# Package 'rccShiny'

May 12, 2017

Type rackage
Version 1.0.0
Title Shiny apps for RCC
<b>Description</b> Creates shiny apps used as a complement to the annual reports from the cancer quality registries in Sweden.
<b>Depends</b> R (>= $3.3.3$ )
Imports acepack (>= 1.4.1), backports (>= 1.0.5), base64enc (>= 0.1.3), bitops (>= 1.0.6), caTools (>= 1.17.1), checkmate (>= 1.8.2), colorspace (>= 1.3.2), data.table (>= 1.10.4), dichromat (>= 2.0.0), digest, DT (>= 0.2), evaluate (>= 0.10), Formula (>= 1.2.1), gdata (>= 2.17.0), ggplot2 (>= 2.2.1), gplots (>= 3.0.1), gridExtra (>= 2.2.1), graphics, grDevices, gtable (>= 0.2.0), gtools (>= 3.5.0), highr (>= 0.6), Hmisc (>= 4.0.3), htmlTable (>= 1.9), htmltools (>= 0.3.5), htmlwidgets (>= 0.8), httpuv (>= 1.3.3), jsonlite (>= 0.9.16), knitr (>= 1.15.1), labeling (>= 0.3), latticeExtra (>= 0.6.28), lazyeval (>= 0.2.0), magrittr (>= 1.5), markdown (>= 0.7.7), methods, mime (>= 0.3), munsell (>= 0.4.3), plyr (>= 1.8.4), R6 (>= 2.0), RColorBrewer (>= 1.1.2), Rcpp (>= 0.12.0), scales (>= 0.4.1), shiny (>= 1.0.3), sourcetools (>= 0.1.5), sp (>= 1.2.4), stats, stringi (>= 1.1.2), stringr (>= 1.2.0), tibble (>= 1.2), utils, xtable (>= 1.8.2), yaml (>= 2.1.14)
LazyData TRUE
License GPL (>= 3)
RoxygenNote 6.0.1
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Repository bitbucket.org/cancercentrum/rccshiny
<b>Date</b> 2017-05-12
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rccShiny

Shiny apps for RCC

## **Description**

returns shiny apps that can be used as a complement to the annual reports from the cancer quality registries in Sweden.

### Usage

```
rccShiny(data = NULL, outcome = "outcome", outcomeTitle = outcome,
  folder = "ind", folderLinkText = outcomeTitle, path = getwd(),
  textBeforeSubtitle = NULL, textAfterSubtitle = NULL, comment = "",
  description = c("(beskrivning saknas)", "(description missing)"),
  geoUnitsHospital = "sjukhus", geoUnitsCounty = "landsting",
  geoUnitsRegion = "region", geoUnitsPatient = FALSE,
  regionSelection = TRUE, regionLabel = c("Begränsa till region",
  "Limit to region"), period = "period", periodLabel = c("Diagnosår",
  "Year of diagnosis"), varOther = NULL, targetValues = NULL,
  funnelplot = FALSE, sortDescending = NULL, hideLessThan = 5,
  language = c("sv"), npcrGroupPrivateOthers = FALSE)
```

#### **Arguments**

data frame containing the variables used.

outcome vector with names(s) of variable(s) in data containing the variable(s) to be pre-

sented in the app, for example a quality indicator. Variable(s) must be of type

logical, factor or numeric. Default is "outcome".

outcomeTitle label(s) of the outcome(s) shown in the app. Must be the same length as argu-

ment outcome. Default is argument outcome.

folder name of folder where the results are placed. Default is "ind".

folderLinkText short name displayed in ready-to-use html link returned by the function. Default

is argument outcomeTitle.

path search path to folder returned by the function. Default is working directory.

textBeforeSubtitle

optional text placed before the subtitles in the tabs.

textAfterSubtitle

optional text placed after the subtitles in the tabs.

comment optional comment printed under the sidebar panel.

description description shown in the tab Beskrivning/Description.

geoUnitsHospital

optional name of variable in data containing hospital names. Variable must be of type character. At least one geoUnit must be given. To be implemented:

Hospital codes.

geoUnitsCounty

optional name of variable in data containing county codes. Variable must be of type numeric. Can be either county of residence for the patient or the county the hospital belongs to. See details for valid values. At least one geoUnit must be given. To be implemented: Codes for county of hospital are fetched automatically from hospital codes.

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geoUnitsRegion optional name of variable in data containing region codes (1=Stockholm, 2=Uppsala-Örebro, 3=Sydöstra, 4=Södra, 5=Västra, 6=Norra). Variable must be of type numeric. Can be either region of residence for the patient or the region the hospital belongs to. At least one geoUnit must be given. To be implemented: Codes for

region of hospital are fetched automatically from hospital codes.

geoUnitsPatient

if geoUnitsCounty/geoUnitsRegion is county/region of residence for the patient (LKF). If FALSE and a hospital is chosen by the user in the sidebar panel the output is highlighted for the respective county/region that the hospital belongs to. Default is FALSE.

regionSelection

adds a widget to the sidebar panel with the option to show only one region at a

time. Default is TRUE.

regionLabel if regionSelection = TRUE label of widget shown in the sidebar panel. Default

is c("Begränsa till region", "Limit to region").

period name of variable in data containing time periods, for example year of diagnosis.

Variable must be of type numeric. Default is "period".

periodLabel label for the period widget in the sidebar panal. Default is c("Diagnosår", "Year

of diagnosis").

varOther optional list of variable(s), other than period and geoUnits, to be shown in the

sidebar panel. Arguments to the list are: var (name of variable in data), label (label shown over widget in sidebar panel), choices (which values of var should

be shown, min, max for continuous variables).

targetValues optional vector of 1-2 target levels to be plotted in the tab Jämförelse/Comparison.

Only applicable for dichotomous variables.

funnelplot adds a widget to the sidebar panel with the option to show a funnel plot in the tab

Jämförelse/Comparison. Only applicaple for dichotomous variables. Default is

FALSE.

sortDescending should the bars in tab Jämförelse/Comparison be plotted in descending order.

Default is TRUE.

hideLessThan  $\,$  value under which groups (cells) are supressed. Default is 5 and all values <5

are set to 5.

language vector giving the language for the app. Possible values are "sv" and "en". De-

fault is "sv". See details.

npcrGroupPrivateOthers

should private hospitals be grouped when displaying data for the entire country. Applicable for NPCR. Default is FALSE.

#### **Details**

Valid values for geoUnitsCounty are:

geoUnitsPatient	!geoUnitsPatient	Text shown
1	10,11	Stockholm
3	12	Uppsala
4	13	Södermanland
5	21	Östergötland
6	22	Jönköping
7	23	Kronoberg
8	24,25	Kalmar

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9	26	Gotland
10	27	Blekinge
12	28,30,41	Skåne
13	42	Halland
14	50,51,52,53	Västra Götaland
17	54	Värmland
18	55	Örebro
19	56	Västmanland
20	57	Dalarna
21	61	Gävleborg
22	62	Västernorrland
23	63	Jämtland
24	64	Västerbotten
25	65	Norrbotten
-	91,92,93,94,95,96	Övriga/privata - region

If language = c("sv", "en") the following applies to arguments: textBeforeSubtitle, textAfterSubtitle, comment, description, regionLabel, label in list varOther: if there are two values the first is used in the Swedish version and the second in the English version. If there is only one value this is recycled in both versions. The following applies to argument outcomeTitle: the titles should be given in a list, the first listargument is used in the Swedish version and the second in the English version. The Swedish title(s) will be recycled if English is missing. The following applies to arguments outcome, geoUnitsHospital, geoUnitsCounty, geoUnitsRegion, period, var in list varOther: in the English version the variable name with the suffix \_en (for example "outcome\_en") will be used if this exists and otherwise the Swedish variable name will be recycled.

#### Value

A folder path/apps/svlen/folder containing: global.R, server.R, ui.R, data/data.RData, docs/description.html.

#### Author(s)

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## **Examples**

```
rccShiny(
 data = rccShinyData,
  folder = "Indikator1",
  outcome = paste0("outcome",1:3),
  outcomeTitle = c("Dikotom", "Kontinuerlig", "Kategorisk"),
  comment = "Skovde och Lidkoping tillhor Skaraborg",
  description = "Att tanka pa vid tolkning ....",
  varOther = list(
   list(
      var = "age",
      label = "Alder vid diagnos"
   ),
   list(
      var = "stage",
      label = "Stadium",
      choices = c("I", "II")
   )
  ),
```

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```
funnelplot = TRUE
## Not run:
library(shiny)
runApp("./apps/sv/Indikator1")
## End(Not run)
# For Swedish/English version
rccShinyData$outcome1_en <- rccShinyData$outcome1</pre>
rccShiny(
  data = rccShinyData,
  folder = "Indikator2",
  outcome = "outcome1",
  outcomeTitle = list("Kontaktsjukskoterska", "Contact nurse"),
  textBeforeSubtitle = c("Nagot pa svenska", "Something in English"),
  description = c("Superbra att ha!", "Supergood to have!"),
  varOther = list(
    list(
      var = "age"
     label = c("Alder vid diagnos", "Age at diagnosis"),
      choices = c(0,120)
  ),
  targetValues = c(95,99),
  language = c("sv", "en")
```

rccShinyData

Testdata for RCC shiny apps

#### **Description**

Data set used in the examples given in the function rccShiny.

# Usage

rccShinyData

#### **Format**

```
A data frame with 20000 rows and 9 variables:

sjukhus hospital names (character).

landsting county codes for hospital (numeric).

region region codes for hospital (numeric).

period year of diagnosis.

age patients age at diagnosis.

outcome1 dichotomous outcome (logical).

outcome2 continuous outcome (numeric).

outcome3 categorical outcome with 5 levels (factor).

stage patients stage at diagnosis.
```

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