

# Statistiktest

Elias Joneborg

2/8/2022

## R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
summary(cars)
```

```
##      speed      dist
##  Min.   : 4.0    Min.   :  2.00
##  1st Qu.:12.0    1st Qu.: 26.00
##  Median :15.0    Median : 36.00
##  Mean   :15.4    Mean   : 42.98
##  3rd Qu.:19.0    3rd Qu.: 56.00
##  Max.   :25.0    Max.   :120.00
```

```
library(tidyr)
```

```
swetrau_scrambled <- read.csv("swetrau-scrambled.csv")
problem_scrambled <- read.csv("problem-scrambled.csv")
```

```
problem_scrambled$`Problemområde_.FMP`[problem_scrambled$`Problemområde_.FMP`=='ok'|problem_scrambled$`
problem_scrambled$`Problemområde_.FMP`[problem_scrambled$`Problemområde_.FMP`=='bristande rutin'|problem
      problem_scrambled$`Problemområde_.FMP`=='Dokumentation'|problem
      problem_scrambled$`Problemområde_.FMP`=='Kommunikation'|problem
      problem_scrambled$`Problemområde_.FMP`=='Logistik/teknik'|problem
      problem_scrambled$`Problemområde_.FMP`=='Lång tid till op'|problem
      problem_scrambled$`Problemområde_.FMP`=='Neurokirurg'|problem
      problem_scrambled$`Problemområde_.FMP`=='Resurs'|problem_scrambled
      problem_scrambled$`Problemområde_.FMP`=='Triage på akutmottagn
```

```
problemområde<-na.omit(problem_scrambled)
```

```
problemområde2<- merge(swetrau_scrambled, problem_scrambled, by= "id")
```

```
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

problemområde3<-problemområde2 %>% select(inj_dominant, pt_age_yrs, Problemomrade_.FMP, NISS, pre_sbp_v
problemområde4<-filter(problemområde3, NISS>15, NISS<76, pt_age_yrs >15, pt_age_yrs <120, inj_dominant

#AIS-fix
library(stringr)

AIS <-problemområde4 %>% select(10:59)

getLastNumber = function(x) str_sub(x, 8L, 8L)

AIS2 <- apply(AIS, c(1,2), getLastNumber)

AIS2=as.data.frame(AIS2)

names(AIS2) <- c('AIS_sev01', 'AIS_sev02', 'AIS_sev03', 'AIS_sev04', 'AIS_sev05', 'AIS_sev06', 'AIS_sev07', 'AIS_sev08', 'AIS_sev09', 'AIS_sev10', 'AIS_sev11', 'AIS_sev12', 'AIS_sev13', 'AIS_sev14', 'AIS_sev15', 'AIS_sev16', 'AIS_sev17', 'AIS_sev18', 'AIS_sev19', 'AIS_sev20', 'AIS_sev21', 'AIS_sev22', 'AIS_sev23', 'AIS_sev24', 'AIS_sev25', 'AIS_sev26', 'AIS_sev27', 'AIS_sev28', 'AIS_sev29', 'AIS_sev30', 'AIS_sev31', 'AIS_sev32', 'AIS_sev33', 'AIS_sev34', 'AIS_sev35', 'AIS_sev36', 'AIS_sev37', 'AIS_sev38', 'AIS_sev39', 'AIS_sev40', 'AIS_sev41', 'AIS_sev42', 'AIS_sev43', 'AIS_sev44', 'AIS_sev45', 'AIS_sev46', 'AIS_sev47', 'AIS_sev48', 'AIS_sev49', 'AIS_sev50')

problemområde5<-cbind(problemområde4, AIS2)
library(dplyr)
TBI_1 <-filter(problemområde5, AISCode_01 <200000 & AIS_sev01>3)
TBI_2 <-filter(problemområde5, AISCode_02 <200000 & AIS_sev02>3)
TBI_3 <-filter(problemområde5, AISCode_03 <200000 & AIS_sev03>3)
TBI_4 <-filter(problemområde5, AISCode_04 <200000 & AIS_sev04>3)
TBI_5 <-filter(problemområde5, AISCode_05 <200000 & AIS_sev05>3)
TBI_6 <-filter(problemområde5, AISCode_06 <200000 & AIS_sev06>3)
TBI_7 <-filter(problemområde5, AISCode_07 <200000 & AIS_sev07>3)
TBI_8 <-filter(problemområde5, AISCode_08 <200000 & AIS_sev08>3)
TBI_9 <-filter(problemområde5, AISCode_09 <200000 & AIS_sev09>3)
TBI_10 <-filter(problemområde5, AISCode_10 <200000 & AIS_sev10>3)
TBI_11 <-filter(problemområde5, AISCode_11 <200000 & AIS_sev11>3)
TBI_12 <-filter(problemområde5, AISCode_12 <200000 & AIS_sev12>3)
TBI_13 <-filter(problemområde5, AISCode_13 <200000 & AIS_sev13>3)
TBI_14 <-filter(problemområde5, AISCode_14 <200000 & AIS_sev14>3)
TBI_15 <-filter(problemområde5, AISCode_15 <200000 & AIS_sev15>3)
TBI_16 <-filter(problemområde5, AISCode_16 <200000 & AIS_sev16>3)
TBI_17 <-filter(problemområde5, AISCode_17 <200000 & AIS_sev17>3)
TBI_18 <-filter(problemområde5, AISCode_18 <200000 & AIS_sev18>3)
TBI_19 <-filter(problemområde5, AISCode_19 <200000 & AIS_sev19>3)
TBI_20 <-filter(problemområde5, AISCode_20 <200000 & AIS_sev20>3)
TBI_21 <-filter(problemområde5, AISCode_21 <200000 & AIS_sev21>3)
TBI_22 <-filter(problemområde5, AISCode_22 <200000 & AIS_sev22>3)

```

```

TBI_23 <-filter(problemområde5, AISCode_23 <200000 & AIS_sev23>3)
TBI_24 <-filter(problemområde5, AISCode_24 <200000 & AIS_sev24>3)
TBI_25 <-filter(problemområde5, AISCode_25 <200000 & AIS_sev25>3)
TBI_26 <-filter(problemområde5, AISCode_26 <200000 & AIS_sev26>3)
TBI_27 <-filter(problemområde5, AISCode_27 <200000 & AIS_sev27>3)
TBI_28 <-filter(problemområde5, AISCode_28 <200000 & AIS_sev28>3)
TBI_29 <-filter(problemområde5, AISCode_29 <200000 & AIS_sev29>3)
TBI_30 <-filter(problemområde5, AISCode_30 <200000 & AIS_sev30>3)
TBI_31 <-filter(problemområde5, AISCode_31 <200000 & AIS_sev31>3)
TBI_32 <-filter(problemområde5, AISCode_32 <200000 & AIS_sev32>3)
TBI_33 <-filter(problemområde5, AISCode_33 <200000 & AIS_sev33>3)
TBI_34 <-filter(problemområde5, AISCode_34 <200000 & AIS_sev34>3)
TBI_35 <-filter(problemområde5, AISCode_35 <200000 & AIS_sev35>3)
TBI_36 <-filter(problemområde5, AISCode_36 <200000 & AIS_sev36>3)
TBI_37 <-filter(problemområde5, AISCode_37 <200000 & AIS_sev37>3)
TBI_38 <-filter(problemområde5, AISCode_38 <200000 & AIS_sev38>3)
TBI_39 <-filter(problemområde5, AISCode_39 <200000 & AIS_sev39>3)
TBI_40 <-filter(problemområde5, AISCode_40 <200000 & AIS_sev40>3)
TBI_41 <-filter(problemområde5, AISCode_41 <200000 & AIS_sev41>3)
TBI_42 <-filter(problemområde5, AISCode_42 <200000 & AIS_sev42>3)
TBI_43 <-filter(problemområde5, AISCode_43 <200000 & AIS_sev43>3)
TBI_44 <-filter(problemområde5, AISCode_44 <200000 & AIS_sev44>3)
TBI_45 <-filter(problemområde5, AISCode_45 <200000 & AIS_sev45>3)
TBI_46 <-filter(problemområde5, AISCode_46 <200000 & AIS_sev46>3)
TBI_47 <-filter(problemområde5, AISCode_47 <200000 & AIS_sev47>3)
TBI_48 <-filter(problemområde5, AISCode_48 <200000 & AIS_sev48>3)
TBI_49 <-filter(problemområde5, AISCode_49 <200000 & AIS_sev49>3)
TBI_50 <-filter(problemområde5, AISCode_50 <200000 & AIS_sev50>3)

```

```

SevereTBI_cohort <- Reduce(function(x, y) merge(x, y, all=TRUE),
                           list(TBI_1, TBI_2, TBI_3, TBI_4, TBI_5,
                                TBI_6, TBI_7, TBI_8, TBI_9, TBI_10,
                                TBI_11, TBI_12, TBI_13, TBI_14, TBI_15,
                                TBI_16, TBI_17, TBI_18, TBI_19, TBI_20,
                                TBI_21, TBI_22, TBI_23, TBI_24, TBI_25,
                                TBI_26, TBI_27, TBI_28, TBI_29, TBI_30,
                                TBI_31, TBI_32, TBI_33, TBI_34, TBI_35,
                                TBI_36, TBI_37, TBI_38, TBI_39, TBI_40,
                                TBI_41, TBI_42, TBI_43, TBI_44, TBI_45,
                                TBI_46, TBI_47, TBI_48, TBI_49, TBI_50))

library(table1)

```

```

##
## Attaching package: 'table1'

```

```

## The following objects are masked from 'package:base':
##
##     units, units<-

```

```

SevereTBI_cohort1 <-SevereTBI_cohort

```

```

SevereTBI_cohort1$inj_dominant<-factor(SevereTBI_cohort1$inj_dominant, levels=c(1,2), labels=c("Blunt",

```

```

label(SevereTBI_cohort1$NISS)           <- "New Injury Severity Score"
label(SevereTBI_cohort1$inj_dominant)    <- "Dominant Injury"
label(SevereTBI_cohort1$pt_age_yrs)      <- "Age"
label(SevereTBI_cohort1$pre_sbp_value)   <- "Pre Hospital Systolic BP"
label(SevereTBI_cohort1$ed_sbp_value)    <- "Emergency Department Systolic BP"

units(SevereTBI_cohort1$pre_sbp_value)  <- "mmHg"
units(SevereTBI_cohort1$ed_sbp_value)    <- "mmHg"
units(SevereTBI_cohort1$pt_age_yrs)     <- "years"

table1(~ pt_age_yrs + NISS + pre_sbp_value + ed_sbp_value | inj_dominant, data=SevereTBI_cohort1)

```

## Get nicer 'table1' LaTeX output by simply installing the 'kableExtra' package

	Blunt	Penetrating	Overall
	(N=1203)	(N=1217)	(N=2420)
Age (years)			
Mean (SD)	58.4 (24.9)	58.6 (24.8)	58.5 (24.9)
Median [Min, Max]	57.0 [16.0, 102]	58.0 [16.0, 102]	58.0 [16.0, 102]
New Injury Severity Score			
Mean (SD)	37.2 (15.2)	36.1 (15.2)	36.6 (15.2)
Median [Min, Max]	35.0 [16.0, 75.0]	34.0 [16.0, 75.0]	34.0 [16.0, 75.0]
Pre Hospital Systolic BP (mmHg)			
Mean (SD)	146 (53.3)	147 (53.7)	147 (53.5)
Median [Min, Max]	146 [0, 265]	150 [0, 265]	147 [0, 265]
Missing	6 (0.5%)	9 (0.7%)	15 (0.6%)
Emergency Department Systolic BP (mmHg)			
Mean (SD)	147 (59.9)	146 (60.7)	147 (60.3)
Median [Min, Max]	148 [0, 285]	148 [0, 285]	148 [0, 285]
Missing	6 (0.5%)	8 (0.7%)	14 (0.6%)

```

library(dplyr)

problemområde5$ed_sbp_value[is.na(problemområde5$ed_sbp_value)]<-350

problemområde5$ed_sbp_value[problemområde5$ed_sbp_value>=1 & problemområde5$ed_sbp_value<=49]<-1
problemområde5$ed_sbp_value[problemområde5$ed_sbp_value>=50 & problemområde5$ed_sbp_value<=75]<-2
problemområde5$ed_sbp_value[problemområde5$ed_sbp_value>=76 & problemområde5$ed_sbp_value<=89]<-3
problemområde5$ed_sbp_value[problemområde5$ed_sbp_value>89 & problemområde5$ed_sbp_value<=298]<-4
problemområde5$ed_sbp_value[problemområde5$ed_sbp_value==350]<-5
problemområde5$ed_sbp_value[problemområde5$ed_sbp_value==999]<-5

# Tar RTS värdet från ed, om det inte finns så använder den vanliga blodtrycket, som är grupperat enligt
problemområde5$sbp_rts<-with(problemområde5, ifelse(ed_sbp_rts==999 & is.na(problemområde5$ed_sbp_value),
Shock_cohort <- filter(problemområde5, sbp_rts==1 | sbp_rts==2 | sbp_rts==3)

library(table1)

Shock_cohort$inj_dominant<-factor(Shock_cohort$inj_dominant, levels=c(1,2),
labels=c("Blunt", "Penetrating"))

```

```

label(Shock_cohort$NISS)           <- "New Injury Severity Score"
label(Shock_cohort$pre_sbp_value)  <- "Pre Hospital Systolic BP"
label(Shock_cohort$ed_sbp_value)   <- "Emergency Department Systolic BP"

units(Shock_cohort$pre_sbp_value) <- "mmHg"
units(Shock_cohort$ed_sbp_value)  <- "mmHg"

table1(~ inj_dominant + NISS + pre_sbp_value + ed_sbp_value | inj_dominant, data=Shock_cohort)

## Get nicer 'table1' LaTeX output by simply installing the 'kableExtra' package

```

	Blunt	Penetrating	Overall
	(N=827)	(N=820)	(N=1647)
inj_dominant			
Blunt	827 (100%)	0 (0%)	827 (50.2%)
Penetrating	0 (0%)	820 (100%)	820 (49.8%)
New Injury Severity Score			
Mean (SD)	36.9 (15.0)	36.7 (15.6)	36.8 (15.3)
Median [Min, Max]	35.0 [16.0, 75.0]	34.0 [16.0, 75.0]	34.0 [16.0, 75.0]
Pre Hospital Systolic BP (mmHg)			
Mean (SD)	146 (54.4)	144 (54.4)	145 (54.4)
Median [Min, Max]	148 [0, 265]	145 [0, 265]	146 [0, 265]
Missing	7 (0.8%)	8 (1.0%)	15 (0.9%)
Emergency Department Systolic BP (mmHg)			
Mean (SD)	3.45 (0.916)	3.45 (0.920)	3.45 (0.918)
Median [Min, Max]	4.00 [0, 5.00]	4.00 [0, 5.00]	4.00 [0, 5.00]

#### #ELDERLY

```

Elderly_cohort <- filter(problemområde4, pt_age_yrs <120, pt_age_yrs >65)

library(table1)

Elderly_cohort$inj_dominant<-factor(Elderly_cohort$inj_dominant, levels=c(1,2),
  labels=c("Blunt", "Penetrating"))

      label(Elderly_cohort$NISS)           <- "New Injury Severity Score"
      label(Elderly_cohort$pre_sbp_value)  <- "Pre Hospital Systolic BP"
      label(Elderly_cohort$ed_sbp_value)   <- "Emergency Department Systolic BP"

      units(Elderly_cohort$pre_sbp_value) <- "mmHg"
      units(Elderly_cohort$ed_sbp_value)  <- "mmHg"

      table1(~ inj_dominant + NISS + pre_sbp_value + ed_sbp_value | inj_dominant, data=Elderly_cohort)

## Get nicer 'table1' LaTeX output by simply installing the 'kableExtra' package

```

	Blunt	Penetrating	Overall
	(N=695)	(N=693)	(N=1388)
inj_dominant			
Blunt	695 (100%)	0 (0%)	695 (50.1%)
Penetrating	0 (0%)	693 (100%)	693 (49.9%)
New Injury Severity Score			
Mean (SD)	37.6 (15.8)	37.5 (15.8)	37.5 (15.8)
Median [Min, Max]	35.0 [16.0, 75.0]	34.0 [16.0, 75.0]	35.0 [16.0, 75.0]
Pre Hospital Systolic BP (mmHg)			
Mean (SD)	145 (55.3)	146 (52.3)	146 (53.8)
Median [Min, Max]	144 [0, 265]	148 [0, 265]	146 [0, 265]
Missing	4 (0.6%)	5 (0.7%)	9 (0.6%)
Emergency Department Systolic BP (mmHg)			
Mean (SD)	147 (58.8)	144 (60.1)	146 (59.5)
Median [Min, Max]	146 [0, 285]	145 [0, 285]	146 [0, 285]
Missing	2 (0.3%)	6 (0.9%)	8 (0.6%)

```

Penetrating_1 <-filter(problemområde5, AISCode_01 <600000 & AISCode_01 >300000 & AIS_sev01>2 & AIS_
Penetrating_2 <-filter(problemområde5, AISCode_02 <600000 & AISCode_02 >300000 & AIS_sev02>2 & AIS_
Penetrating_3 <-filter(problemområde5, AISCode_03 <600000 & AISCode_03 >300000 & AIS_sev03>2 & AIS_
Penetrating_4 <-filter(problemområde5, AISCode_04 <600000 & AISCode_04 >300000 & AIS_sev04>2 & AIS_
Penetrating_5 <-filter(problemområde5, AISCode_05 <600000 & AISCode_05 >300000 & AIS_sev05>2 & AIS_
Penetrating_6 <-filter(problemområde5, AISCode_06 <600000 & AISCode_06 >300000 & AIS_sev06>2 & AIS_
Penetrating_7 <-filter(problemområde5, AISCode_07 <600000 & AISCode_07 >300000 & AIS_sev07>2 & AIS_
Penetrating_8 <-filter(problemområde5, AISCode_08 <600000 & AISCode_08 >300000 & AIS_sev08>2 & AIS_
Penetrating_9 <-filter(problemområde5, AISCode_09 <600000 & AISCode_09 >300000 & AIS_sev09>2 & AIS_
Penetrating_10 <-filter(problemområde5, AISCode_10 <600000 & AISCode_10 >300000 & AIS_sev10>2 & AIS_
Penetrating_11 <-filter(problemområde5, AISCode_11 <600000 & AISCode_11 >300000 & AIS_sev11>2 & AIS_
Penetrating_12 <-filter(problemområde5, AISCode_12 <600000 & AISCode_12 >300000 & AIS_sev12>2 & AIS_
Penetrating_12 <-filter(problemområde5, AISCode_12 <600000 & AISCode_12 >300000 & AIS_sev12>2 & AIS_
Penetrating_13 <-filter(problemområde5, AISCode_13 <600000 & AISCode_13 >300000 & AIS_sev13>2 & AIS_
Penetrating_14 <-filter(problemområde5, AISCode_14 <600000 & AISCode_14 >300000 & AIS_sev14>2 & AIS_
Penetrating_15 <-filter(problemområde5, AISCode_15 <600000 & AISCode_15 >300000 & AIS_sev15>2 & AIS_
Penetrating_16 <-filter(problemområde5, AISCode_16 <600000 & AISCode_16 >300000 & AIS_sev16>2 & AIS_
Penetrating_17 <-filter(problemområde5, AISCode_17 <600000 & AISCode_17 >300000 & AIS_sev17>2 & AIS_
Penetrating_18 <-filter(problemområde5, AISCode_18 <600000 & AISCode_18 >300000 & AIS_sev18>2 & AIS_
Penetrating_19 <-filter(problemområde5, AISCode_19 <600000 & AISCode_19 >300000 & AIS_sev19>2 & AIS_
Penetrating_20 <-filter(problemområde5, AISCode_20 <600000 & AISCode_20 >300000 & AIS_sev20>2 & AIS_
Penetrating_21 <-filter(problemområde5, AISCode_21 <600000 & AISCode_21 >300000 & AIS_sev21>2 & AIS_
Penetrating_22 <-filter(problemområde5, AISCode_22 <600000 & AISCode_22 >300000 & AIS_sev22>2 & AIS_
Penetrating_23 <-filter(problemområde5, AISCode_23 <600000 & AISCode_23 >300000 & AIS_sev23>2 & AIS_
Penetrating_24 <-filter(problemområde5, AISCode_24 <600000 & AISCode_24 >300000 & AIS_sev24>2 & AIS_
Penetrating_25 <-filter(problemområde5, AISCode_25 <600000 & AISCode_25 >300000 & AIS_sev25>2 & AIS_
Penetrating_26 <-filter(problemområde5, AISCode_26 <600000 & AISCode_26 >300000 & AIS_sev26>2 & AIS_
Penetrating_27 <-filter(problemområde5, AISCode_27 <600000 & AISCode_27 >300000 & AIS_sev27>2 & AIS_
Penetrating_28 <-filter(problemområde5, AISCode_28 <600000 & AISCode_28 >300000 & AIS_sev28>2 & AIS_
Penetrating_29 <-filter(problemområde5, AISCode_29 <600000 & AISCode_29 >300000 & AIS_sev29>2 & AIS_
Penetrating_30 <-filter(problemområde5, AISCode_30 <600000 & AISCode_30 >300000 & AIS_sev30>2 & AIS_
Penetrating_31 <-filter(problemområde5, AISCode_31 <600000 & AISCode_31 >300000 & AIS_sev31>2 & AIS_
Penetrating_32 <-filter(problemområde5, AISCode_32 <600000 & AISCode_32 >300000 & AIS_sev32>2 & AIS_
Penetrating_33 <-filter(problemområde5, AISCode_33 <600000 & AISCode_33 >300000 & AIS_sev33>2 & AIS_
Penetrating_34 <-filter(problemområde5, AISCode_34 <600000 & AISCode_34 >300000 & AIS_sev34>2 & AIS_

```

```

Penetrating_35 <-filter(problemområde5, AISCode_35 <600000 & AISCode_35 >300000 & AIS_sev35>2 & AIS
Penetrating_36 <-filter(problemområde5, AISCode_36 <600000 & AISCode_36 >300000 & AIS_sev36>2 & AIS
Penetrating_37 <-filter(problemområde5, AISCode_37 <600000 & AISCode_37 >300000 & AIS_sev37>2 & AIS
Penetrating_38 <-filter(problemområde5, AISCode_38 <600000 & AISCode_38 >300000 & AIS_sev38>2 & AIS
Penetrating_39 <-filter(problemområde5, AISCode_39 <600000 & AISCode_39 >300000 & AIS_sev39>2 & AIS
Penetrating_40 <-filter(problemområde5, AISCode_40 <600000 & AISCode_40 >300000 & AIS_sev40>2 & AIS
Penetrating_41 <-filter(problemområde5, AISCode_41 <600000 & AISCode_41 >300000 & AIS_sev41>2 & AIS
Penetrating_42 <-filter(problemområde5, AISCode_42 <600000 & AISCode_42 >300000 & AIS_sev42>2 & AIS
Penetrating_43 <-filter(problemområde5, AISCode_43 <600000 & AISCode_43 >300000 & AIS_sev43>2 & AIS
Penetrating_44 <-filter(problemområde5, AISCode_44 <600000 & AISCode_44 >300000 & AIS_sev44>2 & AIS
Penetrating_45 <-filter(problemområde5, AISCode_45 <600000 & AISCode_45 >300000 & AIS_sev45>2 & AIS
Penetrating_46 <-filter(problemområde5, AISCode_46 <600000 & AISCode_46 >300000 & AIS_sev46>2 & AIS
Penetrating_47 <-filter(problemområde5, AISCode_47 <600000 & AISCode_47 >300000 & AIS_sev47>2 & AIS
Penetrating_48 <-filter(problemområde5, AISCode_48 <600000 & AISCode_48 >300000 & AIS_sev48>2 & AIS
Penetrating_49 <-filter(problemområde5, AISCode_49 <600000 & AISCode_49 >300000 & AIS_sev49>2 & AIS
Penetrating_50 <-filter(problemområde5, AISCode_50 <600000 & AISCode_50 >300000 & AIS_sev50>2 & AIS

```

```

Penetrating_cohort <- Reduce(function(x, y) merge(x, y, all=TRUE),list(Penetrating_1, Penetrating_2

```

```

Penetrating_cohort <- filter(Penetrating_cohort, inj_dominant == 2)

```

```

library(table1)

```

```

label(Penetrating_cohort$NISS)           <- "New Injury Severity Score"
label(Penetrating_cohort$pre_sbp_value)   <- "Pre Hospital Systolic BP"
label(Penetrating_cohort$ed_sbp_value)    <- "Emergency Department Systolic BP"

units(Penetrating_cohort$pre_sbp_value)   <- "mmHg"
units(Penetrating_cohort$ed_sbp_value)    <- "mmHg"

table1(~ + NISS + pre_sbp_value + ed_sbp_value, data=SevereTBI_cohort1)

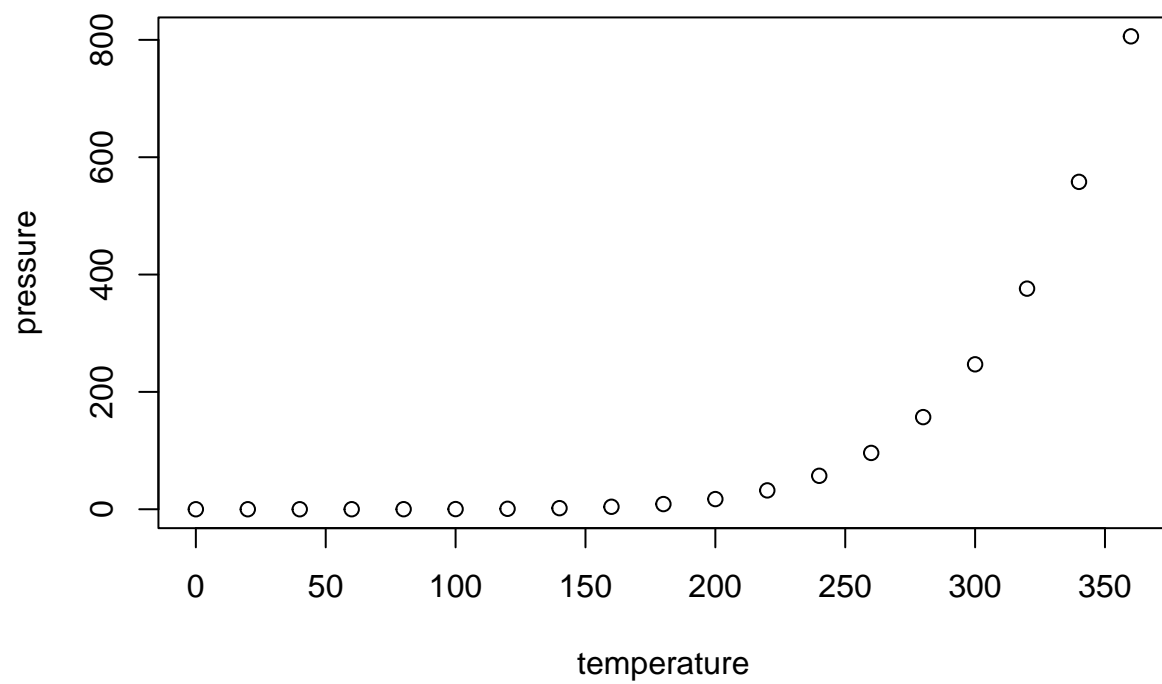
```

## Get nicer ‘table1’ LaTeX output by simply installing the ‘kableExtra’ package

	Overall
	(N=2420)
New Injury Severity Score	
Mean (SD)	36.6 (15.2)
Median [Min, Max]	34.0 [16.0, 75.0]
Pre Hospital Systolic BP (mmHg)	
Mean (SD)	147 (53.5)
Median [Min, Max]	147 [0, 265]
Missing	15 (0.6%)
Emergency Department Systolic BP (mmHg)	
Mean (SD)	147 (60.3)
Median [Min, Max]	148 [0, 285]
Missing	14 (0.6%)

## Including Plots

You can also embed plots, for example:



Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.