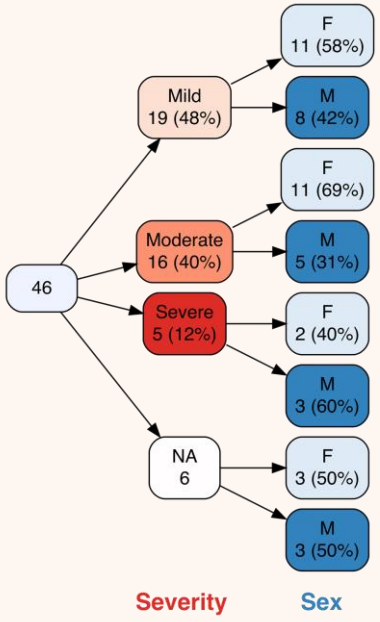
vtree v4.0.0 cheatsheet

For more information, type: `vignette("vtree")`

Basics

Draw a basic variable tree

```
vtree(FakeData,"Severity Sex")
```

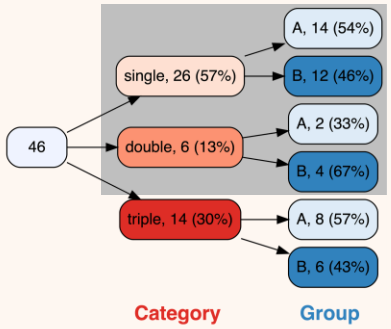


Parameter setting	Effect
vp=FALSE	Use full denominator for %
horiz=FALSE	Vertical variable tree
sameline=TRUE	Show label, n (%)
splitwidth=50	Split text after 50 chars
getscript=TRUE	Get DOT script
plain=TRUE	Nodes in shades of blue
digits=1	1 decimal place in %
cdigits=2	2 dec. places in summary
showpct=FALSE	Do not show %
showcount=FALSE	Do not show counts

Pruning

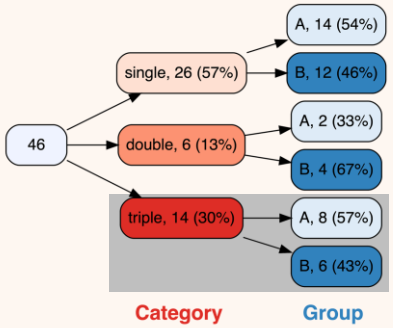
Prune single and double and their descendants

```
vtree(FakeData,"Category Group",sameline=TRUE,
  prune=list(Category=c("single","double")))
```



Only keep single and double and their descendants

```
vtree(FakeData,"Category Group",sameline=TRUE,
  keep=list(Category=c("single","double")))
```



Other ways to prune	Effect
prunebelow	Prune below nodes
follow	Only follow specified nodes
prunesmaller	Prune smaller nodes

Text

Add text to nodes

```
vtree(FakeData,"Group Category",sameline=TRUE,
  text=list(Category=c(triple="\n*not verified*")))
```

Code	Effect
\n	Line break
...	Italics
...	Bold
^...^	Superscript
~...~	Subscript
%%red ...%%	Make text red (*or another color*)

R Markdown

Code	Output
vtree(FakeData,"Group Category")	PNG
vtree(FakeData,"Severity Sex",pngknit=FALSE)	htmlwidget

Parameter setting	Effect
imagewidth="3in"	Image 3 inches wide
imageheight="4in"	Image 4 inches tall
pxwidth=800	Image 800 pixels wide
pxheight=2000	Image 200 pixels high

Variable specification

Prefix	Effect
is.na:	is.na(variable)
stem:	all REDCap variables starting with stem
rc:	identify a REDCap checkbox variable
tri:	trichotomize in each node of variable

Suffix	Effect
*this**	variable names starting with *this*
this#	variable names ending with numeric digits

Dichotomize	Effect
variable=*x*	*x* vs. all other values
variable<*x*	below *x* vs. all other values
variable>*x*	above *x* vs. all other values

Additional functions

Function	Purpose
svtree	Launch a Shiny vtree app
VennTable	Format pattern table
crosstabToCases	Convert a crosstab array to cases
grVizToPNG	Generate a PNG file
build.data.frame	Generate data frame from specified counts

summary parameter

Syntax: `summary="` variable-specification format-text-&-codes `"`

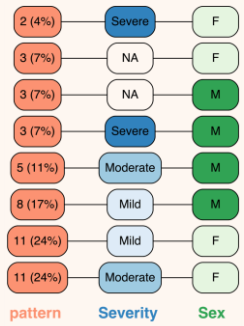
Example: summary="Age \nmean age = %mean%"

Variable specification	Effect
variable=*x*	*x* vs. all other values
variable>*x*	below *x* vs. all other values
variable<*x*	above *x* vs. all other values

Code	Produces
%mean%	mean
%SD%	standard deviation
%sum%	sum
%min%	minimum
%max%	maximum
%pX%	Xth percentile
%median%	median, i.e. p50
%IQR%	IQR, i.e. p25, p75
%npct%	frequency and percentage
%pct%	just percentage
%list%	comma-separated list of values
%listlines%	individual values on separate lines
%mv%	the number of missing values
%nonmv%	the number of non-missing values

Code	Restricts summary information to:
%noroot%	all nodes *except* the root
%leafonly%	leaf nodes
%var=*v*%	nodes of variable *v*
%node=*n*%	nodes named *n*

Pattern trees and tables




```
 n pct Severity Sex
 2   4   Severe   F
 3   7     <NA>   F
 3   7     <NA>   M
 3   7   Severe   M
 5  11 Moderate   M
 8  17     Mild   M
11  24     Mild   F
11  24 Moderate   F
```

Parameter setting	Effect
pattern=TRUE	Generate a pattern tree
Venn=TRUE	Use Venn settings for indicator variables
ptable=TRUE	Generate a pattern table
check.is.na=TRUE	Generate a pattern table for missing

Format a pattern table for markdown

```
VennTable(vtree(FakeData,"Ind1 Ind2",ptable=T),markdown=T)
```

Labels

Parameter setting	Effect
labelvar=c(Ind1="Indicator1")	Relabel Ind1
labelnode=list(MyVar=c(New="Old",New2="Old2"))	Change node labels
tlabelnode=list(c(Group="A",Sex="F",label="girl")	Change the label of a specific node
varnamepointsize=15	Set font size (points) for variable names
shownodelabels=FALSE	Do not show node labels
showvarnames=FALSE	Do not show variable names
showvarinnode=TRUE	Show variable name in each node
showlegend=TRUE	Show a legend
title="All businesses"	Show a title for the root node

 • Learn more at https://github.com/nbarrowman/vtree/ • package version 4.0.0 • updated Jan 10, 2020