186 (29%) | 4730 |
| Total | 4861 (100%) | 10905 (100%) | 15766 |

Table 171: Contingency table between split and Tipo de Reoperação 3

| split | Tipo de Reoperação 3 | | | | Total |
|-------|----------------------|------------|-----------|--------------|-------|
| | 1 | 2 | 3 | NA | |
| train | 512 (71%) | 410 (71%) | 42 (68%) | 10072 (70%) | 11036 |
| test | 211 (29%) | 168 (29%) | 20 (32%) | 4331 (30%) | 4730 |
| Total | 723 (100%) | 578 (100%) | 62 (100%) | 14403 (100%) | 15766 |

Table 172: Contingency table between split and Tipo de Dispositivo ao final do procedimento 3

| split | Tipo de Dispositivo ao final do procedimento 3 | | | | | Total |
|-------|------------------------------------------------|------------|------------|-----------|--------------|-------|
| | 1 | 2 | 3 | 4 | NA | |
| train | 691 (72%) | 164 (65%) | 113 (71%) | 68 (69%) | 10000 (70%) | 11036 |
| test | 275 (28%) | 87 (35%) | 47 (29%) | 31 (31%) | 4290 (30%) | 4730 |
| Total | 966 (100%) | 251 (100%) | 160 (100%) | 99 (100%) | 14290 (100%) | 15766 |

Table 173: Contingency table between split and Óbito intraoperatório 3

| split | Óbito intraoperatório 3 | | | Total |
|-------|-------------------------|----------|--------------|-------|
| | 0 | 1 | NA | |
| train | 1034 (70%) | 3 (75%) | 9999 (70%) | 11036 |
| test | 439 (30%) | 1 (25%) | 4290 (30%) | 4730 |
| Total | 1473 (100%) | 4 (100%) | 14289 (100%) | 15766 |

Table 174: Contingency table between split and Tipo de Reoperação 4

| split | Tipo de Reoperação 4 | | | | Total |
|-------|----------------------|------------|-----------|--------------|-------|
| | 1 | 2 | 3 | NA | |
| train | 139 (72%) | 166 (66%) | 21 (64%) | 10710 (70%) | 11036 |
| test | 53 (28%) | 85 (34%) | 12 (36%) | 4580 (30%) | 4730 |
| Total | 192 (100%) | 251 (100%) | 33 (100%) | 15290 (100%) | 15766 |

Table 175: Contingency table between split and Tipo de Dispositivo ao final do procedimento 4

| split | Tipo de Dispositivo ao final do procedimento 4 | | | | | Total |
|-------|------------------------------------------------|------------|-----------|-----------|--------------|-------|
| | 1 | 2 | 3 | 4 | NA | |
| train | 199 (69%) | 73 (66%) | 30 (67%) | 28 (67%) | 10706 (70%) | 11036 |
| test | 89 (31%) | 37 (34%) | 15 (33%) | 14 (33%) | 4575 (30%) | 4730 |
| Total | 288 (100%) | 110 (100%) | 45 (100%) | 42 (100%) | 15281 (100%) | 15766 |

Table 176: Contingency table between split and Óbito intraoperatório 4

| split | Óbito intraoperatório 4 | | Total |
|-------|-------------------------|--------------|-------|
| | 0 | NA | |
| train | 330 (68%) | 10706 (70%) | 11036 |
| test | 155 (32%) | 4575 (30%) | 4730 |
| Total | 485 (100%) | 15281 (100%) | 15766 |

Table 177: Contingency table between split and Tipo de Reoperação 5

| split | Tipo de Reoperação 5 | | | | Total |
|-------|----------------------|------------|-----------|--------------|-------|
| | 1 | 2 | 3 | NA | |
| train | 50 (70%) | 69 (65%) | 9 (64%) | 10908 (70%) | 11036 |
| test | 21 (30%) | 37 (35%) | 5 (36%) | 4667 (30%) | 4730 |
| Total | 71 (100%) | 106 (100%) | 14 (100%) | 15575 (100%) | 15766 |

Table 178: Contingency table between split and Tipo de Dispositivo ao final do procedimento 5

| split | Tipo de Dispositivo ao final do procedimento 5 | | | | | Total |
|-------|------------------------------------------------|-----------|-----------|-----------|--------------|-------|
| | 1 | 2 | 3 | 4 | NA | |
| train | 70 (70%) | 36 (64%) | 16 (73%) | 6 (46%) | 10908 (70%) | 11036 |
| test | 30 (30%) | 20 (36%) | 6 (27%) | 7 (54%) | 4667 (30%) | 4730 |
| Total | 100 (100%) | 56 (100%) | 22 (100%) | 13 (100%) | 15575 (100%) | 15766 |

Table 179: Contingency table between split and Óbito intraoperatório 5

| split | Óbito intraoperatório 5 | | Total |
|-------|-------------------------|--------------|-------|
| | 0 | NA | |
| train | 129 (67%) | 10907 (70%) | 11036 |
| test | 63 (33%) | 4667 (30%) | 4730 |
| Total | 192 (100%) | 15574 (100%) | 15766 |

Table 180: Contingency table between split and Tipo de Reoperação 6

| split | Tipo de Reoperação 6 | | | | Total |
|-------|----------------------|-----------|----------|--------------|-------|
| | 1 | 2 | 3 | NA | |
| train | 19 (73%) | 34 (74%) | 4 (67%) | 10979 (70%) | 11036 |
| test | 7 (27%) | 12 (26%) | 2 (33%) | 4709 (30%) | 4730 |
| Total | 26 (100%) | 46 (100%) | 6 (100%) | 15688 (100%) | 15766 |

Table 181: Contingency table between split and Tipo de Dispositivo ao final do procedimento 6

| split | Tipo de Dispositivo ao final do procedimento 6 | | | | | Total |
|-------|------------------------------------------------|-----------|----------|----------|--------------|-------|
| | 1 | 2 | 3 | 4 | NA | |
| train | 30 (75%) | 16 (64%) | 5 (71%) | 8 (89%) | 10977 (70%) | 11036 |
| test | 10 (25%) | 9 (36%) | 2 (29%) | 1 (11%) | 4708 (30%) | 4730 |
| Total | 40 (100%) | 25 (100%) | 7 (100%) | 9 (100%) | 15685 (100%) | 15766 |

Table 182: Contingency table between split and Óbito intraoperatório 6

| split | Óbito intraoperatório 6 | | Total |
|-------|-------------------------|--------------|-------|
| | 0 | NA | |
| train | 59 (73%) | 10977 (70%) | 11036 |
| test | 22 (27%) | 4708 (30%) | 4730 |
| Total | 81 (100%) | 15685 (100%) | 15766 |

Table 183: Contingency table between split and Tipo de Reoperação 7

| split | Tipo de Reoperação 7 | | | | Total |
|-------|----------------------|-----------|----------|--------------|-------|
| | 1 | 2 | 3 | NA | |
| train | 7 (70%) | 13 (72%) | 2 (50%) | 11014 (70%) | 11036 |
| test | 3 (30%) | 5 (28%) | 2 (50%) | 4720 (30%) | 4730 |
| Total | 10 (100%) | 18 (100%) | 4 (100%) | 15734 (100%) | 15766 |

Table 184: Contingency table between split and Tipo de Dispositivo ao final do procedimento 7

| split | Tipo de Dispositivo ao final do procedimento 7 | | | | | Total |
|-------|------------------------------------------------|-----------|----------|----------|--------------|-------|
| | 1 | 2 | 3 | 4 | NA | |
| train | 9 (69%) | 9 (69%) | 0 (0%) | 4 (100%) | 11014 (70%) | 11036 |
| test | 4 (31%) | 4 (31%) | 1 (100%) | 0 (0%) | 4721 (30%) | 4730 |
| Total | 13 (100%) | 13 (100%) | 1 (100%) | 4 (100%) | 15735 (100%) | 15766 |

Table 185: Contingency table between split and Óbito intraoperatório 7

| split | Óbito intraoperatório 7 | | Total |
|-------|-------------------------|--------------|-------|
| | 0 | NA | |
| train | 22 (69%) | 11014 (70%) | 11036 |
| test | 10 (31%) | 4720 (30%) | 4730 |
| Total | 32 (100%) | 15734 (100%) | 15766 |

Table 186: Contingency table between split and Tipo de Reoperação 8

| split | Tipo de Reoperação 8 | | | Total |
|-------|----------------------|----------|--------------|-------|
| | 1 | 2 | NA | |
| train | 3 (100%) | 5 (56%) | 11028 (70%) | 11036 |
| test | 0 (0%) | 4 (44%) | 4726 (30%) | 4730 |
| Total | 3 (100%) | 9 (100%) | 15754 (100%) | 15766 |

Table 187: Contingency table between split and Tipo de Dispositivo ao final do procedimento 8

| split | Tipo de Dispositivo ao final do procedimento 8 | | | | Total |
|-------|------------------------------------------------|----------|----------|--------------|-------|
| | 1 | 2 | 4 | NA | |
| train | 5 (71%) | 2 (50%) | 1 (100%) | 11028 (70%) | 11036 |
| test | 2 (29%) | 2 (50%) | 0 (0%) | 4726 (30%) | 4730 |
| Total | 7 (100%) | 4 (100%) | 1 (100%) | 15754 (100%) | 15766 |

Table 188: Contingency table between split and Óbito intraoperatório 8

| split | Óbito intraoperatório 8 | | Total |
|-------|-------------------------|--------------|-------|
| | 0 | NA | |
| train | 8 (67%) | 11028 (70%) | 11036 |
| test | 4 (33%) | 4726 (30%) | 4730 |
| Total | 12 (100%) | 15754 (100%) | 15766 |

Table 189: Contingency table between split and Tipo de Reoperação 9

| split | Tipo de Reoperação 9 | | Total |
|-------|----------------------|--------------|-------|
| | 2 | NA | |
| train | 2 (40%) | 11034 (70%) | 11036 |
| test | 3 (60%) | 4727 (30%) | 4730 |
| Total | 5 (100%) | 15761 (100%) | 15766 |

Table 190: Contingency table between split and Tipo de Dispositivo ao final do procedimento 9

| split | Tipo de Dispositivo ao final do procedimento 9 | | | Total |
|-------|------------------------------------------------|----------|--------------|-------|
| | 1 | 2 | NA | |
| train | 1 (33%) | 1 (50%) | 11034 (70%) | 11036 |
| test | 2 (67%) | 1 (50%) | 4727 (30%) | 4730 |
| Total | 3 (100%) | 2 (100%) | 15761 (100%) | 15766 |

Table 191: Contingency table between split and Óbito intraoperatório 9

| split | Óbito intraoperatório 9 | | Total |
|-------|-------------------------|--------------|-------|
| | 0 | NA | |
| train | 2 (40%) | 11034 (70%) | 11036 |
| test | 3 (60%) | 4727 (30%) | 4730 |
| Total | 5 (100%) | 15761 (100%) | 15766 |

Table 192: Contingency table between split and Tipo de Reoperação 10

| split | Tipo de Reoperação 10 | | Total |
|-------|-----------------------|--------------|-------|
| | 2 | NA | |
| train | 1 (100%) | 11035 (70%) | 11036 |
| test | 0 (0%) | 4730 (30%) | 4730 |
| Total | 1 (100%) | 15765 (100%) | 15766 |

Table 193: Contingency table between split and Tipo de Dispositivo ao final do procedimento 10

| split | Tipo de Dispositivo ao final do procedimento 10 | | Total |
|-------|-------------------------------------------------|--------------|-------|
| | 2 | NA | |
| train | 1 (100%) | 11035 (70%) | 11036 |
| test | 0 (0%) | 4730 (30%) | 4730 |
| Total | 1 (100%) | 15765 (100%) | 15766 |

Table 194: Contingency table between split and Óbito intraoperatório 10

| split | Óbito intraoperatório 10 | | Total |
|-------|--------------------------|--------------|-------|
| | 0 | NA | |
| train | 1 (100%) | 11035 (70%) | 11036 |
| test | 0 (0%) | 4730 (30%) | 4730 |
| Total | 1 (100%) | 15765 (100%) | 15766 |

Table 195: Contingency table between split and Mudança do tipo de DCEI: entre o Procedimento 1 e Procedimento 2

| split | Mudança do tipo de DCEI: entre o Procedimento 1 e Procedimento 2 | | | Total |
|-------|------------------------------------------------------------------|------------|--------------|-------|
| | 0 | 1 | NA | |
| train | 3121 (68%) | 194 (70%) | 7721 (71%) | 11036 |
| test | 1455 (32%) | 85 (30%) | 3190 (29%) | 4730 |
| Total | 4576 (100%) | 279 (100%) | 10911 (100%) | 15766 |

Table 196: Contingency table between split and Mudança do tipo de DCEI: entre o Procedimento 2 e Procedimento 3

| split | Mudança do tipo de DCEI: entre o Procedimento 2 e Procedimento 3 | | | Total |
|-------|------------------------------------------------------------------|-----------|--------------|-------|
| | 0 | 1 | NA | |
| train | 971 (70%) | 65 (69%) | 10000 (70%) | 11036 |
| test | 411 (30%) | 29 (31%) | 4290 (30%) | 4730 |
| Total | 1382 (100%) | 94 (100%) | 14290 (100%) | 15766 |

Table 197: Contingency table between split and Mudança do tipo de DCEI: entre o Procedimento 3 e Procedimento 4

| split | Mudança do tipo de DCEI: entre o Procedimento 3 e Procedimento 4 | | | Total |
|-------|------------------------------------------------------------------|-----------|--------------|-------|
| | 0 | 1 | NA | |
| train | 311 (68%) | 19 (68%) | 10706 (70%) | 11036 |
| test | 146 (32%) | 9 (32%) | 4575 (30%) | 4730 |
| Total | 457 (100%) | 28 (100%) | 15281 (100%) | 15766 |

Table 198: Contingency table between split and Mudança do tipo de DCEI: entre o Procedimento 4 e Procedimento 5

| split | Mudança do tipo de DCEI: entre o Procedimento 4 e Procedimento 5 | | | Total |
|-------|------------------------------------------------------------------|----------|--------------|-------|
| | 0 | 1 | NA | |
| train | 122 (67%) | 6 (67%) | 10908 (70%) | 11036 |
| test | 60 (33%) | 3 (33%) | 4667 (30%) | 4730 |
| Total | 182 (100%) | 9 (100%) | 15575 (100%) | 15766 |

Table 199: Contingency table between split and Mudança do tipo de DCEI: entre o Procedimento 5 e Procedimento 6

| split | Mudança do tipo de DCEI: entre o Procedimento 5 e Procedimento 6 | | | Total |
|-------|------------------------------------------------------------------|----------|--------------|-------|
| | 0 | 1 | NA | |
| train | 54 (73%) | 5 (71%) | 10977 (70%) | 11036 |
| test | 20 (27%) | 2 (29%) | 4708 (30%) | 4730 |
| Total | 74 (100%) | 7 (100%) | 15685 (100%) | 15766 |

Table 200: Contingency table between split and Mudança do tipo de DCEI: entre o Procedimento 6 e Procedimento 7

| split | Mudança do tipo de DCEI: entre o Procedimento 6 e Procedimento 7 | | | Total |
|-------|------------------------------------------------------------------|----------|--------------|-------|
| | 0 | 1 | NA | |
| train | 20 (71%) | 2 (67%) | 11014 (70%) | 11036 |
| test | 8 (29%) | 1 (33%) | 4721 (30%) | 4730 |
| Total | 28 (100%) | 3 (100%) | 15735 (100%) | 15766 |

Table 201: Contingency table between split and Mudança do tipo de DCEI: entre o Procedimento 7 e Procedimento 8

| split | Mudança do tipo de DCEI: entre o Procedimento 7 e Procedimento 8 | | | Total |
|-------|------------------------------------------------------------------|----------|--------------|-------|
| | 0 | 1 | NA | |
| train | 8 (73%) | 0 (0%) | 11028 (70%) | 11036 |
| test | 3 (27%) | 1 (100%) | 4726 (30%) | 4730 |
| Total | 11 (100%) | 1 (100%) | 15754 (100%) | 15766 |

Table 202: Contingency table between split and Mudança do tipo de DCEI: entre o Procedimento 8 e Procedimento 9

| split | Mudança do tipo de DCEI: entre o Procedimento 8 e Procedimento 9 | | Total |
|-------|------------------------------------------------------------------|--------------|-------|
| | 0 | NA | |
| train | 2 (40%) | 11034 (70%) | 11036 |
| test | 3 (60%) | 4727 (30%) | 4730 |
| Total | 5 (100%) | 15761 (100%) | 15766 |

Table 203: Contingency table between split and Mudança do tipo de DCEI: entre o Procedimento 9 e Procedimento 10

| split | Mudança do tipo de DCEI: entre o Procedimento 9 e Procedimento 10 | | Total |
|-------|-------------------------------------------------------------------|--------------|-------|
| | 0 | NA | |
| train | 1 (100%) | 11035 (70%) | 11036 |
| test | 0 (0%) | 4730 (30%) | 4730 |
| Total | 1 (100%) | 15765 (100%) | 15766 |

Table 204: Contingency table between split and Diálise durante os episódios de hospitalização

| split | Diálise durante os episódios de hospitalização | | Total |
|-------|------------------------------------------------|-----------|-------|
| | 0 | 1 | |
| train | 11004 (70%) | 32 (73%) | 11036 |
| test | 4718 (30%) | 12 (27%) | 4730 |
| Total | 15722 (100%) | 44 (100%) | 15766 |

Table 205: Contingency table between split and UTI durante os episódios de hospitalização

| split | UTI durante os episódios de hospitalização | | Total |
|-------|--------------------------------------------|-------------|-------|
| | 0 | 1 | |
| train | 8823 (70%) | 2213 (69%) | 11036 |
| test | 3732 (30%) | 998 (31%) | 4730 |
| Total | 12555 (100%) | 3211 (100%) | 15766 |

Table 206: Contingency table between split and Admissão em até 180 dias antes da T0

| split | Admissão em até 180 dias antes da T0 | | Total |
|-------|--------------------------------------|-------------|-------|
| | 0 | 1 | |
| train | 10284 (70%) | 752 (70%) | 11036 |
| test | 4412 (30%) | 318 (30%) | 4730 |
| Total | 14696 (100%) | 1070 (100%) | 15766 |

Table 207: Contingency table between split and Readmissões pós-T0 com diálise

| split | Readmissões pós-T0 com diálise | | | | Total |
|-------|--------------------------------|-----------|----------|----------|-------|
| | 0 | 1 | 2 | 3 | |
| train | 11020 (70%) | 13 (68%) | 2 (100%) | 1 (100%) | 11036 |
| test | 4724 (30%) | 6 (32%) | 0 (0%) | 0 (0%) | 4730 |
| Total | 15744 (100%) | 19 (100%) | 2 (100%) | 1 (100%) | 15766 |

Table 208: Contingency table between split and Desfecho principal da admissão T0

| split | Desfecho principal da admissão T0 | |
|-------|-----------------------------------|-------|
| | 0 | Total |
| train | 11036 (70%) | 11036 |
| test | 4730 (30%) | 4730 |
| Total | 15766 (100%) | 15766 |

Table 209: Contingency table between split and Readmissão cirúrgica em até 30 dias

| split | Readmissão cirúrgica em até 30 dias | | Total |
|-------|-------------------------------------|------------|-------|
| | 0 | 1 | |
| train | 10937 (70%) | 99 (72%) | 11036 |
| test | 4692 (30%) | 38 (28%) | 4730 |
| Total | 15629 (100%) | 137 (100%) | 15766 |

Table 210: Contingency table between split and Readmissão cirúrgica entre 31 a 60 dias

| split | Readmissão cirúrgica entre 31 a 60 dias | | Total |
|-------|-----------------------------------------|-----------|-------|
| | 0 | 1 | |
| train | 10973 (70%) | 63 (68%) | 11036 |
| test | 4700 (30%) | 30 (32%) | 4730 |
| Total | 15673 (100%) | 93 (100%) | 15766 |

Table 211: Contingency table between split and Readmissão cirúrgica entre 61 a 180 dias

| split | Readmissão cirúrgica entre 61 a 180 dias | | Total |
|-------|------------------------------------------|------------|-------|
| | 0 | 1 | |
| train | 10928 (70%) | 108 (72%) | 11036 |
| test | 4689 (30%) | 41 (28%) | 4730 |
| Total | 15617 (100%) | 149 (100%) | 15766 |

Table 212: Contingency table between split and Readmissão cirúrgica em até 1 ano

| split | Readmissão cirúrgica em até 1 ano | | Total |
|-------|-----------------------------------|------------|-------|
| | 0 | 1 | |
| train | 10945 (70%) | 91 (69%) | 11036 |
| test | 4689 (30%) | 41 (31%) | 4730 |
| Total | 15634 (100%) | 132 (100%) | 15766 |

Table 213: Contingency table between split and Desfecho final do estudo

| split | Desfecho final do estudo | | | Total |
|-------|--------------------------|-------------|-------------|-------|
| | 1 | 2 | 3 | |
| train | 1787 (70%) | 5348 (69%) | 3901 (71%) | 11036 |
| test | 754 (30%) | 2380 (31%) | 1596 (29%) | 4730 |
| Total | 2541 (100%) | 7728 (100%) | 5497 (100%) | 15766 |

Table 214: Contingency table between split and Ventilação mecânica / IOT

| split | Ventilação mecânica / IOT | | Total |
|-------|---------------------------|--------------|-------|
| | 1 | NA | |
| train | 1994 (70%) | 9042 (70%) | 11036 |
| test | 855 (30%) | 3875 (30%) | 4730 |
| Total | 2849 (100%) | 12917 (100%) | 15766 |