# Package 'StudyDiagnostics'

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2 breakDownIndexEvents

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breakDownIndexEvents Break down index events

#### **Description**

For the concepts included in the index event definition, count how often they are encountered at the cohort index date.

## Usage

```
breakDownIndexEvents(
  connectionDetails = NULL,
  connection = NULL,
  cdmDatabaseSchema,
  oracleTempSchema = NULL,
  cohortDatabaseSchema = cdmDatabaseSchema,
  cohortTable = "cohort",
  baseUrl = NULL,
  webApiCohortId = NULL,
  cohortJson = NULL,
  cohortSql = NULL,
  cohortId = cohortId
)
```

#### **Arguments**

connectionDetails

An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package. Can be left NULL if connection is provided.

connection

An object of type connection as created using the connect function in the DatabaseConnector package. Can be left NULL if connectionDetails is provided, in which case a new connection will be opened at the start of the function, and closed when the function finishes.

 ${\tt cdmDatabaseSchema}$ 

Schema name where your patient-level data in OMOP CDM format resides. Note that for SQL Server, this should include both the database and schema name, for example 'cdm\_data.dbo'.

oracleTempSchema

Should be used in Oracle to specify a schema where the user has write privileges for storing temporary tables.

cohortDatabaseSchema

Schema name where your cohort table resides. Note that for SQL Server, this should include both the database and schema name, for example 'scratch.dbo'.

cohortTable Name of the cohort table.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Needn't be provided if cohortJson and cohortSql are provided.

webApiCohortId The ID of the cohort in the WebAPI instance. Needn't be provided if cohortJson

and cohortSql are provided.

cohortJson A character string containing the JSON of a cohort definition. Needn't be pro-

vided if baseUrl and cohortId are provided.

cohortSql The OHDSI SQL representation of the same cohort definition. Needn't be pro-

vided if baseUrl and cohortId are provided.

cohortId The cohort definition ID used to reference the cohort in the cohort table.

#### Value

A data frame with concepts, and per concept the count of how often the concept was encountered at the index date.

compareCohortCharacteristics

Compare cohort characteristics

#### **Description**

Compare the characteristics of two cohorts, computing the standardized difference of the mean.

## Usage

compare Cohort Characteristics (characteristics 1, characteristics 2)

#### **Arguments**

characteristics1

Characteristics of the first cohort, as created using the getCohortCharacteristics function.

characteristics2

Characteristics of the second cohort, as created using the getCohortCharacteristics function.

#### Value

A data frame comparing the characteristics of the two cohorts.

computeCohortOverlap Compute overlap between two cohorts

## **Description**

Computes the overlap between a target and a comparator cohort.

## Usage

```
computeCohortOverlap(
  connectionDetails = NULL,
  connection = NULL,
  cohortDatabaseSchema = cdmDatabaseSchema,
  cohortTable = "cohort",
  targetCohortId,
  comparatorCohortId
)
```

## **Arguments**

connectionDetails

An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package. Can be left NULL if connection is provided.

connection

An object of type connection as created using the connect function in the DatabaseConnector package. Can be left NULL if connectionDetails is provided, in which case a new connection will be opened at the start of the function, and closed when the function finishes.

cohort Database Schema

Schema name where your cohort table resides. Note that for SQL Server, this should include both the database and schema name, for example 'scratch.dbo'.

cohortTable Name of the cohort table.

targetCohortId The cohort definition ID used to reference the target cohort in the cohort table.

 ${\tt comparatorCohortId}$ 

The cohort definition ID used to reference the comparator cohort in the cohort table.

## Value

A data frame with overlap statistics.

createCohortTable 5

#### **Description**

This function creates an empty cohort table. Optionally, additional empty tables are created to store statistics on the various inclusion criteria.

## Usage

```
createCohortTable(
  connectionDetails = NULL,
  connection = NULL,
  cohortDatabaseSchema,
  cohortTable = "cohort",
  createInclusionStatsTables = FALSE,
  resultsDatabaseSchema = cohortDatabaseSchema,
  cohortInclusionTable = paste0(cohortTable, "_inclusion"),
  cohortInclusionResultTable = paste0(cohortTable, "_inclusion_result"),
  cohortInclusionStatsTable = paste0(cohortTable, "_inclusion_stats"),
  cohortSummaryStatsTable = paste0(cohortTable, "_summary_stats")
)
```

#### **Arguments**

connectionDetails

An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package. Can be left NULL if connection is provided.

connection

An object of type connection as created using the connect function in the DatabaseConnector package. Can be left NULL if connectionDetails is provided, in which case a new connection will be opened at the start of the function, and closed when the function finishes.

cohortDatabaseSchema

Schema name where your cohort table resides. Note that for SQL Server, this should include both the database and schema name, for example 'scratch.dbo'.

cohortTable Name of the cohort table. createInclusionStatsTables

Create the four additional tables for storing inclusion rule statistics?

resultsDatabaseSchema

Schema name where the statistics tables reside. Note that for SQL Server, this should include both the database and schema name, for example 'scratch.dbo'.

cohortInclusionTable

Name of the inclusion table, one of the tables for storing inclusion rule statistics. cohortInclusionResultTable

Name of the inclusion result table, one of the tables for storing inclusion rule statistics.

cohortInclusionStatsTable

Name of the inclusion stats table, one of the tables for storing inclusion rule statistics.

 ${\tt cohortSummaryStatsTable}$ 

Name of the summary stats table, one of the tables for storing inclusion rule statistics.

createConceptCountsTable

Create concept counts table

## **Description**

Create a table with counts of how often each concept ID occurs in the CDM.

## Usage

```
createConceptCountsTable(
  connectionDetails = NULL,
  connection = NULL,
  cdmDatabaseSchema,
  conceptCountsDatabaseSchema = cdmDatabaseSchema,
  conceptCountsTable = "concept_counts"
)
```

#### **Arguments**

connectionDetails

An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package. Can be left NULL if connection is provided.

connection

An object of type connection as created using the connect function in the DatabaseConnector package. Can be left NULL if connectionDetails is provided, in which case a new connection will be opened at the start of the function, and closed when the function finishes.

cdmDatabaseSchema

Schema name where your patient-level data in OMOP CDM format resides. Note that for SQL Server, this should include both the database and schema name, for example 'cdm\_data.dbo'.

 ${\tt concept Counts Database Schema}$ 

Schema name where your concept counts table resides. Note that for SQL Server, this should include both the database and schema name, for example 'scratch.dbo'.

conceptCountsTable

Name of the concept counts table. This table can be created using the createConceptCountsTable.

findCohortIncludedSourceConcepts

Check source codes used in a cohort definition

## Description

This function first extracts all concept sets used in a cohort definition. Then, for each concept set the concept found in the CDM database the contributing source codes are identified.

## Usage

```
findCohortIncludedSourceConcepts(
  connectionDetails = NULL,
  connection = NULL,
  cdmDatabaseSchema,
  oracleTempSchema = NULL,
  baseUrl = NULL,
  webApiCohortId = NULL,
  cohortJson = NULL,
  cohortSql = NULL,
  byMonth = FALSE,
  useSourceValues = FALSE
)
```

#### **Arguments**

connectionDetails

An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package. Can be left NULL if connection is provided.

connection

An object of type connection as created using the connect function in the DatabaseConnector package. Can be left NULL if connectionDetails is provided, in which case a new connection will be opened at the start of the function, and closed when the function finishes.

cdmDatabaseSchema

Schema name where your patient-level data in OMOP CDM format resides. Note that for SQL Server, this should include both the database and schema name, for example 'cdm\_data.dbo'.

oracleTempSchema

Should be used in Oracle to specify a schema where the user has write privileges for storing temporary tables.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Needn't be provided if cohortJson and cohortSql are provided.

webApiCohortId The ID of the cohort in the WebAPI instance. Needn't be provided if cohortJson

and cohortSql are provided.

cohortJson A character string containing the JSON of a cohort definition. Needn't be pro-

vided if baseUrl and cohortId are provided.

cohortSql The OHDSI SQL representation of the same cohort definition. Needn't be pro-

vided if baseUrl and cohortId are provided.

byMonth Compute counts by month? If FALSE, only overall counts are computed. useSourceValues

Use the source\_value fields to find the codes used in the data? If not, this analysis will rely entirely on the source\_concept\_id fields instead. Note that, depending on the source data and ETL, it might be possible for the source\_value fields to contain patient-identifiable information by accident.

#### Value

A data frame with source codes, with counts per domain how often the code was encountered in the CDM.

findCohortOrphanConcepts

Find orphan concepts for all concept sets in a cohort

#### **Description**

Searches for concepts that should belong to the concept sets in a cohort definition but don't, for example because of missing source-to-standard concept maps, or erroneous hierarchical relationships.

## Usage

```
findCohortOrphanConcepts(
  connectionDetails = NULL,
  connection = NULL,
  cdmDatabaseSchema,
  oracleTempSchema = NULL,
  baseUrl = NULL,
  webApiCohortId = NULL,
  cohortJson = NULL,
  conceptCountsDatabaseSchema = cdmDatabaseSchema,
  conceptCountsTable = "concept_counts"
)
```

#### **Arguments**

connectionDetails

An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package. Can be left NULL if connection is provided.

connection

An object of type connection as created using the connect function in the DatabaseConnector package. Can be left NULL if connectionDetails is provided, in which case a new connection will be opened at the start of the function, and closed when the function finishes.

cdmDatabaseSchema

Schema name where your patient-level data in OMOP CDM format resides. Note that for SQL Server, this should include both the database and schema name, for example 'cdm\_data.dbo'.

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oracleTempSchema

Should be used in Oracle to specify a schema where the user has write privileges

for storing temporary tables.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Needn't be provided if cohortJson is provided.

webApiCohortId The ID of the cohort in the WebAPI instance. Needn't be provided if cohortJson

is provided.

cohortJson A character string containing the JSON of a cohort definition. Needn't be pro-

vided if baseUrl and webApiCohortId are provided.

conceptCountsDatabaseSchema

Schema name where your concept counts table resides. Note that for SQL Server, this should include both the database and schema name, for example

'scratch.dbo'.

conceptCountsTable

Name of the concept counts table. This table can be created using the createConceptCountsTable.

#### **Details**

Logically, this function performs the following steps for each concept set expression in the cohort definition:

- Given the concept set expression, find all included concepts.
- Find all names of the input concepts, including synonyms, and the names of source concepts that map to them.
- Search for concepts (standard and source) that contain any of those names as substring.
- Filter those concepts to those that are not in the original set of concepts (i.e. orphans).
- Restrict the set of orphan concepts to those that appear in the CDM database and across network concept prevalence (as either source concept or standard concept).

#### Value

A data frame with orphan concepts, with counts how often the code was encountered in the CDM.

findOrphanConcepts

Find (source) concepts that do not roll up to their ancestor(s)

#### **Description**

Searches for concepts that should belong to the set of concepts but don't, for example because of missing source-to-standard concept maps, or erroneous hierarchical relationships.

#### **Usage**

```
findOrphanConcepts(
  connectionDetails = NULL,
  connection = NULL,
  cdmDatabaseSchema,
  oracleTempSchema = NULL,
  conceptIds,
  conceptCountsDatabaseSchema = cdmDatabaseSchema,
  conceptCountsTable = "concept_counts"
)
```

#### **Arguments**

connectionDetails

An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package. Can be left NULL if connection is provided.

connection

An object of type connection as created using the connect function in the DatabaseConnector package. Can be left NULL if connectionDetails is provided, in which case a new connection will be opened at the start of the function, and closed when the function finishes.

cdmDatabaseSchema

Schema name where your patient-level data in OMOP CDM format resides. Note that for SQL Server, this should include both the database and schema name, for example 'cdm data.dbo'.

oracleTempSchema

Should be used in Oracle to specify a schema where the user has write privileges for storing temporary tables.

conceptIds A vector of concept IDs for which we want to find orphans.

conceptCountsDatabaseSchema

Schema name where your concept counts table resides. Note that for SQL Server, this should include both the database and schema name, for example 'scratch.dbo'.

conceptCountsTable

Name of the concept counts table. This table can be created using the createConceptCountsTable.

#### **Details**

Logically, this function performs the following steps for the input set of concept IDs:

- Find all names of the input concepts, including synonyms, and the names of source concepts that map to them.
- Search for concepts (standard and source) that contain any of those names as substring.
- Filter those concepts to those that are not in the original set of concepts (i.e. orphans).
- Restrict the set of orphan concepts to those that appear in the CDM database and across network concept prevalence (as either source concept or standard concept).

#### Value

A data frame with orphan concepts, with counts how often the code was encountered in the CDM.

getCohortCharacteristics

Create characterization of a cohort

#### **Description**

Computes features using all drugs, conditions, procedures, etc. observed on or prior to the cohort index date.

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#### Usage

```
getCohortCharacteristics(
  connectionDetails = NULL,
  connection = NULL,
  cdmDatabaseSchema,
  oracleTempSchema = NULL,
  cohortDatabaseSchema = cdmDatabaseSchema,
  cohortTable = "cohort",
  cohortId,
  covariateSettings = FeatureExtraction::createDefaultCovariateSettings()
)
```

#### **Arguments**

connectionDetails

An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package. Can be left NULL if connection is provided.

connection

An object of type connection as created using the connect function in the DatabaseConnector package. Can be left NULL if connectionDetails is provided, in which case a new connection will be opened at the start of the function, and closed when the function finishes.

cdmDatabaseSchema

Schema name where your patient-level data in OMOP CDM format resides. Note that for SQL Server, this should include both the database and schema name, for example 'cdm data.dbo'.

oracleTempSchema

Should be used in Oracle to specify a schema where the user has write privileges for storing temporary tables.

cohortDatabaseSchema

Schema name where your cohort table resides. Note that for SQL Server, this should include both the database and schema name, for example 'scratch.dbo'.

cohortTable Name of the cohort table.

cohortId The cohort definition ID used to reference the cohort in the cohort table. covariateSettings

Either an object of type covariateSettings as created using one of the create-Covariate functions in the FeatureExtraction package, or a list of such objects.

#### Value

A data frame with cohort characteristics.

getIncidenceProportion

Compute incidence proportion for a cohort

#### **Description**

Returns yearly incidence proportion time series data stratified by age and gender

#### **Usage**

```
getIncidenceProportion(
  connectionDetails = NULL,
  connection = NULL,
  cohortDatabaseSchema,
  cohortTable,
  cdmDatabaseSchema,
  firstOccurrenceOnly = TRUE,
  minObservationTime = 365,
  cohortId
)
```

#### **Arguments**

connectionDetails

An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package. Can be left NULL if connection is provided.

connection

An object of type connection as created using the connect function in the DatabaseConnector package. Can be left NULL if connectionDetails is provided, in which case a new connection will be opened at the start of the function, and closed when the function finishes.

cohortDatabaseSchema

Schema name where your cohort table resides. Note that for SQL Server, this should include both the database and schema name, for example 'scratch.dbo'.

cohortTable Nam

Name of the cohort table.

cdmDatabaseSchema

Schema name where your patient-level data in OMOP CDM format resides. Note that for SQL Server, this should include both the database and schema name, for example 'cdm\_data.dbo'.

firstOccurrenceOnly

Use only the first occurrence of the cohort per person?

minObservationTime

The minimum amount of observation time required before the occurrence of a cohort entry. This is also used to eliminate immortal time from the denominator.

cohortId

The cohort definition ID used to reference the cohort in the cohort table.

#### Details

Returns a data frame of cohort count, background count, and incidence proportion per 1000 persons of cohort entry with the following stratifications: 1) no stratification, 2) gender stratification, 3) age (10-year) stratification, 4) calendar year and age (10-year) stratification, 5) calendar year and gender stratification, 6) calendar year, age (10-year), and gender stratification with option to save dataframes.

#### Value

A data frame

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```
getInclusionStatistics
```

Get statistics on cohort inclusion criteria

#### **Description**

Get statistics on cohort inclusion criteria

## Usage

```
getInclusionStatistics(
  connectionDetails = NULL,
  connection = NULL,
  resultsDatabaseSchema,
  cohortId,
  simplify = TRUE,
  cohortTable = "cohort",
  cohortInclusionTable = paste0(cohortTable, "_inclusion"),
  cohortInclusionResultTable = paste0(cohortTable, "_inclusion_result"),
  cohortInclusionStatsTable = paste0(cohortTable, "_inclusion_stats"),
  cohortSummaryStatsTable = paste0(cohortTable, "_summary_stats")
)
```

#### **Arguments**

connectionDetails

An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package. Can be left NULL if connection

is provided.

connection An object of type connection as created using the connect function in the

DatabaseConnector package. Can be left NULL if connectionDetails is provided, in which case a new connection will be opened at the start of the function,

and closed when the function finishes.

resultsDatabaseSchema

Schema name where the statistics tables reside. Note that for SQL Server, this should include both the database and schema name, for example 'scratch.dbo'.

cohortId The cohort definition ID used to reference the cohort in the cohort table.

simplify Simply output the attrition table?

cohortTable Name of the cohort table. Used only to conveniently derive names of the four

rule statistics tables.

cohortInclusionTable

Name of the inclusion table, one of the tables for storing inclusion rule statistics.

cohortInclusionResultTable

Name of the inclusion result table, one of the tables for storing inclusion rule statistics.

cohortInclusionStatsTable

Name of the inclusion stats table, one of the tables for storing inclusion rule statistics.

cohortSummaryStatsTable

Name of the summary stats table, one of the tables for storing inclusion rule statistics.

#### Value

If 'simplify = TRUE', this function returns a single data frame. Else a list of data frames is returned.

```
getInclusionStatisticsFromFiles
```

Get inclusion criteria statistics from files

## **Description**

Gets inclusion criteria statistics from files, as stored when using the ROhdsiWebApi::insertCohortDefinitionSetInPa function with generateStats = TRUE.

## Usage

```
getInclusionStatisticsFromFiles(
  cohortId,
  folder,
  cohortInclusionFile = file.path(folder, "cohortInclusion.csv"),
  cohortInclusionResultFile = file.path(folder, "cohortIncResult.csv"),
  cohortInclusionStatsFile = file.path(folder, "cohortIncStats.csv"),
  cohortSummaryStatsFile = file.path(folder, "cohortSummaryStats.csv"),
  simplify = TRUE
)
```

## **Arguments**

cohortId The cohort definition ID used to reference the cohort in the cohort table.

folder The path to the folder where the inclusion statistics are stored.

cohortInclusionFile

Name of the inclusion table, one of the tables for storing inclusion rule statistics.

cohortInclusionResultFile

Name of the inclusion result table, one of the tables for storing inclusion rule statistics.

 ${\tt cohortInclusionStatsFile}$ 

Name of the inclusion stats table, one of the tables for storing inclusion rule statistics.

cohortSummaryStatsFile

Name of the summary stats table, one of the tables for storing inclusion rule statistics.

simplify Simply output the attrition table?

## Value

If 'simplify = TRUE', this function returns a single data frame. Else a list of data frames is returned.

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instantiateCohort

Instantiate a cohort

#### **Description**

This function instantiates the cohort in the cohort table. Optionally, the inclusion rule statistics are computed and stored in the inclusion rule statistics tables described in createCohortTable).

## Usage

```
instantiateCohort(
  connectionDetails = NULL,
  connection = NULL,
  cdmDatabaseSchema,
  oracleTempSchema = NULL,
  cohortDatabaseSchema = cdmDatabaseSchema,
  cohortTable = "cohort",
 baseUrl = NULL,
 webApiCohortId = NULL,
  cohortJson = NULL,
  cohortSql = NULL,
  cohortId = webApiCohortId,
  generateInclusionStats = FALSE,
  resultsDatabaseSchema = cohortDatabaseSchema,
  cohortInclusionTable = paste0(cohortTable, "_inclusion"),
  cohortInclusionResultTable = paste0(cohortTable, "_inclusion_result"),
 cohortInclusionStatsTable = paste0(cohortTable, "_inclusion_stats"),
  cohortSummaryStatsTable = paste0(cohortTable, "_summary_stats")
)
```

#### **Arguments**

connectionDetails

An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package. Can be left NULL if connection is provided.

connection

An object of type connection as created using the connect function in the DatabaseConnector package. Can be left NULL if connectionDetails is provided, in which case a new connection will be opened at the start of the function, and closed when the function finishes.

cdmDatabaseSchema

Schema name where your patient-level data in OMOP CDM format resides. Note that for SQL Server, this should include both the database and schema name, for example 'cdm\_data.dbo'.

oracleTempSchema

Should be used in Oracle to specify a schema where the user has write privileges for storing temporary tables.

cohortDatabaseSchema

Schema name where your cohort table resides. Note that for SQL Server, this should include both the database and schema name, for example 'scratch.dbo'.

cohortTable Name of the cohort table.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Needn't be provided if cohortJson and cohortSql are provided.

webApiCohortId The ID of the cohort in the WebAPI instance. Needn't be provided if cohortJson

and cohortSql are provided.

cohortJson A character string containing the JSON of a cohort definition. Needn't be pro-

vided if baseUrl and cohortId are provided.

cohortSql The OHDSI SQL representation of the same cohort definition. Needn't be pro-

vided if baseUrl and cohortId are provided.

cohortId The cohort definition ID used to reference the cohort in the cohort table.

generateInclusionStats

Compute and store inclusion rule statistics?

resultsDatabaseSchema

Schema name where the statistics tables reside. Note that for SQL Server, this should include both the database and schema name, for example 'scratch.dbo'.

cohortInclusionTable

Name of the inclusion table, one of the tables for storing inclusion rule statistics.

cohortInclusionResultTable

Name of the inclusion result table, one of the tables for storing inclusion rule statistics.

cohortInclusionStatsTable

Name of the inclusion stats table, one of the tables for storing inclusion rule statistics.

 ${\tt cohortSummaryStatsTable}$ 

Name of the summary stats table, one of the tables for storing inclusion rule statistics

plotIncidenceProportion

Plot incidence proportion by year, age, and gender

## **Description**

Characterizes the incidence proportion of a phenotype as a time series visualization

## Usage

```
plotIncidenceProportion(
  incidenceProportion,
  restrictToFullAgeData = FALSE,
  fileName = NULL
)
```

#### **Arguments**

 $incidence {\tt Proportion}$ 

Incidence proportion time series data for plotting generated using getIncidenceProportion function.

restrictToFullAgeData

Restrict to panels having data on all ages?

fileName Optional: name of the file where the plot should be saved, for example 'plot.png'.

See the function ggsave in the ggplot2 package for supported file formats.

#### **Details**

Generates time series plots of the incidence proportion per 1000 persons of phenotype entry by year, age, and gender.

## Value

A ggplot object. Use the ggsave function to save to file in a different format.

plotIncidenceProportionByYear

Plot incidence proportion by year

## Description

Characterizes the incidence proportion of a phenotype as a time series visualization

## Usage

plotIncidenceProportionByYear(incidenceProportion, fileName = NULL)

#### **Arguments**

 $incidence {\tt Proportion}$ 

 $Incidence\ proportion\ time\ series\ data\ for\ plotting\ generated\ using\ getIncidence Proportion$ 

function.

fileName Optional: name of the file where the plot should be saved, for example 'plot.png'.

See the function ggsave in the ggplot2 package for supported file formats.

#### **Details**

Generates time series plots of the incidence proportion per 1000 persons of phenotype entry by year.

## Value

A ggplot object. Use the ggsave function to save to file in a different format.

runStudyDiagnostics Run study diagnostics

## Description

Runs the study diagnostics on all (or a subset of) the cohorts instantiated using the ROhdsiWebApi::insertCohortDefin function.

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#### **Usage**

```
runStudyDiagnostics(
 packageName,
 cohortToCreateFile = "settings/CohortsToCreate.csv",
 connectionDetails = NULL,
 connection = NULL,
  cdmDatabaseSchema,
 oracleTempSchema = NULL,
 cohortDatabaseSchema,
 cohortTable = "cohort",
 cohortIds = NULL,
 inclusionStatisticsFolder = NULL,
 exportFolder,
 databaseId,
 databaseName,
 databaseDescription,
 runInclusionStatistics = TRUE,
 runIncludedSourceConcepts = TRUE,
  runOrphanConcepts = TRUE,
  runBreakdownIndexEvents = TRUE,
 runIncidenceProportion = TRUE,
 runCohortOverlap = TRUE,
 runCohortCharacterization = TRUE
)
```

## Arguments

The name of the package containing the cohort definitions packageName

cohortToCreateFile

The location of the cohortToCreate file within the package.

connectionDetails

An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package. Can be left NULL if connection is provided.

connection

An object of type connection as created using the connect function in the DatabaseConnector package. Can be left NULL if connectionDetails is provided, in which case a new connection will be opened at the start of the function, and closed when the function finishes.

cdmDatabaseSchema

Schema name where your patient-level data in OMOP CDM format resides. Note that for SQL Server, this should include both the database and schema name, for example 'cdm\_data.dbo'.

oracleTempSchema

Should be used in Oracle to specify a schema where the user has write privileges for storing temporary tables.

cohortDatabaseSchema

Schema name where your cohort table resides. Note that for SQL Server, this should include both the database and schema name, for example 'scratch.dbo'.

cohortTable Name of the cohort table.

cohortIds Optionally, provide a subset of cohort IDs to restrict the diagnostics to. StudyDiagnostics 19

inclusion Statistics Folder

The folder where the inclusion rule statistics are stored. Can be left NULL if

runInclusionStatistics = FALSE.

exportFolder The folder where the output will be exported to. If this folder does not exist it

will be created.

databaseId A short string for identifying the database (e.g. 'Synpuf').

databaseName The full name of the database.

databaseDescription

A short description (several sentences) of the database.

runInclusionStatistics

Generate and export statistic on the cohort incusion rules?

runIncludedSourceConcepts

Generate and export the source concepts included in the cohorts?

runOrphanConcepts

Generate and export potential orphan concepts?

runBreakdownIndexEvents

Generate and export the breakdown of index events?

runIncidenceProportion

Generate and export the cohort incidence proportions?

runCohortOverlap

Generate and export the cohort overlap?

 ${\tt runCohortCharacterization}$ 

Generate and export the cohort characterization?

StudyDiagnostics StudyDiagnostics

## **Description**

StudyDiagnostics

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