

07/18/2023

Matt/Abi code-snippet to guide one using 'cat_trauma' function

```
# install packages
# install.packages('icdpicr')
# install.packages('dplyr')
# install.packages('readr')
# install.packages('tidyr')

# clear memory
rm(list = ls())

# use libraries
library(icdpicr)
library(dplyr)

##
## Attaching package: 'dplyr'

## The following objects are masked from 'package:stats':
##
##   filter, lag

## The following objects are masked from 'package:base':
##
##   intersect, setdiff, setequal, union

library(readr)
library(tidyr)

# import dataset or use given "injury" dataset

# very large dataset!
dim(injury)

## [1] 100477      11

# demonstrate using a sample
inj = injury[1:100,1:3]
dim(inj)

## [1] 100      3

df_score = cat_trauma(inj,"dx",icd10=TRUE,i10_iss_method="roc_max_NIS",calc_method = 1,verbose=FALSE)

#
df_score[1:3,]

##           dx1 sev_1      issbr_1      dx2 sev_2      issbr_2      dx3 sev_3 issbr_3
## 1 S72.342A      1 Extremities <NA>      NA      <NA>      <NA>      NA      <NA>
```

```

## 2 S05.22XA      1      Face      <NA>      NA      <NA>      <NA>      NA      <NA>
## 3 S00.01XA      1  Head/Neck S00.03XA      2 Head/Neck S00.11XA      2      Face
##   mxaisbr_General mxaisbr_HeadNeck mxaisbr_Face mxaisbr_Extremities
## 1              0              0              0              1
## 2              0              0              1              0
## 3              0              2              2              0
##   mxaisbr_Chest mxaisbr_Abdomen maxais riss niss ecode_1 mechmaj1 mechmin1
## 1              0              0          1   1   1      <NA>      <NA>      <NA>
## 2              0              0          1   1   1      <NA>      <NA>      <NA>
## 3              0              0          2   8   9      <NA>      <NA>      <NA>
##   intent1 ecode_2 mechmaj2 mechmin2 intent2 ecode_3 mechmaj3 mechmin3 intent3
## 1      <NA>      <NA>      <NA>      <NA>      <NA>      <NA>      <NA>      <NA>      <NA>
## 2      <NA>      <NA>      <NA>      <NA>      <NA>      <NA>      <NA>      <NA>      <NA>
## 3      <NA>      <NA>      <NA>      <NA>      <NA>      <NA>      <NA>      <NA>      <NA>
##   ecode_4 mechmaj4 mechmin4 intent4      Pmort
## 1      <NA>      <NA>      <NA>      <NA> 0.01385792
## 2      <NA>      <NA>      <NA>      <NA> 0.01441280
## 3      <NA>      <NA>      <NA>      <NA> 0.01767370

```

```
df_score$Pmort[1:30]
```

```

## [1] 0.013857916 0.014412795 0.017673701 0.026078454 0.027839150 0.024364215
## [7] 0.005516156 0.037222518 0.021037152 0.012338552 0.034120587 0.008390491
## [13] 0.012887174 0.011312456 0.009349195 0.021670947 0.010596986 0.012476598
## [19] 0.011782806 0.012988879 0.015681288 0.023933817 0.009871213 0.011410342
## [25] 0.028842248 0.011010488 0.025939057 0.009774662 0.009349195 0.053184548

```