Package ‘CHOIRBM’

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Title  Plots the CHOIR Body Map
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Description Collection of utility functions for visualizing
        body map data collected with the Collaborative Health Outcomes
        Information Registry.
License MIT + file LICENSE
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BugReports https://github.com/emcramer/CHOIRBM/issues
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**gen_example_data**  
*Generate Simple Example Data*

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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**

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

**Arguments**

- `seed` integer to seed the random number generator

**Value**

values data.frame

**Examples**

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

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**plot_female_choirbm**  
*Plot the male CHOIR Body Map*

---

**Description**

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

**Usage**

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

**Arguments**

- `df` data.frame
- `value` string

**Value**

ggrob
plot_male_choirbm

Examples

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

Description

Creates a new plot of the male CHOIR body map.

Usage

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

Arguments

- `df` data.frame
- `value` string

Value

grob

Examples

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

string_to_map

Converts a comma-separated string to a CHOIR BM

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

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

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

\textit{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
validation

Examples

data(validation)
head(validation)
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