

Package ‘CHOIRBM’

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Title Plots the CHOIR Body Map

Version 0.0.2

Description Collection of utility functions for visualizing
body map data collected with the Collaborative Health Outcomes
Information Registry.

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URL <https://github.com/emcramer/CHOIRBM>

BugReports <https://github.com/emcramer/CHOIRBM/issues>

Depends R (>= 3.5.0)

Imports ggplot2, rlang, stringr

Suggests knitr, rmarkdown, testthat (>= 2.0.0)

VignetteBuilder knitr

Config/testthat/edition 2

Encoding UTF-8

LazyData true

RoxygenNote 7.1.1

NeedsCompilation no

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gen_example_data	<i>Generate Simple Example Data</i>
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Description

Creates a data frame with CHOIR Body Map segment IDs and a randomly associated value. Also adds grouping information for facetting while plotting.

Usage

```
gen_example_data(seed = 123)
```

Arguments

seed	integer to seed the random number generator
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Value

values data.frame

Examples

```
cbm_df <- gen_example_data()
head(cbm_df)
```

plot_female_choirbm	<i>Plot the male CHOIR Body Map</i>
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Description

Creates a new plot of the front and back of the female CHOIR body map.

Usage

```
plot_female_choirbm(df, value)
```

Arguments

df	data.frame
value	string

Value

ggrob

Examples

```
cbm_df <- gen_example_data()
plot_female_choirbm(cbm_df, "value")
```

plot_male_choirbm	<i>Plot the male CHOIR Body Map</i>
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Description

Creates a new plot of the male CHOIR body map.

Usage

```
plot_male_choirbm(df, value)
```

Arguments

df	data.frame
value	string

Value

ggrob

Examples

```
cbm_df <- gen_example_data()
plot_male_choirbm(cbm_df, "value")
```

string_to_map	<i>Converts a comma-separated string to a CHOIR BM</i>
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Description

Takes a string of IDs that are separated by a comma and converts the information into a data frame with a binary indication of whether or not an ID appeared. Useful for plotting an individual's CHOIR BM or for isolating particular sections to highlight.

Usage

```
string_to_map(map_str = "", delim = ",")
```

Arguments

map_str The delimited CBM string.
delim The delimiter for the CBM string.

Value

ret_df data.frame with all of the CHOIR BM segment IDs with a 1 if the segment was present and 0 otherwise.

Examples

```
cbm_str <- "101,102,103,104,201,202"
cbm_df <- string_to_map(cbm_str)
#plot in a male or female bodymap...
plot_male_choirbm(cbm_df, "value")
```

validation

CHOIR Body Map data for approximately 7,000 patients

Description

A non-identifiable, simulated data set generated by randomly permuting data from the CHOIR Body Map validation study.

Usage

```
data(validation)
```

Format

An object of class "data.frame"

id A randomly generated numeric code for each patient.

gender The patient's gender.

race The patient's race.

age The patient's age.

bodymap_regions_csv The patient's CHOIR Body Map in a comma separated string.

score A simulated pain score for demonstration purposes.

References

This data set was derived from the data collected during the study validating the CHOIR Body Map as an instrument for recording a patient's anatomical pain location. doi: [10.1097/pr9.0000000000000880](https://doi.org/10.1097/pr9.0000000000000880)

Examples

```
data(validation)  
head(validation)
```

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