Tables - split

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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
}
```

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: Número de procedimentos

split	Mean	Min	Median	Max	Standard Deviation	N	Missing
train	1.445	1	1	10	0.837	11036	0
test	1.474	1	1	9	0.851	4730	0

Table 4: 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 5: 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 6: 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 7: 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 8: 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 9: 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 10: 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 11: 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 12: 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 13: 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 14: 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 15: 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 16: 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 17: 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 18: 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 19: 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 20: 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 21: 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 22: 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 23: 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 24: 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 25: 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 26: 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 27: 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 28: 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 29: 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 30: 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 31: 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 32: 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 33: 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 34: 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 35: 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 36: 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 37: 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 38: 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 39: 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 40: 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 41: 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 42: 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 43: 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 44: 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 45: Antiarritmicos

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 46: 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 47: 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 48: 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 49: 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 50: 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 51: 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 52: 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 53: 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 54: Insuficiência cardíaca (ivabradina, levosimedan, 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 55: 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 56: 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 57: 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 58: 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 59: 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 60: 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 61: 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 62: 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 63: Broncodiltador

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 64: 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 65: Psicofármacos (Ansiolítico/ antidepressivo/ 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 66: 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 67: 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 68: 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 69: 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 70: 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 71: 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 72: 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 73: 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 74: 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 75: 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 76: 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 77: 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 78: 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 79: 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 80: 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 81: 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 82: 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 83: 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 84: 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 85: 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 86: 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 87: 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 88: 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 89: Interconsulta médica (Especialidades cirúrgicas, infecto, uro, nefro, psiquiatra, dermato, 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 90: 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 91: 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 92: 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 93: 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 94: 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 95: 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 96: 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 97: 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 98: 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 99: 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 100: 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 101: 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 102: 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 103: 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 104: 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 105: 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 106: 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 107: 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 108: 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 109: 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 110: 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 111: 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 112: 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 113: 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 114: 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 115: 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 116: 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 117: 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 118: 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 119: 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 120: 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 121: 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 122: 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 123: 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 124: 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 125: 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 126: 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 127: 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 128: 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 129: 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 130: 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 131: 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()
df[columns_list$outcome_columns] <- lapply(df[columns_list$outcome_columns], as.character)

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 132: Contingency table between split and Sexo

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

Table 133: Contingency table between split and Doença cardíaca

	Doença cardíaca				
split	0	1	2	NA	Total
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 134: Contingency table between split and Classe funcional de IC (NYHA)

	Classe funcional de IC (NYHA)			
split	1	2	NA	Total
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 135: Contingency table between split and Hipertensão arterial

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

Table 136: Contingency table between split and Infarto do miocárdio prévio / Doença arterial coronariana

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

Table 137: Contingency table between split and Insuficiência cardíaca

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

Table 138: Contingency table between split and Fibrilação / flutter atrial

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

Table 139: Contingency table between split and Parada cardíaca prévia/ Taquicardia ventricular instável

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

Table 140: Contingency table between split and Transplante cardíaco prévio

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

Table 141: Contingency table between split and Valvopatias/ Prótese valvares

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

Table 142: Contingency table between split and Endocardite prévia

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

Table 143: Contingency table between split and Diabetes melittus

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

Table 144: Contingency table between split and Insuficiência renal crônica

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

Table 145: Contingency table between split and Hemodiálise

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

Table 146: Contingency table between split and Acidente Vascular Cerebral/ Acidente isquêmico transitório prévios

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

Table 147: Contingency table between split and Doença pulmonar obstrutiva crônica

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

Table 148: Contingency table between split and Neoplasia em tratamento ou tratada recentemente (12 meses)

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

Table 149: Contingency table between split and Tipo de Procedimento 1

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

Table 150: Contingency table between split and Tipo de Reoperação 1

	Tipo de Reoperação 1				
split	1	2	3	NA	Total
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 151: Contingency table between split and Tipo de Procedimento 1 (merge: procedure type com reop type)

	Tipo de Procedimento 1 (merge: procedure type com reop type)				
split	1	2	3	4	Total
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 152: Contingency table between split and Tipo de Dispositivo ao final do procedimento 1

	Tipo de Dispositivo ao final do procedimento 1				
split	1	2	3	4	Total
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 153: Contingency table between split and Tipo de Dispositivo ao final do procedimento 1

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

Table 154: Contingency table between split and Óbito intraoperatório 1

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

Table 155: Contingency table between split and Tipo de Reoperação 2

	Tipo de Reoperação 2				
split	1	2	3	NA	Total
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 156: Contingency table between split and Tipo de Dispositivo ao final do procedimento 2

	Tipo de Dispositivo ao final do procedimento 2					
split	1	2	3	4	NA	Total
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 157: Contingency table between split and Óbito intraoperatório 2

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

Table 158: Contingency table between split and Tipo de Reoperação 3

	Tipo de Reoperação 3				
split	1	2	3	NA	Total
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 159: Contingency table between split and Tipo de Dispositivo ao final do procedimento 3

	Tipo de Dispositivo ao final do procedimento 3					
split	1	2	3	4	NA	Total
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 160: Contingency table between split and Óbito intraoperatório 3

	Óbito intraoperatório 3			
split	0	1	NA	Total
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 161: Contingency table between split and Tipo de Reoperação 4

	Tipo de Reoperação 4				
split	1	2	3	NA	Total
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 162: Contingency table between split and Tipo de Dispositivo ao final do procedimento 4

	Tipo de Dispositivo ao final do procedimento 4					
split	1	2	3	4	NA	Total
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 163: Contingency table between split and Óbito intraoperatório 4

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

Table 164: Contingency table between split and Tipo de Reoperação 5

	Tipo de Reoperação 5				
split	1	2	3	NA	Total
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 165: Contingency table between split and Tipo de Dispositivo ao final do procedimento 5

	Tipo de Dispositivo ao final do procedimento 5					
split	1	2	3	4	NA	Total
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 166: Contingency table between split and Óbito intraoperatório 5

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

Table 167: Contingency table between split and Tipo de Reoperação 6

	Tipo de Reoperação 6				
split	1	2	3	NA	Total
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 168: Contingency table between split and Tipo de Dispositivo ao final do procedimento 6

	Tipo de Dispositivo ao final do procedimento 6					
split	1	2	3	4	NA	Total
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 169: Contingency table between split and Óbito intraoperatório 6

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

Table 170: Contingency table between split and Tipo de Reoperação 7

	Tipo de Reoperação 7				
split	1	2	3	NA	Total
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 171: Contingency table between split and Tipo de Dispositivo ao final do procedimento 7

	Tipo de Dispositivo ao final do procedimento 7					
split	1	2	3	4	NA	Total
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 172: Contingency table between split and Óbito intraoperatório 7

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

Table 173: Contingency table between split and Tipo de Reoperação 8

	Tipo de Reoperação 8			
split	1	2	NA	Total
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 174: Contingency table between split and Tipo de Dispositivo ao final do procedimento 8

	Tipo de Dispositivo ao final do procedimento 8				
split	1	2	4	NA	Total
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 175: Contingency table between split and Óbito intraoperatório 8

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

Table 176: Contingency table between split and Tipo de Reoperação 9

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

Table 177: Contingency table between split and Tipo de Dispositivo ao final do procedimento 9

	Tipo de Dispositivo ao final do procedimento 9			
split	1	2	NA	Total
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 178: Contingency table between split and Óbito intraoperatório 9

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

Table 179: Contingency table between split and Tipo de Reoperação 10

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

Table 180: Contingency table between split and Tipo de Dispositivo ao final do procedimento 10

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

Table 181: Contingency table between split and Óbito intraoperatório 10

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

Table 182: Contingency table between split and Mudança do tipo de DCEI: entre o Procedimento 1 e Procedimento 2

	Mudança do tipo de DCEI: entre o Procedimento 1 e Procedimento 2			
split	0	1	NA	Total
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 183: Contingency table between split and Mudança do tipo de DCEI: entre o Procedimento 2 e Procedimento 3

	Mudança do tipo de DCEI: entre o Procedimento 2 e Procedimento 3			
split	0	1	NA	Total
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 184: Contingency table between split and Mudança do tipo de DCEI: entre o Procedimento 3 e Procedimento 4

	Mudança do tipo de DCEI: entre o Procedimento 3 e Procedimento 4			
split	0	1	NA	Total
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 185: Contingency table between split and Mudança do tipo de DCEI: entre o Procedimento 4 e Procedimento 5

	Mudança do tipo de DCEI: entre o Procedimento 4 e Procedimento 5			
split	0	1	NA	Total
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 186: Contingency table between split and Mudança do tipo de DCEI: entre o Procedimento 5 e Procedimento 6

	Mudança do tipo de DCEI: entre o Procedimento 5 e Procedimento 6			
split	0	1	NA	Total
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 187: Contingency table between split and Mudança do tipo de DCEI: entre o Procedimento 6 e Procedimento 7

	Mudança do tipo de DCEI: entre o Procedimento 6 e Procedimento 7			
split	0	1	NA	Total
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 188: Contingency table between split and Mudança do tipo de DCEI: entre o Procedimento 7 e Procedimento 8

	Mudança do tipo de DCEI: entre o Procedimento 7 e Procedimento 8			
split	0	1	NA	Total
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 189: Contingency table between split and Mudança do tipo de DCEI: entre o Procedimento 8 e Procedimento 9

	Mudança do tipo de DCEI: entre o Procedimento 8 e Procedimento 9		
split	0	NA	Total
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 Mudança do tipo de DCEI: entre o Procedimento 9 e Procedimento 10

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

Table 191: Contingency table between split and Diálise durante os episódios de hospitalização

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

Table 192: Contingency table between split and UTI durante os episódios de hospitalização

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

Table 193: Contingency table between split and Admissão em até 180 dias antes da T0

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

Table 194: Contingency table between split and Readmissões pós-T0 com diálise

	Readmissões pós-T0 com diálise				
split	0	1	2	3	Total
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 195: Contingency table between split and Desfecho principal da admissão T0

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

Table 196: Contingency table between split and Readmissão em até 30 dias

	Readmissão em até 30 dias		
split	0	1	Total
train	10623 (70%)	413 (68%)	11036
test	4540 (30%)	190 (32%)	4730
Total	15163 (100%)	603 (100%)	15766

Table 197: Contingency table between split and Readmissão em até 60 dias

	Readmissão em até 60 dias		
split	0	1	Total
train	10411 (70%)	625 (69%)	11036
test	4449 (30%)	281 (31%)	4730
Total	14860 (100%)	906 (100%)	15766

Table 198: Contingency table between split and Readmissão em até 180 dias

	Readmissão em até 180 dias		
split	0	1	Total
train	10000 (70%)	1036 (70%)	11036
test	4277 (30%)	453 (30%)	4730
Total	14277 (100%)	1489 (100%)	15766

Table 199: Contingency table between split and Readmissão em até 1 ano

	Readmissão em até 1 ano		
split	0	1	Total
train	9640 (70%)	1396 (69%)	11036
test	4114 (30%)	616 (31%)	4730
Total	13754 (100%)	2012 (100%)	15766

Table 200: Contingency table between split and Readmissão cirúrgica em até 30 dias

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

Table 201: Contingency table between split and Readmissão cirúrgica entre 31 a 60 dias

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

Table 202: Contingency table between split and Readmissão cirúgica entre 61 a 180 dias

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

Table 203: Contingency table between split and Readmissão cirúrgica em até 1 ano

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

Table 204: Contingency table between split and Desfecho final do estudo

	Desfecho final do estudo			
split	1	2	3	Total
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 205: Contingency table between split and Óbito intraoperatório

	Óbito intraoperatório		
split	0	1	Total
train	11033 (70%)	3 (75%)	11036
test	4729 (30%)	1 (25%)	4730
Total	15762 (100%)	4 (100%)	15766

Table 206: Contingency table between split and Óbito hospitalar (intraoperatório ou admissao T0)

	Óbito hospitalar (intraoperatório ou admissao T0)		
split	0	1	Total
train	11033 (70%)	3 (75%)	11036
test	4729 (30%)	1 (25%)	4730
Total	15762 (100%)	4 (100%)	15766

Table 207: Contingency table between split and Óbito durante algum episódio de readmissão hospitalar

	Óbito durante algum episódio de readmissão hospitalar		
split	0	1	Total
train	10124 (70%)	912 (70%)	11036
test	4338 (30%)	392 (30%)	4730
Total	14462 (100%)	1304 (100%)	15766

Table 208: Contingency table between split and Óbito em até 30 dias após a alta T0

	Óbito em até 30 dias após a alta T0		
split	0	1	Total
train	10982 (70%)	54 (76%)	11036
test	4713 (30%)	17 (24%)	4730
Total	15695 (100%)	71 (100%)	15766

Table 209: Contingency table between split and Óbito em até 180 dias após a alta T0

	Óbito em até 180 dias após a alta T0		
split	0	1	Total
train	10805 (70%)	231 (70%)	11036
test	4631 (30%)	99 (30%)	4730
Total	15436 (100%)	330 (100%)	15766

Table 210: Contingency table between split and Óbito em até 1 ano após a alta T0

	Óbito em até 1 ano após a alta T0		
split	0	1	Total
train	10669 (70%)	367 (71%)	11036
test	4580 (30%)	150 (29%)	4730
Total	15249 (100%)	517 (100%)	15766

Table 211: Contingency table between split and Óbito em até 2 anos após a alta T0

	Óbito em até 2 anos após a alta T0		
split	0	1	Total
train	10503 (70%)	533 (71%)	11036
test	4508 (30%)	222 (29%)	4730
Total	15011 (100%)	755 (100%)	15766

Table 212: Contingency table between split and Óbito em até 3 anos após a alta T0

	Óbito em até 3 anos após a alta T0		
split	0	1	Total
train	10393 (70%)	643 (70%)	11036
test	4460 (30%)	270 (30%)	4730
Total	14853 (100%)	913 (100%)	15766

Table 213: Contingency table between split and Óbito (status final)

	Óbito (status final)		
split	0	1	Total
train	9249 (70%)	1787 (70%)	11036
test	3976 (30%)	754 (30%)	4730
Total	13225 (100%)	2541 (100%)	15766

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

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

Table 215: Contingency table between split and Transplante cardíaco

	Transplante cardíaco			
split	0	1	NA	Total
train	9114 (70%)	13 (62%)	1909 (70%)	11036
test	3897 (30%)	8 (38%)	825 (30%)	4730
Total	13011 (100%)	21 (100%)	2734 (100%)	15766