Create DM table as csv file

mja@statgroup.dk2016-04-20

Contents

Introduction	1										
Create DM sample table as CSV file and other files											
Get the data and prepare for derivation of summary statistics	1										
Create frame for cube from an existing RDF data cube	2										
Store the SQL statements to a file	2										
Define SQL statements directly	3										

Introduction

This is a somewhat convoluted script. The idea is to take an existing cube structure and derive the results. That was usefull initially to extend a cube. Now, it is not as usefull. So the script may seem pointless. TODO(mja): fix it.

Create DM sample table as CSV file and other files

This script creates the result and codelist for a simple DM table.

```
library(rrdfancillary)
devtools::load_all(pkg="../..")
```

Loading rrdfqbcrndex

Get the data and prepare for derivation of summary statistics

```
library(foreign)
library(sqldf)

fnadsl<- system.file("extdata/sample-xpt", "adsl.xpt", package="rrdfqbcrndex")
print(fnadsl)</pre>
```

[1] "/home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-xpt/adsl.xpt"

```
if (!file.exists(fnadsl)) {
    fnadsl<- file.path("..", "extdata/sample-xpt", "adsl.xpt")
    }
if (!file.exists(fnadsl)) {
    stop("File does not exist - ",fnadsl)
}
adsl<- read.xport(fnadsl)
adsl$TRT01A<- as.character(adsl$TRT01A)
adsl$RACE<- as.character(adsl$RACE)
adsl$SAFFL<- as.character(adsl$SAFFL)
adsl$SEX<- as.character(adsl$SEX)

## SASxport package maps characters and dates etc into more R like data type
## install.packages("SASxport")
## library(SASxport)
## adsl<- as.data.frame(read.xport(fnadsl,as.is=TRUE))
## str(adsl)</pre>
```

Create frame for cube from an existing RDF data cube

The code input a turtle file with an RDF data cube. SQL statements for calculating the measurements are derived from the cube, and used to derive the summary statistics. Note: the SQL statements does not show records where the combination of values lead to 0 observations. This is handled below, in a not so clever way. A better approach would be to include the concept of a skeleton in the SQL statements.

ToDo(MJA): move this to rrdfqbcrndcheck or move to another package, like rrdfqcbcrnd0

```
library(rrdfqbcrndcheck)

dataCubeFile<- system.file("extdata/sample-rdf", "DC-DM-sample.ttl", package="rrdfqbcrndex")
checkCube <- new.rdf(ontology=FALSE)  # Initialize
load.rdf(dataCubeFile, format="TURTLE", appendTo= checkCube)
summarize.rdf(checkCube)

stmtSQL<- GetSQLFromCube(checkCube)

cat(stmtSQL$summStatSQL)

adsl.summ.stat.res<- sqldf( stmtSQL$summStatSQL)
names(adsl.summ.stat.res)<- tolower(gsub("(a|b)\\.","", names(adsl.summ.stat.res)))</pre>
```

Store the SQL statements to a file

```
res.text<- stmtSQL$summStatSQL

cr.text<- pasteO("create table qbframe ", "(", paste(names(stmtSQL$qbframe), "TEXT", collapse=", "),
in.text<- pasteO(
   paste(
   pasteO("insert into qbframe ", "(", pasteO(names(stmtSQL$qbframe),collapse=","), ")\n" ),
   "values\n",</pre>
```

```
paste0( "(", apply(stmtSQL$qbframe,1,function(x) {paste0('"',x,'"', collapse=",")}), ")", collapse="
collapse="\n"
    ),";\n")

se.text<- "select * from qbframe;"

tempfile<- file.path(tempdir(),"temp-code.R")
cat(paste('res.text<- "', res.text,'"\n',collapse="\n"), file=tempfile)
cat(paste("cr.text<- '", cr.text,"'\n",collapse="\n"), file=tempfile,append=TRUE)
cat(paste("in.text<- '", in.text,"'\n",collapse="\n"), file=tempfile,append=TRUE)
cat(paste("se.text<- '", se.text,"'\n",collapse="\n"), file=tempfile,append=TRUE)
print(tempfile)</pre>
```

Define SQL statements directly

UNION

The statements below are inserted from the file generated above.

Work-around: add SELECT statments below corresponding to the desired statistics. Update the .csv file, and re-create the cube. Repeat until done. This is of course not the ideal way; waiting to the formular interface to the cube.

Note: the GetSQLFromCube functions in package rrdfqbcrndcheck generates the SQL statements from the cube obversyations.

```
res.text<- "
SELECT a.TRT01A, '_ALL_' as RACE, a.SEX, a.SAFFL, 'count' as procedure, 'quantity' as factor, '_ALL_' a
SELECT a.TRT01A, '_ALL_' as RACE, '_ALL_' as SEX, a.SAFFL, 'mean' as procedure, 'WEIGHTBL' as factor, '
SELECT a.TRT01A, '_ALL_' as RACE, '_ALL_' as SEX, a.SAFFL, 'max' as procedure, 'WEIGHTBL' as factor, '_
SELECT a.TRT01A, '_ALL_' as RACE, '_ALL_' as SEX, a.SAFFL, 'max' as procedure, 'AGE' as factor, '_NULL_
SELECT a.TRT01A, 'ALL' as RACE, 'ALL' as SEX, a.SAFFL, 'median' as procedure, 'WEIGHTBL' as factor,
UNION
SELECT a.TRT01A, a.RACE, '_ALL_' as SEX, a.SAFFL, 'count' as procedure, 'quantity' as factor, '_ALL_' a
UNION
SELECT a.TRT01A, b.RACE, '_ALL_' as SEX, a.SAFFL, 'percent' as procedure, 'proportion' as factor, 'RACE
UNION
SELECT a.TRT01A, '_ALL_' as RACE, '_ALL_' as SEX, a.SAFFL, 'stdev' as procedure, 'AGE' as factor, '_NUL
SELECT a.TRT01A, '_ALL_' as RACE, '_ALL_' as SEX, a.SAFFL, 'min' as procedure, 'AGE' as factor, '_NULL_
SELECT a.TRT01A, '_ALL_' as RACE, b.SEX, a.SAFFL, 'percent' as procedure, 'proportion' as factor, 'SEX'
SELECT a.TRT01A, '_ALL_' as RACE, '_ALL_' as SEX, a.SAFFL, 'min' as procedure, 'WEIGHTBL' as factor, '_
SELECT '_ALL_' as TRT01A, a.RACE, '_ALL_' as SEX, a.SAFFL, 'count' as procedure, 'quantity' as factor,
SELECT a.TRT01A, '_ALL_' as RACE, '_ALL_' as SEX, a.SAFFL, 'mean' as procedure, 'AGE' as factor, '_NULL
SELECT 'ALL' as TRT01A, 'ALL' as RACE, a.SEX, a.SAFFL, 'count' as procedure, 'quantity' as factor,
```

```
SELECT a.TRT01A, '_ALL_' as RACE, '_ALL_' as SEX, a.SAFFL, 'median' as procedure, 'AGE' as factor, '_NU
SELECT a.TRT01A, '_ALL_' as RACE, '_ALL_' as SEX, a.SAFFL, 'count' as procedure, 'quantity' as factor,
SELECT a.TRT01A, '_ALL_' as RACE, '_ALL_' as SEX, a.SAFFL, 'stdev' as procedure, 'WEIGHTBL' as factor,
cr.text<- '</pre>
create table qbframe (trt01a TEXT, race TEXT, factor TEXT, procedure TEXT, sex TEXT, saffl TEXT, unit T
in.text<- '</pre>
insert into qbframe (trt01a,race,factor,procedure,sex,saffl,unit,denominator)
("Xanomeline High Dose", "AMERICAN INDIAN OR ALASKA NATIVE", "proportion", "percent", "_ALL_", "Y", "_NULL_",
("Xanomeline Low Dose", "AMERICAN INDIAN OR ALASKA NATIVE", "proportion", "percent", "_ALL_", "Y", "_NULL_", "
("Xanomeline Low Dose", "BLACK OR AFRICAN AMERICAN", "proportion", "percent", "_ALL_", "Y", "_NULL_", "RACE"),
("Placebo", "_ALL_", "quantity", "count", "F", "Y", "_NULL_", "_ALL_"),
("_ALL_","WHITE","quantity","count","_ALL_","Y","_NULL_","_ALL_"),
("Xanomeline Low Dose", "_ALL_", "AGE", "min", "_ALL_", "Y", "YEARS", "_NULL_"),
("Xanomeline High Dose","_ALL_","AGE","stdev","_ALL_","Y","YEARS","_NULL_"),
("Xanomeline Low Dose", "_ALL_", "proportion", "percent", "M", "Y", "_NULL_", "SEX"),
("Xanomeline Low Dose", "WHITE", "quantity", "count", "_ALL_", "Y", "_NULL_", "_ALL_"),
("Xanomeline High Dose", "AMERICAN INDIAN OR ALASKA NATIVE", "quantity", "count", "_ALL_", "Y", "_NULL_", "_AL
("Placebo", "BLACK OR AFRICAN AMERICAN", "quantity", "count", "_ALL_", "Y", "_NULL_", "_ALL_"),
("Placebo", "AMERICAN INDIAN OR ALASKA NATIVE", "proportion", "percent", "_ALL_", "Y", "_NULL_", "RACE"),
("Placebo", "BLACK OR AFRICAN AMERICAN", "proportion", "percent", "_ALL_", "Y", "_NULL_", "RACE")
("Placebo", "_ALL_", "quantity", "count", "M", "Y", "_NULL_", "_ALL_"),
("Placebo", "_ALL_", "proportion", "percent", "F", "Y", "_NULL_", "SEX"),
("Xanomeline High Dose","_ALL_","quantity","count","ALL_","Y","_NULL_","_ALL_"),
("Xanomeline Low Dose","_ALL_","quantity","count","M","Y","_NULL_","_ALL_"),
("Xanomeline High Dose", "_ALL_", "proportion", "percent", "F", "Y", "_NULL_", "SEX"),
("Placebo","_ALL_","AGÉ","mean","_ALL_","Y","YEARS","_NULL_"),
("_ALL_", "BLACK OR AFRICAN AMERICAN", "quantity", "count", "_ALL_", "Y", "_NULL_", "_ALL_"),
("Xanomeline Low Dose", "AMERICAN INDIAN OR ALASKA NATIVE", "quantity", "count", "_ALL_", "Y", "_NULL_", "_ALL
("Xanomeline Low Dose", "BLACK OR AFRICAN AMERICAN", "quantity", "count", "_ALL_", "Y", "_NULL_", "_ALL_"),
("Xanomeline High Dose", "BLACK OR AFRICAN AMERICAN", "proportion", "percent", "_ALL_", "Y", "NULL_", "RACE")
("Xanomeline High Dose", "WHITE", "proportion", "percent", "_ALL_", "Y", "_NULL_", "RACE"),
("_ALL_","_ALL_","quantity","count","M","Y","_NULL_","_ALL_"),
```

```
("Xanomeline High Dose", "_ALL_", "quantity", "count", "F", "Y", "_NULL_", "_ALL_"),
("Placebo", "_ALL_", "proportion", "percent", "M", "Y", "_NULL_", "SEX"),
("Xanomeline Low Dose", "_ALL_", "proportion", "percent", "F", "Y", "_NULL_", "SEX"),
("Xanomeline Low Dose", "_ALL_", "AGE", "mean", "_ALL_", "Y", "YEARS", "_NULL_"),
("Xanomeline High Dose", "_ALL_", "proportion", "percent", "M", "Y", "_NULL_", "SEX"),
("Placebo", "AMERICAN INDIAN OR ALASKA NATIVE", "quantity", "count", "_ALL_", "Y", "_NULL_", "_ALL_"),
("Xanomeline High Dose", "BLACK OR AFRICAN AMERICAN", "quantity", "count", "_ALL_", "Y", "_NULL_", "_ALL_"),
("_ALL_", "AMERICAN INDIAN OR ALASKA NATIVE", "quantity", "count", "_ALL_", "Y", "_NULL_", "_ALL_"),
("Placebo", "WHITE", "proportion", "percent", "_ALL_", "Y", "_NULL_", "RACE"),
("Xanomeline Low Dose","_ALL_","WEIGHTBL","min","_ALL_","Y","KG","_NULL_"), ("Xanomeline High Dose","_ALL_","WEIGHTBL","stdev","_ALL_","Y","KG","_NULL_"),
("Xanomeline High Dose","_ALL_","WEIGHTBL","max","_ALL_","Y","KG","_NULL_"),
("Placebo","_ALL_","WEIGHTBL","max","_ALL_","Y","KG","_NULL_"),
("Placebo","_ALL_","WEIGHTBL","mean","_ALL_","Y","KG","_NULL_"),
("Xanomeline High Dose","_ALL_","WEIGHTBL","mean","_ALL_","Y","KG","_NULL_"),
se.text<-'
```

Evaluate the SQL code

```
adsl.summ.stat.res<- sqldf( res.text )
# adsl.summ.stat$unit<- "_NULL_"
names(adsl.summ.stat.res)<- tolower(gsub("(a|b)\\.","", names(adsl.summ.stat.res)))
rm(qbframe)
sqldf()</pre>
```

<SQLiteConnection>

```
sqldf(cr.text)
```

NULL

sqldf(in.text)

NULL

```
qbframe<- sqldf(se.text)
sqldf()</pre>
```

NULL

```
# str(qbframe)
```

Combine generated results with the cube frame and write CSV file

```
adsl.summ.stat<- merge(qbframe,adsl.summ.stat.res,by=names(qbframe),all=TRUE)
# adsl.summ.stat<- merge(stmtSQL$qbframe,adsl.summ.stat.res,all=TRUE)
adsl.summ.stat$measure[ is.na(adsl.summ.stat$measure) & adsl.summ.stat$procedure=="count" ]<- 0
adsl.summ.stat</pre>
```

##			tr	t01a					race	factor
##	1		_	ALL_					_ALL_	quantity
##	2		_	ALL_					_ALL_	quantity
##	3		_	ALL_	AMERICAN	INDIAN	OR	ALASK	A NATIVE	quantity
##	4		_	ALL_	BI	LACK OR	AFF	RICAN	AMERICAN	quantity
##	5		_	ALL_					WHITE	quantity
##	6		Pla	cebo					_ALL_	AGE
##	7		Pla	cebo					_ALL_	AGE
##	8		Pla	cebo					_ALL_	AGE
##	9		Pla	cebo					_ALL_	AGE
##	10		Pla	cebo					_ALL_	AGE
##	11		Pla	cebo					_ALL_	proportion
##	12		Pla	cebo					_ALL_	proportion
##	13		Pla	cebo					_ALL_	quantity
##	14		Pla	cebo					_ALL_	quantity
##	15		Pla	cebo					_ALL_	quantity
##	16		Pla	cebo					_ALL_	
##	17		Pla	cebo					_ALL_	WEIGHTBL
##	18		Pla	cebo					_ALL_	
##	19		Pla	cebo					_ALL_	WEIGHTBL
##				cebo					_ALL_	
##										proportion
##	22		Pla	cebo	AMERICAN					quantity
##	23		Pla	cebo	BI	LACK OR	AFF	RICAN	AMERICAN	proportion
##				cebo	BI	LACK OR	AFF	RICAN	AMERICAN	quantity
##			Pla	cebo					WHITE	proportion
##				cebo					WHITE	quantity
		Xanomeline	•						_ALL_	AGE
		Xanomeline	•						_ALL_	AGE
		Xanomeline	_						_ALL_	AGE
		Xanomeline	_						_ALL_	AGE
##	31	Xanomeline	High	Dose					_ALL_	AGE

```
## 32 Xanomeline High Dose
                                                           _ALL_ proportion
## 33 Xanomeline High Dose
                                                           _ALL_ proportion
## 34 Xanomeline High Dose
                                                           ALL
                                                                   quantity
## 35 Xanomeline High Dose
                                                           _ALL_
                                                                   quantity
                                                           _ALL_
## 36 Xanomeline High Dose
                                                                   quantity
## 37 Xanomeline High Dose
                                                           ALL
                                                                   WEIGHTBL
## 38 Xanomeline High Dose
                                                           ALL
                                                                   WEIGHTBL
## 39 Xanomeline High Dose
                                                           _ALL_
                                                                   WEIGHTBL
## 40 Xanomeline High Dose
                                                           _ALL_
                                                                   WEIGHTBL
## 41 Xanomeline High Dose
                                                           _{
m ALL}_{
m }
                                                                   WEIGHTBL
## 42 Xanomeline High Dose AMERICAN INDIAN OR ALASKA NATIVE proportion
## 43 Xanomeline High Dose AMERICAN INDIAN OR ALASKA NATIVE
                                                                   quantity
## 44 Xanomeline High Dose
                                    BLACK OR AFRICAN AMERICAN proportion
                                                                   quantity
## 45 Xanomeline High Dose
                                     BLACK OR AFRICAN AMERICAN
## 46 Xanomeline High Dose
                                                           WHITE proportion
## 47 Xanomeline High Dose
                                                          WHITE
                                                                   quantity
       Xanomeline Low Dose
                                                           _{\mathtt{ALL}}
                                                                         AGE
## 49
       Xanomeline Low Dose
                                                           ALL
                                                                         AGE
## 50
       Xanomeline Low Dose
                                                                         AGE
                                                           _ALL_
                                                           _ALL_
## 51
       Xanomeline Low Dose
                                                                         AGE
## 52
       Xanomeline Low Dose
                                                           _ALL_
                                                                         AGE
## 53
       Xanomeline Low Dose
                                                           _ALL_ proportion
       Xanomeline Low Dose
## 54
                                                           _ALL_ proportion
       Xanomeline Low Dose
                                                           \_\mathtt{ALL}_{\_}
## 55
                                                                   quantity
## 56
       Xanomeline Low Dose
                                                           \mathtt{ALL}
                                                                   quantity
                                                           _ALL_
## 57
       Xanomeline Low Dose
                                                                   quantity
## 58
       Xanomeline Low Dose
                                                           _ALL_
                                                                   WEIGHTBL
   59
       Xanomeline Low Dose
                                                           _ALL_
                                                                   WEIGHTBL
## 60
       Xanomeline Low Dose
                                                           \_\mathtt{ALL}\_
                                                                   WEIGHTBL
## 61
       Xanomeline Low Dose
                                                           _{\mathtt{ALL}}_{\mathtt{}}
                                                                   WEIGHTBL
## 62
       Xanomeline Low Dose
                                                           _{
m ALL}_{
m }
                                                                   WEIGHTBL
## 63
       Xanomeline Low Dose AMERICAN INDIAN OR ALASKA NATIVE proportion
## 64
       Xanomeline Low Dose AMERICAN INDIAN OR ALASKA NATIVE
                                                                   quantity
## 65
       Xanomeline Low Dose
                                    BLACK OR AFRICAN AMERICAN proportion
## 66
       Xanomeline Low Dose
                                    BLACK OR AFRICAN AMERICAN
                                                                   quantity
##
       Xanomeline Low Dose
  67
                                                          WHITE proportion
       Xanomeline Low Dose
                                                          WHITE
                                                                   quantity
##
      procedure
                   sex saffl
                                unit denominator
                                                      measure
                            Y _NULL_
                                            _ALL_ 143.000000
## 1
                     F
          count
## 2
                            Y _NULL_
          count
                     Μ
                                            _ALL_ 111.000000
## 3
                            Y NULL
          count ALL
                                            ALL
                                                     1.000000
## 4
          count ALL
                            Y NULL
                                                    23.000000
                                            _ALL_
## 5
          count _ALL_
                            Y NULL
                                            _ALL_ 230.00000
## 6
                            Y YEARS
                                           _NULL_ 89.000000
            max _ALL_
## 7
           mean _ALL_
                            Y
                               YEARS
                                           _{
m NULL}_{
m }
                                                    75.209302
         median _ALL_
                            Y
                                                    76.000000
## 8
                               YEARS
                                           \_\mathtt{NULL}\_
## 9
            min _ALL_
                            Y
                               YEARS
                                           _{
m NULL}_{
m }
                                                   52.000000
                                           _{
m NULL}_{
m }
## 10
          stdev _ALL_
                            Y
                              YEARS
                                                     8.590167
## 11
                     F
                            Y _NULL_
                                              SEX 61.627907
        percent
## 12
        percent
                     Μ
                            Y _NULL_
                                              SEX
                                                    38.372093
## 13
                            Y _NULL_
          count _ALL_
                                            _ALL_
                                                    86.000000
## 14
          count
                            Y _NULL_
                                            _ALL_
                                                    53.000000
## 15
                     М
                            Y NULL
                                            ALL
                                                    33.000000
          count
## 16
            max _ALL_
                            Y
                                  KG
                                           NULL
                                                   86.200000
```

```
## 17
            mean _ALL_
                             Y
                                    KG
                                              _{
m NULL}_{
m }
                                                      62.759302
## 18
          median _ALL_
                              Y
                                    KG
                                              _NULL_
                                                       60.550000
## 19
             \min \_ALL_{-}
                              Y
                                    KG
                                              NULL
                                                       34.000000
           stdev _ALL_
                              Y
                                                       12.771544
## 20
                                    KG
                                              _NULL_
                                _NULL_
## 21
         percent _ALL_
                             Y
                                                RACE
                                                        0.000000
           count _ALL_
                             Y NULL
                                                        0.00000
## 22
                                               ALL
                             Y NULL
## 23
         percent _ALL_
                                               RACE
                                                        9.302326
## 24
           count _ALL_
                             Y NULL
                                               _ALL_
                                                        8.000000
## 25
         percent _ALL_
                             Y
                                _NULL_
                                               RACE
                                                       90.697674
## 26
           count _ALL_
                             Y
                                _NULL_
                                               _ALL_
                                                       78.000000
## 27
             max _ALL_
                             Y
                                 YEARS
                                              _NULL_
                                                       88.000000
                             Y
## 28
            mean _ALL_
                                 YEARS
                                              _{
m NULL}_{
m }
                                                       74.380952
                                              _NULL_
                                                       76.000000
## 29
                             Y
                                 YEARS
          median _ALL_
                                 YEARS
## 30
             min _ALL_
                              Y
                                              _{
m NULL}_{
m }
                                                       56.000000
                             Y
## 31
           stdev _ALL_
                                 YEARS
                                              _NULL_
                                                        7.886094
## 32
         percent
                             Y
                                _{
m NULL}_{
m }
                                                 SEX
                                                       47.619048
## 33
                      М
                             Y _NULL_
                                                 SEX
                                                       52.380952
         percent
##
   34
                             Y NULL
                                                       84.000000
           count _ALL_
                                               \_\mathtt{ALL}\_
                             Y _NULL_
## 35
                      F
                                                       40.000000
           count
                                               _ALL_
## 36
           count
                      М
                             Y
                                NULL
                                               _ALL_
                                                       44.000000
## 37
             max _ALL_
                             Y
                                    KG
                                              _NULL_ 108.00000
## 38
                             Y
                                    KG
            mean _ALL_
                                              _NULL_
                                                       70.004762
          median _ALL_
## 39
                              Y
                                    KG
                                              NULL
                                                       69.200000
                              Y
                                              _NULL_
## 40
             min _ALL_
                                    KG
                                                       41.700000
                              Y
                                              _{
m NULL}
## 41
           stdev _ALL_
                                    KG
                                                       14.653433
## 42
         percent _ALL_
                             Y
                                NULL
                                                RACE
                                                        1.190476
                             Y
                                _{
m NULL}_{
m }
                                                        1.000000
## 43
           count _ALL_
                                               _ALL_
                                _NULL_
## 44
         percent _ALL_
                             Y
                                                RACE
                                                       10.714286
## 45
                             Y _NULL_
           count _ALL_
                                               \_\mathtt{ALL}\_
                                                        9.000000
## 46
                             Y _NULL_
                                               RACE
                                                       88.095238
         percent _ALL_
## 47
           count _ALL_
                             Y
                                _{
m NULL}_{
m L}
                                               _ALL_
                                                       74.000000
## 48
             max _ALL_
                             Y
                                 YEARS
                                              _NULL_
                                                       88.000000
## 49
            mean _ALL_
                              Y
                                 YEARS
                                              _{
m NULL}_{
m }
                                                       75.666667
## 50
          median _ALL_
                             Y
                                 YEARS
                                              _NULL_
                                                       77.500000
## 51
                             Y
                                 YEARS
                                              NULL
                                                       51.000000
             min _ALL_
## 52
           stdev _ALL_
                             Y
                                 YEARS
                                              _NULL_
                                                        8.286051
## 53
         percent
                             Y NULL
                                                 SEX
                                                      59.523810
                             Y _NULL_
## 54
         percent
                      М
                                                 SEX
                                                       40.476190
                                _NULL_
## 55
           count _ALL_
                             Y
                                               _ALL_
                                                       84.000000
                                               _ALL_
## 56
           count
                      F
                             Y _NULL_
                                                       50.000000
                                NULL_
## 57
           count
                      М
                             Y
                                               ALL
                                                       34.000000
                             Y
                                              _NULL_ 106.100000
## 58
             max _ALL_
                                    KG
## 59
            mean _ALL_
                             Y
                                    KG
                                              _NULL_
                                                      67.279518
                              Y
## 60
                                    KG
                                              _NULL_
                                                       64.900000
          median _ALL_
                              Y
## 61
             min _ALL_
                                    KG
                                              _NULL_
                                                       45.400000
                              Y
           stdev _ALL_
                                    KG
                                              _{
m NULL}_{
m }
## 62
                                                       14.123599
## 63
         percent _ALL_
                             Y
                                _{
m NULL}_{
m }
                                                RACE
                                                        0.00000
## 64
           count _ALL_
                             Y _NULL_
                                               _{
m ALL}_{
m }
                                                        0.000000
## 65
         percent _ALL_
                             Y _NULL_
                                               RACE
                                                        7.142857
## 66
           count _ALL_
                             Y _NULL_
                                               _ALL_
                                                        6.000000
## 67
         percent _ALL_
                             Y _NULL_
                                               RACE
                                                       92.857143
## 68
           count ALL
                             Y NULL
                                               _ALL_
                                                       78.000000
```

```
dmtableFile<- file.path( system.file("extdata/sample-cfg", package="rrdfqbcrndex"), "dm.AR.csv" )
## dmtableFile<- file.path(tempdir(), "temp-dm.AR.csv")
write.csv(adsl.summ.stat, file=dmtableFile, row.names=FALSE)
cat("Written to ", dmtableFile, "\n")</pre>
```

 $\verb| ## Written to /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-cfg/dm.AR.csv| \\$