# Package 'ROhdsiWebApi'

October 6, 2020

```
Type Package
Title R package to allow interactivity with a WebApi instance
Version 1.1.3
Date 2020-10-06
Maintainer Gowtham Rao <gowthamrao@gmail.com>
Description Includes R wrappers for calling WebAPI web services.
License Apache License 2.0
Depends R (\xi = 3.1.0),
Imports checkmate,
     dplyr,
     httr ( i = 1.3.1 ),
     jsonlite,
     lifecycle,
     lubridate,
     openxlsx (\xi = 4.0.17),
     ParallelLogger,
     purrr,
     readr,
     RJSONIO,
     scales,
     SqlRender,
     stringr,
     tibble,
     tidyr,
     rlang
Suggests testthat,
     knitr.
     rmarkdown
URL https://github.com/OHDSI/ROhdsiWebApi
\mathbf{BugReports} \ \mathsf{https://github.com/OHDSI/ROhdsiWebApi/issues}
{\bf NeedsCompilation} no
RoxygenNote 7.1.1
Encoding UTF-8
VignetteBuilder knitr
Language en-US
RdMacros lifecycle
```

# R topics documented:

| cancelCharacterizationGeneration   | 3               |
|--|-----------------|
| cancelCohortGeneration   | 3<br>4          |
| cancel Generation  | 5               |
| cancelIncidenceRateGeneration  | 6               |
| cancelPathwayGeneration  | 6               |
| convertConceptSetDefinitionToTable   | 7               |
| createConceptSetWorkbook   | 8               |
| deleteCharacterizationDefinition   | 9               |
| deleteCohortDefinition   | 9               |
|  |                 |
| deleteConceptSetDefinition   | 10              |
| deleteDefinition   | 11              |
| deleteEstimationDefinition   | 12              |
| deleteIncidenceRateDefinition  | 12              |
| deletePathwayDefinition  | 13              |
| deletePredictionDefinition   | 14              |
| detectCharacterizationsByName  | 15              |
| detectCohortsByName  | 15              |
| detectConceptSetsByName  | 16              |
| detectEstimationsByName  | 17              |
| detectIncidenceRatesByName   | 18              |
| detectPathwaysByName   | 18              |
| detectPredictionsByName  | 19              |
| existsCharacterizationName   | 20              |
| existsCohortName   | 21              |
| existsConceptSetName   | 21              |
| existsEstimationName   | 22              |
| existsIncidenceRateName  | 23              |
| existsPathwayName  | 23              |
| existsPredictionName   | 24              |
| getCdmSources  | 25              |
| getCharacterizationDefinition  | 25              |
| getCharacterizationDefinitionsMetaData   | 26              |
| getCharacterizationGenerationInformation   | $\frac{1}{27}$  |
| getCharacterizationResults   | 27              |
| getCohortDefinition  | 28              |
| getCohortDefinitionExpression  | 29              |
| getCohortDefinitionName  | 30              |
| getCohortDefinitionsMetaData   | 30              |
| getCohortDefinitionSql   | 31              |
| getCohortGenerationInformation   | 32              |
| getCohortInclusionRulesAndCounts   | 32              |
| getCohortResults   | 33              |
| getCohortSql   | 34              |
| getConcepts  | $\frac{34}{34}$ |
| · · · · ·  |                 |
| getConceptSetDefinition  | 35              |
| getConceptSetDefinitionsMetaData   | 36              |
| getConceptSetsFromCohortDefinition   | 37              |
| getDefinition  | 37              |
| ·  | 38              |
| getEstimationDefinition  | 39              |
| OUT B CTITE OF LOTE INTO THE CONTROL OF STATE OF | - ₹0            |

|                  | $getGenerationInformation \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $ | 40        |
|------------------|---|-----------|
|                  |   | 41        |
|                  | getIncidenceRateDefinitionsMetaData                               | 42        |
|                  | getIncidenceRateGenerationInformation                             | 42        |
|                  | getIncidenceRateResults   | 43        |
|                  | getPathwayDefinition  | 44        |
|                  | getPathwayDefinitionsMetaData                                     | 45        |
|                  | getPathwayGenerationInformation                                   | 45        |
|                  | getPathwayResults   | 46        |
|                  | getPersonProfile  | 47        |
|                  | getPredictionDefinition   | 48        |
|                  | getPredictionDefinitionsMetaData                                  | 48        |
|                  | getPriorityVocabularyKey  | 49        |
|                  | getResults  | 50        |
|                  | getSourceConcepts   | 50        |
|                  | getWebApiVersion  | 51        |
|                  | insertCohortDefinitionInPackage                                   | 52        |
|                  | insertCohortDefinitionSetInPackage                                | 53        |
|                  | invokeCharacterizationGeneration                                  | 54        |
|                  | invokeCohortGeneration  | 55<br>55  |
|                  | invokeGeneration  | 55        |
|                  |   |           |
|                  | invokeIncidenceRateGeneration                                     | 56        |
|                  | invokePathwayGeneration   | 57        |
|                  | isValidCharacterizationId   | 58        |
|                  | isValidCohortId   | 58        |
|                  | isValidConceptSetId   | 59        |
|                  | isValidEstimationId   | 60        |
|                  | isValidId   | 61        |
|                  | isValidIncidenceRateId  | 61        |
|                  | isValidPathwayId  | 62        |
|                  | isValidPredictionId   | 63        |
|                  | isValidSourceKey  | 64        |
|                  | postCharacterizationDefinition                                    | 64        |
|                  | postCohortDefinition  | 65        |
|                  | postConceptSetDefinition  | 66        |
|                  | postDefinition  | 67        |
|                  | postEstimationDefinition  | 68        |
|                  | postIncidenceRateDefinition                                       | 69        |
|                  | postPathwayDefinition   | 70        |
|                  | postPredictionDefinition  | 71        |
|                  | resolveConceptSet   | 72        |
|                  | •   |           |
| $\mathbf{Index}$ |   | <b>73</b> |
|                  |   |           |

# ${\tt cancelCharacterizationGeneration}$

 $Cancel\ generation\ of\ Characterization\ id.$ 

# Description

Cancel generation of Characterization id.

#### Usage

cancelCharacterizationGeneration(characterizationId, baseUrl, sourceKey)

#### Arguments

characterizationId

An integer id representing the id that uniquely identifies a Characteriza-

tion definition in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

sourceKey The source key for a CDM instance in WebAPI, as defined in the Config-

uration page

### **Details**

Cancel the generation of Characterization id in the WebApi.

### Value

A tibble with job status information.

### Examples

#### cancelCohortGeneration

Cancel generation of Cohort id.

# Description

Cancel generation of Cohort id.

# Usage

```
cancelCohortGeneration(cohortId, baseUrl, sourceKey)
```

# Arguments

cohortId An integer id representing the id that uniquely identifies a Cohort defini-

tion in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

sourceKey The source key for a CDM instance in WebAPI, as defined in the Config-

uration page

cancel Generation 5

#### **Details**

Cancel the generation of Cohort id in the WebApi.

#### Value

A tibble with job status information.

#### **Examples**

cancelGeneration

Invoke generation. Stable

# Description

Invoke generation. Stable

# Usage

```
cancelGeneration(id, baseUrl, sourceKey, category)
```

# Arguments

id An integer id representing the id that uniquely identifies a definition for

the category in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

sourceKey The source key for a CDM instance in WebAPI, as defined in the Config-

uration page

category These are the categories in WebApi. The valid string options are 'concept-

Set', 'cohort', 'characterization', 'pathway, 'incidenceRate', 'estimation',

'prediction'.

# Details

Invoke generation (execution) information.

# Value

Error message if invoke failed.

```
## Not run:
cancelGeneration(id = 13242, category = "cohort", baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

### ${\tt cancelIncidenceRateGeneration}$

Cancel generation of IncidenceRate id.

# Description

Cancel generation of IncidenceRate id.

# Usage

cancelIncidenceRateGeneration(incidenceRateId, baseUrl, sourceKey)

### Arguments

incidenceRateId

An integer id representing the id that uniquely identifies a IncidenceRate

definition in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

sourceKey The source key for a CDM instance in WebAPI, as defined in the Config-

uration page

### **Details**

Cancel the generation of IncidenceRate id in the WebApi.

# Value

A tibble with job status information.

# Examples

# ${\tt cancelPathwayGeneration}$

Cancel generation of Pathway id.

# Description

Cancel generation of Pathway id.

# Usage

```
cancelPathwayGeneration(pathwayId, baseUrl, sourceKey)
```

### Arguments

pathwayId An integer id representing the id that uniquely identifies a Pathway defi-

nition in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

sourceKey The source key for a CDM instance in WebAPI, as defined in the Config-

uration page

# **Details**

Cancel the generation of Pathway id in the WebApi.

### Value

A tibble with job status information.

### Examples

# ${\tt convertConceptSetDefinitionToTable}$

Convert a concept set definition to a table Maturing

# Description

Convert a concept set definition to a table Maturing

# Usage

convert Concept Set Definition To Table (concept Set Definition)

### Arguments

### conceptSetDefinition

A concept set definition, for example as obtained through the getConceptSetDefinition function, or taken from a cohort definition.

### Value

Takes a R (list) representation of the Concept Set expression and returns a table (dataframe) representing the concept set expression. This is useful to create publication friendly output of the concept set expression.

### Examples

# createConceptSetWorkbook

Save a set of concept sets expressions, included concepts, and mapped concepts into a workbook Maturing

# Description

Save a set of concept sets expressions, included concepts, and mapped concepts into a workbook  ${\bf Maturing}$ 

# Usage

```
createConceptSetWorkbook(
  conceptSetIds,
  fileName,
  baseUrl,
  included = FALSE,
  mapped = FALSE
)
```

#### Arguments

conceptSetIds A vector of concept set IDs.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

included Should included concepts be included in the workbook?

Mapped Should mapped concepts be included in the workbook?

# Value

A xlsx workbook that includes a list of all concept set IDs and names and a worksheet for the concepts in each set. Options to include an included concepts and mapped concepts worksheet for each concept set are available.

#### deleteCharacterizationDefinition

Delete Characterization id definition. Stable

# Description

Delete Characterization id definition. Stable

# Usage

deleteCharacterizationDefinition(characterizationId, baseUrl)

### **Arguments**

characterizationId

An integer id representing the id that uniquely identifies a Characterization definition in a WebApi instance.

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". Note, there is no trailing '/'. If trailing '/' is used, you may receive an error.

#### **Details**

Delete the Characterization definition from WebAPI for a given Characterization id

#### Value

None, unless error.

### Examples

deleteCohortDefinition

Delete Cohort id definition. Stable

# Description

Delete Cohort id definition. Stable

### Usage

deleteCohortDefinition(cohortId, baseUrl)

### Arguments

cohortId An integer id representing the id that uniquely identifies a Cohort defini-

tion in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### **Details**

Delete the Cohort definition from WebAPI for a given Cohort id

### Value

None, unless error.

# Examples

```
## Not run:
deleteCohortDefinition(cohortId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

### deleteConceptSetDefinition

Delete ConceptSet id definition. Stable

# Description

Delete ConceptSet id definition. Stable

# Usage

deleteConceptSetDefinition(conceptSetId, baseUrl)

### Arguments

conceptSetId An integer id representing the id that uniquely identifies a ConceptSet

definition in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### **Details**

Delete the ConceptSet definition from WebAPI for a given ConceptSet id

# Value

None, unless error.

deleteDefinition 11

# Examples

```
## Not run:
deleteConceptSetDefinition(conceptSetId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

deleteDefinition

Delete a definition id of a chosen category. Stable

# Description

Delete a definition id of a chosen category. Stable

# Usage

```
deleteDefinition(id, baseUrl, category)
```

# Arguments

id An integer id representing the id that uniquely identifies a definition for

the category in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

category These are the categories in WebApi. The valid string options are 'concept-

Set', 'cohort', 'characterization', 'pathway, 'incidenceRate', 'estimation',

'prediction'.

# Details

Delete the definition for an id of chosen category in WebApi.

# Value

None, unless error.

```
## Not run:
deleteDefinition(id = 13242, baseUrl = "http://server.org:80/WebAPI", category = "cohort")
## End(Not run)
```

deleteEstimationDefinition

Delete Estimation id definition. Stable

# Description

Delete Estimation id definition. Stable

### Usage

```
deleteEstimationDefinition(estimationId, baseUrl)
```

# Arguments

estimationId An integer id representing the id that uniquely identifies a Estimation

definition in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

# **Details**

Delete the Estimation definition from WebAPI for a given Estimation id

#### Value

None, unless error.

# Examples

```
## Not run:
deleteEstimationDefinition(estimationId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

### deleteIncidenceRateDefinition

Delete IncidenceRate id definition. Stable

# Description

Delete IncidenceRate id definition. Stable

# Usage

deleteIncidenceRateDefinition(incidenceRateId, baseUrl)

#### Arguments

incidenceRateId

An integer id representing the id that uniquely identifies a IncidenceRate

definition in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### **Details**

Delete the IncidenceRate definition from WebAPI for a given IncidenceRate id

#### Value

None, unless error.

# Examples

```
## Not run:
deleteIncidenceRateDefinition(incidenceRateId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

deletePathwayDefinition

Delete Pathway id definition. Stable

### Description

Delete Pathway id definition. Stable

# Usage

```
deletePathwayDefinition(pathwayId, baseUrl)
```

# Arguments

pathwayId An integer id representing the id that uniquely identifies a Pathway defi-

nition in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

# Details

Delete the Pathway definition from WebAPI for a given Pathway id

# Value

None, unless error.

# Examples

```
## Not run:
deletePathwayDefinition(pathwayId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

 ${\tt deletePredictionDefinition}$ 

Delete Prediction id definition. Stable

# Description

Delete Prediction id definition. Stable

# Usage

deletePredictionDefinition(predictionId, baseUrl)

# Arguments

predictionId An integer id representing the id that uniquely identifies a Prediction

definition in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

# **Details**

Delete the Prediction definition from WebAPI for a given Prediction id

### Value

None, unless error.

```
## Not run:
deletePredictionDefinition(predictionId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

### ${\tt detectCharacterizationsByName}$

Detect the presence of string matched Characterization definitions. Stable

# Description

Detect the presence of string matched Characterization definitions. Stable

### Usage

```
detectCharacterizationsByName(pattern, negate = FALSE, baseUrl)
```

# Arguments

pattern A pattern to look for. See str\_detect for details.

negate If TRUE, return non-matching elements. See str\_detect for details.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

#### **Details**

Detect string matched Characterization definition names from the WebApi, and retrieve metadata definitions.

### Value

FALSE if no matches. If matched - output from getCharacterizationDefinitionsMetaData

# Examples

 ${\tt detectCohortsByName}$ 

Detect the presence of string matched Cohort definitions. Stable

### Description

Detect the presence of string matched Cohort definitions. Stable

### Usage

```
detectCohortsByName(pattern, negate = FALSE, baseUrl)
```

### Arguments

pattern A pattern to look for. See str\_detect for details.

negate If TRUE, return non-matching elements. See str\_detect for details.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

#### **Details**

Detect string matched Cohort definition names from the WebApi, and retrieve metadata definitions.

### Value

FALSE if no matches. If matched - output from getCohortDefinitionsMetaData

# Examples

# ${\tt detectConceptSetsByName}$

 $\label{lem:conceptSet} Detect\ the\ presence\ of\ string\ matched\ ConceptSet\ definitions.$  Stable

# Description

Detect the presence of string matched ConceptSet definitions. Stable

# Usage

```
detectConceptSetsByName(pattern, negate = FALSE, baseUrl)
```

### Arguments

pattern A pattern to look for. See str\_detect for details.

negate If TRUE, return non-matching elements. See str\_detect for details.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### **Details**

Detect string matched ConceptSet definition names from the WebApi, and retrieve metadata definitions.

#### Value

FALSE if no matches. If matched - output from getConceptSetDefinitionsMetaData

### Examples

### detectEstimationsByName

 $\label{eq:continuous} Detect\ the\ presence\ of\ string\ matched\ Estimation\ definitions.$  Stable

# Description

Detect the presence of string matched Estimation definitions. Stable

### Usage

```
detectEstimationsByName(pattern, negate = FALSE, baseUrl)
```

### Arguments

pattern A pattern to look for. See str\_detect for details.

negate If TRUE, return non-matching elements. See str\_detect for details.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### **Details**

Detect string matched Estimation definition names from the WebApi, and retrieve metadata definitions.

# Value

FALSE if no matches. If matched - output from getEstimationDefinitionsMetaData

#### detectIncidenceRatesByName

Detect the presence of string matched IncidenceRate definitions. Stable

# Description

Detect the presence of string matched IncidenceRate definitions. Stable

### Usage

```
detectIncidenceRatesByName(pattern, negate = FALSE, baseUrl)
```

# Arguments

pattern A pattern to look for. See str\_detect for details.

negate If TRUE, return non-matching elements. See str\_detect for details.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

#### **Details**

Detect string matched IncidenceRate definition names from the WebApi, and retrieve metadata definitions.

# Value

FALSE if no matches. If matched - output from getIncidenceRateDefinitionsMetaData

### Examples

detectPathwaysByName Detect the presence of string matched Pathway definitions. Sta-

# Description

Detect the presence of string matched Pathway definitions. Stable

### Usage

```
detectPathwaysByName(pattern, negate = FALSE, baseUrl)
```

### Arguments

pattern A pattern to look for. See str\_detect for details.

negate If TRUE, return non-matching elements. See str\_detect for details.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### **Details**

Detect string matched Pathway definition names from the WebApi, and retrieve metadata definitions.

### Value

FALSE if no matches. If matched - output from getPathwayDefinitionsMetaData

# Examples

# detectPredictionsByName

 $Detect \ the \ presence \ of \ string \ matched \ Prediction \ definitions. \ {\bf Stable}$ 

# Description

Detect the presence of string matched Prediction definitions. Stable

### Usage

```
detectPredictionsByName(pattern, negate = FALSE, baseUrl)
```

### Arguments

pattern A pattern to look for. See str\_detect for details.

negate If TRUE, return non-matching elements. See str\_detect for details.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### **Details**

Detect string matched Prediction definition names from the WebApi, and retrieve metadata definitions.

#### Value

 $FALSE\ if\ no\ matches.\ If\ matched\ -\ output\ from\ getPredictionDefinitionsMetaData$ 

### Examples

existsCharacterizationName

Check if Characterization definition name exists. Stable

# Description

Check if Characterization definition name exists. Stable

### Usage

```
existsCharacterizationName(characterizationName, baseUrl)
```

# Arguments

characterizationName

A string name for the Characterization to be checked.

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### **Details**

Check if a string name already exists in the WebApi as a Characterization definition name.

### Value

If found, the function will return a tibble with details of the specification. If not found, FALSE will be returned.

existsCohortName 21

existsCohortName

Check if Cohort definition name exists. Stable

# Description

Check if Cohort definition name exists. Stable

### Usage

```
existsCohortName(cohortName, baseUrl)
```

# Arguments

cohortName A string name for the Cohort to be checked.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

#### Details

Check if a string name already exists in the WebApi as a Cohort definition name.

# Value

If found, the function will return a tibble with details of the specification. If not found, FALSE will be returned.

# Examples

existsConceptSetName

Check if ConceptSet definition name exists. Stable

# Description

Check if ConceptSet definition name exists. Stable

#### Usage

```
existsConceptSetName(conceptSetName, baseUrl)
```

### Arguments

conceptSetName A string name for the ConceptSet to be checked.

 ${\bf base URL\ for\ the\ WebApi\ instance,\ for\ example:\ "http://server.org:80/WebAPI"}.$ 

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

22 existsEstimationName

#### **Details**

Check if a string name already exists in the WebApi as a ConceptSet definition name.

#### Value

If found, the function will return a tibble with details of the specification. If not found, FALSE will be returned.

### Examples

 ${\tt existsEstimationName}$ 

Check if Estimation definition name exists. Stable

# Description

Check if Estimation definition name exists. Stable

# Usage

```
existsEstimationName(estimationName, baseUrl)
```

### Arguments

estimationName A string name for the Estimation to be checked.

baseUrl The base URL for the WebApi instance, for ex-

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

# **Details**

Check if a string name already exists in the WebApi as a Estimation definition name.

### Value

If found, the function will return a tibble with details of the specification. If not found, FALSE will be returned.

existsIncidenceRateName 23

```
existsIncidenceRateName
```

Check if IncidenceRate definition name exists. Stable

# Description

Check if IncidenceRate definition name exists. Stable

# Usage

```
existsIncidenceRateName(incidenceRateName, baseUrl)
```

### Arguments

incidenceRateName

A string name for the IncidenceRate to be checked.

baseUrl

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

#### Details

Check if a string name already exists in the WebApi as a IncidenceRate definition name.

### Value

If found, the function will return a tibble with details of the specification. If not found, FALSE will be returned.

# Examples

 ${\tt existsPathwayName}$ 

Check if Pathway definition name exists. Stable

# Description

Check if Pathway definition name exists. Stable

### Usage

```
existsPathwayName(pathwayName, baseUrl)
```

24 existsPredictionName

### Arguments

pathwayName A string name for the Pathway to be checked.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### **Details**

Check if a string name already exists in the WebApi as a Pathway definition name.

#### Value

If found, the function will return a tibble with details of the specification. If not found, FALSE will be returned.

# Examples

existsPredictionName

Check if Prediction definition name exists. Stable

# Description

Check if Prediction definition name exists. Stable

### Usage

```
existsPredictionName(predictionName, baseUrl)
```

# Arguments

predictionName A string name for the Prediction to be checked.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

# Details

Check if a string name already exists in the WebApi as a Prediction definition name.

# Value

If found, the function will return a tibble with details of the specification. If not found, FALSE will be returned.

getCdmSources 25

### Examples

getCdmSources

Get the data sources in the WebAPI instance Stable

# Description

Get the data sources in the WebAPI instance Stable

#### Usage

```
getCdmSources(baseUrl)
```

### **Arguments**

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". Note, there is no trailing '/'. If trailing '/' is used, you may receive an error.

# Details

Obtains the data sources configured in the WebAPI instance.

# Value

A data frame.

```
{\tt getCharacterizationDefinition}
```

Get Characterization id definition. Stable

### Description

Get Characterization id definition. Stable

#### Usage

```
getCharacterizationDefinition(characterizationId, baseUrl)
```

# Arguments

characterizationId

An integer id representing the id that uniquely identifies a Characterization definition in a WebApi instance.

baseUrl

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

#### **Details**

Obtain the Characterization definition from WebAPI for a given Characterization id

#### Value

An R object representing the Characterization definition

### Examples

### ${\tt getCharacterizationDefinitionsMetaData}$

Get the meta data for Characterization definitions. Stable

# Description

Get the meta data for Characterization definitions. Stable

### Usage

getCharacterizationDefinitionsMetaData(baseUrl)

# Arguments

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". Note, there is no trailing '/' is used, you may receive an error.

# Details

Get the meta data of WebApi specifications such as id, name, created/modified details, hash object, etc. from WebApi for Characterization. This function is useful to retrieve the current Characterization specifications.

# Value

A tibble of specification metadata for Characterization. Note: modifiedDate and created-Date are returned as text/character.

```
## Not run:
getCharacterizationDefinitionsMetaData(baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

### ${\tt getCharacterizationGenerationInformation}$

Get generation information for Characterization id.

# Description

Get generation information for Characterization id.

# Usage

getCharacterizationGenerationInformation(characterizationId, baseUrl)

### **Arguments**

characterizationId

An integer id representing the id that uniquely identifies a Characterization definition in a WebApi instance.

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". Note, there is no trailing '/'. If trailing '/' is used, you may receive an error.

#### **Details**

Get generation (execution) information about Characterization for a characterizationId.

#### Value

An R object representing the Characterization definition

### Examples

```
{\tt getCharacterizationResults}
```

Get results for a Characterization Id.

# Description

Get results for a Characterization Id.

### Usage

```
getCharacterizationResults(characterizationId, baseUrl)
```

28 getCohortDefinition

### Arguments

characterizationId

An integer id representing the id that uniquely identifies a characterization

analysis definition in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### **Details**

Get the results for Characterization id.

#### Value

An R object with results.

# Examples

```
## Not run:
getCharacterizationResults(characterizationId = 342, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getCohortDefinition

Get Cohort id definition. Stable

# Description

Get Cohort id definition. Stable

# Usage

```
getCohortDefinition(cohortId, baseUrl)
```

# Arguments

cohortId An integer id representing the id that uniquely identifies a Cohort defini-

tion in a WebApi instance.

 ${\tt baseUrl} \qquad \qquad {\tt The \ base \ URL \ for \ the \ WebApi \ instance, for \ example: "http://server.org:80/WebAPI".}$ 

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### **Details**

Obtain the Cohort definition from WebAPI for a given Cohort id

# Value

An R object representing the Cohort definition

#### **Examples**

```
## Not run:
getCohortDefinition(cohortId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getCohortDefinitionExpression

(Deprecated) Get a cohort definition expression

### Description

(Deprecated) Get a cohort definition expression

# Usage

getCohortDefinitionExpression(cohortId, baseUrl)

# Arguments

cohortId An integer id representing the id that uniquely identifies a cohort defini-

tion in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### **Details**

(Deprecated) Obtain the JSON expression from WebAPI for a given cohort id

# Value

A JSON list object representing the cohort definition This function has been deprecated. As an alternative please use the following steps as in the example below: 1) cohortDefinition ;- getCohortDefinition(baseUrl = baseUrl, cohortId = 15873) 2) validJsonExpression ;- RJSONIO::toJSON(cohortDefinition\$expression) 3) save validJsonExpression object as .txt"

```
## Not run:
# This will obtain a cohort definition's JSON expression:
getCohortDefinitionExpression(cohortId = 282, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getCohortDefinitionName

(Deprecated) Get a cohort definition's name from WebAPI

# Description

(Deprecated) Get a cohort definition's name from WebAPI

### Usage

getCohortDefinitionName(baseUrl, cohortId, formatName = FALSE)

### Arguments

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

cohortId An integer id representing the id that uniquely identifies a cohort defini-

tion in a WebApi instance.

formatName Should the name be formatted to remove prefixes and underscores?

# **Details**

(Deprecated) Obtains the name of a cohort. This function has been deprecated. As an alternative please use getCohortDefinition

# Value

The name of the cohort.

 ${\tt getCohortDefinitionsMetaData}$ 

Get the meta data for Cohort definitions. Stable

# Description

Get the meta data for Cohort definitions. Stable

# Usage

getCohortDefinitionsMetaData(baseUrl)

# Arguments

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

#### **Details**

Get the meta data of WebApi specifications such as id, name, created/modified details, hash object, etc. from WebApi for Cohort. This function is useful to retrieve the current Cohort specifications.

#### Value

A tibble of specification metadata for Cohort. Note: modifiedDate and createdDate are returned as text/character.

### Examples

```
## Not run:
getCohortDefinitionsMetaData(baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getCohortDefinitionSql

Get a cohort definition's SQL from WebAPI

### Description

Get a cohort definition's SQL from WebAPI

### Usage

```
getCohortDefinitionSql(cohortId, baseUrl, generateStats = TRUE)
```

# Arguments

cohortId An integer id representing the id that uniquely identifies a cohort defini-

tion in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

generateStats Should the SQL include the code for generating inclusion rule statistics?

Note that if TRUE, several additional tables are expected to exists as

described in the details. By default this is TRUE.

# Details

Obtains the template SQL of a cohort. When using generateStats = TRUE, the following tables are required to exist when executing the SQL: cohort\_inclusion, cohort\_inclusion\_result, cohort\_inclusion\_stats, and cohort\_summary\_stats. Also note that the cohort\_inclusion table should be populated with the names of the rules prior to executing the cohort definition SQL.

### Value

The templated SQL to generate the cohort

 ${\tt getCohortGenerationInformation}$ 

Get generation information for Cohort id.

# Description

Get generation information for Cohort id.

### Usage

```
getCohortGenerationInformation(cohortId, baseUrl)
```

# Arguments

cohortId An integer id representing the id that uniquely identifies a Cohort defini-

tion in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### **Details**

Get generation (execution) information about Cohort for a cohortId.

#### Value

An R object representing the Cohort definition

# Examples

```
## Not run:
getCohortGenerationInformation(cohortId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

### getCohortInclusionRulesAndCounts

Get cohort inclusion rules and person counts

# Description

Get cohort inclusion rules and person counts

# Usage

```
\verb|getCohortInclusionRulesAndCounts(baseUrl, cohortId, sourceKey)|\\
```

getCohortResults 33

### Arguments

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

cohortId An integer id representing the id that uniquely identifies a cohort defini-

tion in a WebApi instance.

sourceKey The source key for a CDM instance in WebAPI, as defined in the Config-

uration page

# **Details**

Obtains the inclusion rules from a cohort definition and summarizes the person counts per rule

getCohortResults

Get results for a Cohort Id.

# Description

Get results for a Cohort Id.

#### Usage

```
getCohortResults(cohortId, baseUrl)
```

# Arguments

cohortId An integer id representing the id that uniquely identifies a cohort defini-

tion in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### **Details**

Get the results for Cohort id.

### Value

An R object with results.

```
## Not run:
getCohortResults(cohortId = 342, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

34 getConcepts

getCohortSql

Get SQL query for Cohort definition.

### Description

Get SQL query for Cohort definition.

# Usage

```
getCohortSql(cohortDefinition, baseUrl, generateStats = TRUE)
```

# Arguments

cohortDefinition

An R list object (not JSON) representing the Cohort definition. It is the output R expression object of list object from CohortDefinition

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

generateStats Should the SQL include the code for generating inclusion rule statistics?

Note that if TRUE, several additional tables are expected to exists as

described in the details. By default this is TRUE.

### **Details**

Given a valid Cohort definition R-object (not JSON) this function will return the parameterized SQL in OHDSI SQL dialect. This SQL may be used along with OHDSI R-package 'SQLRender' to render/translate to target SQL dialect and parameters rendered.

### Value

An R object containing the SQL for Cohort definition.

# Examples

getConcepts

Get concepts Stable

### Description

Get concepts Stable

#### Usage

```
getConcepts(
  conceptIds,
  baseUrl,
  vocabularySourceKey = NULL,
  snakeCaseToCamelCase = TRUE
)
```

### Arguments

conceptIds A vector of concept IDs.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

vocabularySourceKey

The source key of the Vocabulary. By default, the priority Vocabulary is

used.

snakeCaseToCamelCase

Should the column names of the result be converted to camelCase?

#### Value

A tibble containing information on the concepts.

### Examples

```
## Not run:
conceptSet <- getConceptSet(conceptSetId = 282, baseUrl = "http://server.org:80/WebAPI")
conceptIds <- resolveConceptSet(conceptSet = conceptSet, baseUrl = "http://server.org:80/WebAPI")
concepts <- getConcepts(conceptIds = conceptIds, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)</pre>
```

```
getConceptSetDefinition
```

Get ConceptSet id definition. Stable

### Description

```
Get ConceptSet id definition. Stable
```

# Usage

```
getConceptSetDefinition(conceptSetId, baseUrl)
```

# Arguments

conceptSetId An integer id representing the id that uniquely identifies a ConceptSet

definition in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

#### **Details**

Obtain the ConceptSet definition from WebAPI for a given ConceptSet id

### Value

An R object representing the ConceptSet definition

# Examples

```
## Not run:
getConceptSetDefinition(conceptSetId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getConceptSetDefinitionsMetaData

Get the meta data for ConceptSet definitions. Stable

# Description

Get the meta data for ConceptSet definitions. Stable

### Usage

getConceptSetDefinitionsMetaData(baseUrl)

### **Arguments**

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### Details

Get the meta data of WebApi specifications such as id, name, created/modified details, hash object, etc. from WebApi for ConceptSet. This function is useful to retrieve the current ConceptSet specifications.

# Value

A tibble of specification metadata for ConceptSet. Note: modifiedDate and createdDate are returned as text/character.

```
## Not run:
getConceptSetDefinitionsMetaData(baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

#### ${\tt getConceptSetsFromCohortDefinition}$

Get concept set expressions from cohort definition Maturing

### Description

Get all concept set expressions from a cohort definition object as a signel dataframe

### Usage

getConceptSetsFromCohortDefinition(cohortDefinition)

### Arguments

cohortDefinition

An R-object (not JSON) representing the cohort definition

#### Value

A tibble data frame with all the concept sets in the cohort definition R-object

 ${\tt getDefinition}$ 

Get the definition for an id of chosen category in WebApi. Stable

### Description

Get the definition for an id of chosen category in WebApi. Stable

### Usage

```
getDefinition(id, category, baseUrl)
```

#### **Arguments**

An integer id representing the id that uniquely identifies a definition for

the category in a WebApi instance.

category These are the categories in WebApi. The valid string options are 'concept-

Set', 'cohort', 'characterization', 'pathway, 'incidenceRate', 'estimation',

'prediction'.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### **Details**

Get the definition for an id of chosen category in WebApi. The return object will be a R representation of the definition, that may be reconverted to JSON.

# Value

An R object representing the definition

#### Examples

```
## Not run:
getDefinition(id = 13242, category = "cohort", baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

#### getDefinitionsMetadata

Retrieve the meta data for WebApi definitions of a certain category Stable

### Description

Retrieve the meta data for WebApi definitions of a certain category Stable

#### Usage

```
getDefinitionsMetadata(baseUrl, category)
```

### Arguments

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

category These are the categories in WebApi. The valid string options are 'concept-

Set', 'cohort', 'characterization', 'pathway, 'incidenceRate', 'estimation',

'prediction'.

#### **Details**

Obtains the meta data of WebApi specifications such as id, name, created/modified details, hash object, etc for a certain category. The following function categories are supported. Concept-set, Cohort-definition, Cohort-characterization, Pathway-analysis, Incidence rate (ir), estimation and prediction. This function is useful to retrieve the current specifications.

#### Value

A tibble of specification metadata.

```
## Not run:
getDefinitionsMetadata(baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

```
getEstimationDefinition
```

Get Estimation id definition. Stable

#### Description

Get Estimation id definition. Stable

# Usage

getEstimationDefinition(estimationId, baseUrl)

### Arguments

estimationId An integer id representing the id that uniquely identifies a Estimation

definition in a WebApi instance.

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

Note, there is no trailing  $^{\prime}/^{\prime}$ . If trailing  $^{\prime}/^{\prime}$  is used, you may receive an

error.

#### Details

Obtain the Estimation definition from WebAPI for a given Estimation id

### Value

An R object representing the Estimation definition

# Examples

```
## Not run:
getEstimationDefinition(estimationId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

```
getEstimationDefinitionsMetaData
```

Get the meta data for Estimation definitions. Stable

### Description

Get the meta data for Estimation definitions. Stable

### Usage

getEstimationDefinitionsMetaData(baseUrl)

### Arguments

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

#### Details

Get the meta data of WebApi specifications such as id, name, created/modified details, hash object, etc. from WebApi for Estimation. This function is useful to retrieve the current Estimation specifications.

# Value

A tibble of specification metadata for Estimation. Note: modifiedDate and createdDate are returned as text/character.

#### Examples

```
## Not run:
getEstimationDefinitionsMetaData(baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getGenerationInformation

Get generation information. Stable

#### Description

Get generation information. Stable

### Usage

```
getGenerationInformation(id, category, baseUrl)
```

### Arguments

id An integer id representing the id that uniquely identifies a definition for

the category in a WebApi instance.

category The category of expression in WebApi. Only the following strings are

accepted: 'cohort', 'characterization', 'pathway', 'incidenceRate'.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

#### **Details**

Get generation (execution) information.

### Value

An R object with the generation information.

### Examples

getIncidenceRateDefinition

 $Get\ Incidence Rate\ id\ definition.\ {\bf Stable}$ 

### Description

Get IncidenceRate id definition. Stable

# Usage

```
getIncidenceRateDefinition(incidenceRateId, baseUrl)
```

#### Arguments

incidenceRateId

An integer id representing the id that uniquely identifies a IncidenceRate

definition in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### **Details**

Obtain the IncidenceRate definition from WebAPI for a given IncidenceRate id

### Value

An R object representing the IncidenceRate definition

```
## Not run:
getIncidenceRateDefinition(incidenceRateId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

#### ${\tt getIncidenceRateDefinitionsMetaData}$

Get the meta data for IncidenceRate definitions. Stable

# Description

Get the meta data for IncidenceRate definitions. Stable

### Usage

getIncidenceRateDefinitionsMetaData(baseUrl)

#### Arguments

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### **Details**

Get the meta data of WebApi specifications such as id, name, created/modified details, hash object, etc. from WebApi for IncidenceRate. This function is useful to retrieve the current IncidenceRate specifications.

### Value

A tibble of specification metadata for IncidenceRate. Note: modifiedDate and createdDate are returned as text/character.

# Examples

```
## Not run:
getIncidenceRateDefinitionsMetaData(baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

# ${\tt getIncidenceRateGenerationInformation}$

Get generation information for IncidenceRate id.

### Description

Get generation information for IncidenceRate id.

### Usage

getIncidenceRateGenerationInformation(incidenceRateId, baseUrl)

### Arguments

incidenceRateId

An integer id representing the id that uniquely identifies a IncidenceRate

definition in a WebApi instance.

baseUrl

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

#### **Details**

Get generation (execution) information about IncidenceRate for a incidenceRateId.

#### Value

An R object representing the IncidenceRate definition

#### Examples

getIncidenceRateResults

Get results for a IncidenceRate Id.

# Description

Get results for a IncidenceRate Id.

#### Usage

```
getIncidenceRateResults(incidenceRateId, baseUrl)
```

### **Arguments**

incidenceRateId

An integer id representing the id that uniquely identifies a incidence rate

analysis definition in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### Details

Get the results for IncidenceRate id.

# Value

An R object with results.

### Examples

```
## Not run:
getIncidenceRateResults(incidenceRateId = 342, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getPathwayDefinition Get Pathway id definition. Stable

### Description

Get Pathway id definition. Stable

#### Usage

```
getPathwayDefinition(pathwayId, baseUrl)
```

### Arguments

pathwayId An integer id representing the id that uniquely identifies a Pathway defi-

nition in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

# Details

Obtain the Pathway definition from WebAPI for a given Pathway id

### Value

An R object representing the Pathway definition

```
## Not run:
getPathwayDefinition(pathwayId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

### getPathwayDefinitionsMetaData

Get the meta data for Pathway definitions. Stable

# Description

Get the meta data for Pathway definitions. Stable

### Usage

```
getPathwayDefinitionsMetaData(baseUrl)
```

#### Arguments

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

#### **Details**

Get the meta data of WebApi specifications such as id, name, created/modified details, hash object, etc. from WebApi for Pathway. This function is useful to retrieve the current Pathway specifications.

### Value

A tibble of specification metadata for Pathway. Note: modifiedDate and createdDate are returned as text/character.

# Examples

```
## Not run:
getPathwayDefinitionsMetaData(baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

 ${\tt getPathwayGenerationInformation}$ 

Get generation information for Pathway id.

### Description

Get generation information for Pathway id.

### Usage

```
getPathwayGenerationInformation(pathwayId, baseUrl)
```

46 getPathwayResults

#### Arguments

pathwayId An integer id representing the id that uniquely identifies a Pathway defi-

nition in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### **Details**

Get generation (execution) information about Pathway for a pathwayId.

#### Value

An R object representing the Pathway definition

### Examples

```
## Not run:
getPathwayGenerationInformation(pathwayId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getPathwayResults

Get results for a Pathway Id.

# Description

Get results for a Pathway Id.

### Usage

```
getPathwayResults(pathwayId, baseUrl)
```

### Arguments

pathwayId An integer id representing the id that uniquely identifies a pathway anal-

ysis definition in a WebApi instance.

 $base \verb|URL| for the WebApi instance, for example: "http://server.org:80/WebAPI".$ 

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### **Details**

Get the results for Pathway id.

### Value

An R object with results.

getPersonProfile 47

#### Examples

```
## Not run:
getPathwayResults(pathwayId = 342, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getPersonProfile

Get person profile data Maturing

### Description

Get person profile data Maturing

#### Usage

```
getPersonProfile(baseUrl, sourceKey, personId, indexCohortId = NULL)
```

#### Arguments

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

source Key The source key for a CDM instance in WebAPI, as defined in the Config-

uration page

personId The personId of the person whose profile is being reviewed

indexCohortId ¡OPTIONAL; Do you want to use a particular cohortId as the index

cohort? If left NULL, the WebApi will identify the earliest cohort for the person by cohort start date and use it as the index cohort. WebApi uses the cohort start date of the index cohort to calculate the person's index age (ageAtIndex). WebApi will also return the relative position, in days, for each event compared to the index cohorts start date. These relative positions are useful to study the relationship of various events

with respect to the index cohort start date.

### Details

Get a R object with person profile data. This function may be used for visualizing a patients profile in tables or visualization.

### Value

A list of tibble data frame objects corresponding to cohorts, observationPeriod, records and person.

#### getPredictionDefinition

Get Prediction id definition. Stable

#### Description

Get Prediction id definition. Stable

### Usage

getPredictionDefinition(predictionId, baseUrl)

### Arguments

predictionId An integer id representing the id that uniquely identifies a Prediction

definition in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

#### Details

Obtain the Prediction definition from WebAPI for a given Prediction id

### Value

An R object representing the Prediction definition

# Examples

```
## Not run:
getPredictionDefinition(predictionId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

# ${\tt getPredictionDefinitionsMetaData}$

Get the meta data for Prediction definitions. Stable

### Description

Get the meta data for Prediction definitions. Stable

### Usage

getPredictionDefinitionsMetaData(baseUrl)

# Arguments

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". Note, there is no trailing '/' is used, you may receive an

error.

#### **Details**

Get the meta data of WebApi specifications such as id, name, created/modified details, hash object, etc. from WebApi for Prediction. This function is useful to retrieve the current Prediction specifications.

#### Value

A tibble of specification metadata for Prediction. Note: modifiedDate and createdDate are returned as text/character.

### Examples

```
## Not run:
getPredictionDefinitionsMetaData(baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getPriorityVocabularyKey

Get Priority Vocabulary Source Key Stable

### Description

Get Priority Vocabulary Source Key Stable

### Usage

```
getPriorityVocabularyKey(baseUrl)
```

# Arguments

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". Note, there is no trailing '/'. If trailing '/' is used, you may receive an error.

#### **Details**

Obtains the source key of the default OMOP Vocabulary in WebApi.

### Value

A string.

50 getSourceConcepts

getResults

Get generation results Stable

### Description

Get generation results Stable

### Usage

```
getResults(id, baseUrl, category)
```

### Arguments

An integer id representing the id that uniquely identifies a definition for

the category in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

category These are the categories in WebApi. The valid string options are 'concept-

Set', 'cohort', 'characterization', 'pathway, 'incidenceRate', 'estimation',

'prediction'.

### **Details**

Get the results objects from WebApi for a definition of a certain category in WebApi.

### Value

Returns the result objects for a given id and category from the WebApi.

# Examples

```
## Not run:
getResults(id = 282, category = "cohort", baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getSourceConcepts

Get source concepts that map to standard concepts Stable

### Description

Get source concepts that map to standard concepts Stable

#### Usage

```
getSourceConcepts(
  conceptIds,
  baseUrl,
  vocabularySourceKey = NULL,
  snakeCaseToCamelCase = TRUE
)
```

getWebApiVersion 51

### Arguments

conceptIds A list of concept IDs referring to standard concepts.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

vocabularySourceKey

The source key of the Vocabulary. By default, the priority Vocabulary is

used.

snakeCaseToCamelCase

Should the column names of the result be converted to camelCase?

### Value

A tibble containing information on the source concepts.

### Examples

getWebApiVersion

Get the WebAPI version number Stable

# Description

Get the WebAPI version number Stable

### Usage

```
getWebApiVersion(baseUrl)
```

### Arguments

baseUrl

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### Details

Obtains the WebAPI version number.

### Value

A string.

#### insertCohortDefinitionInPackage

Load a cohort definition and insert it into this package Maturing

### Description

Load a cohort definition and insert it into this package Maturing

### Usage

```
insertCohortDefinitionInPackage(
  cohortId,
  name = NULL,
  jsonFolder = "inst/cohorts",
  sqlFolder = "inst/sql/sql_server",
  baseUrl,
  generateStats = FALSE
)
```

#### Arguments

cohortId An integer id representing the id that uniquely identifies a cohort defini-

tion in a WebApi instance.

name The name that will be used for the JSON and SQL files. If not provided,

the name in cohort will be used, but this may not lead to valid file names.

jsonFolder Path to the folder where the JSON representation will be saved.

sqlFolder Path to the folder where the SQL representation will be saved.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

generateStats Should the SQL include the code for generating inclusion rule statistics?

Note that if TRUE, several additional tables are expected to exists as

described in the details.

### **Details**

Load a cohort definition from a WebApi instance and insert it into this package. This will fetch the JSON object and store it in a folder (defaults to 'the inst/cohorts' folder), and fetch the template SQL and store it in another folder (defaults to the 'inst/sql/sql\_server' folder). Both folders will be created if they don't exist. When using generateStats = TRUE, the following tables are required to exist when executing the SQL: cohort\_inclusion, cohort\_inclusion\_result, cohort\_inclusion\_stats, and cohort\_summary\_stats. Also note that the cohort\_inclusion table should be populated with the names of the rules prior to executing the cohort definition SQL. Note: generate inclusion statistics are created for all by default.

```
## Not run:
# This will create 'inst/cohorts/Angioedema.json' and 'inst/sql/sql_server/Angioedema.sql':
```

#### insertCohortDefinitionSetInPackage

Insert a set of cohort definitions into package

### Description

Insert a set of cohort definitions into package

### Usage

```
insertCohortDefinitionSetInPackage(
  fileName = "inst/settings/CohortsToCreate.csv",
  baseUrl,
  jsonFolder = "inst/cohorts",
  sqlFolder = "inst/sql/sql_server",
  rFileName = "R/CreateCohorts.R",
  insertTableSql = TRUE,
  insertCohortCreationR = TRUE,
  generateStats = FALSE,
  packageName
)
```

### Arguments

fileName Name of a CSV file specifying the cohorts to insert. See details for the

expected file format.

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

jsonFolder Path to the folder where the JSON representations will be saved.

sqlFolder Path to the folder where the SQL representations will be saved.

R rFileName Name of R file to generate when insertCohortCreationR = TRUE.

insertTableSql Should the SQL for creating the cohort table be inserted into the package

as well? This file will be called CreateCohortTable.sql.

insertCohortCreationR

Insert R code that will create the cohort table and instantiate the cohorts? This will create a file called R/CreateCohorts.R containing a function

called .createCohorts.

generateStats Should cohort inclusion rule statistics be created?

packageName The name of the package (only needed when inserting the R code as well).

#### Details

The CSV file should have at least the following fields:

atlasId The cohort ID in ATLAS.

**cohortId** The cohort ID that will be used when instantiating the cohort (can be different from atlasId).

**name** The name to be used for the cohort. This name will be used to generate file names, so please use letters and numbers only (no spaces).

#### invokeCharacterizationGeneration

Invoke generation of Characterization id.

### Description

Invoke generation of Characterization id.

#### Usage

invokeCharacterizationGeneration(characterizationId, baseUrl, sourceKey)

#### **Arguments**

characterizationId

An integer id representing the id that uniquely identifies a Characteriza-

tion definition in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

sourceKey The source key for a CDM instance in WebAPI, as defined in the Config-

uration page

### **Details**

Invoke the generation of Characterization id in the WebApi.

#### Value

A tibble with job status information.

invokeCohortGeneration 55

#### invokeCohortGeneration

Invoke generation of Cohort id.

### Description

Invoke generation of Cohort id.

### Usage

invokeCohortGeneration(cohortId, baseUrl, sourceKey)

# Arguments

cohortId An integer id representing the id that uniquely identifies a Cohort defini-

tion in a WebApi instance.

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

Note, there is no trailing  $^{\prime}/^{\prime}.$  If trailing  $^{\prime}/^{\prime}$  is used, you may receive an

error.

sourceKey The source key for a CDM instance in WebAPI, as defined in the Config-

uration page

#### **Details**

Invoke the generation of Cohort id in the WebApi.

### Value

A tibble with job status information.

### Examples

invokeGeneration

Invoke generation. Stable

### Description

Invoke generation. Stable

### Usage

```
invokeGeneration(id, baseUrl, sourceKey, category)
```

### Arguments

id An integer id representing the id that uniquely identifies a definition for

the category in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

source Key The source key for a CDM instance in WebAPI, as defined in the Config-

uration page

category These are the categories in WebApi. The valid string options are 'concept-

Set', 'cohort', 'characterization', 'pathway, 'incidenceRate', 'estimation',

'prediction'.

#### **Details**

Invoke generation (execution) information.

### Value

Error message if invoke failed.

### Examples

```
## Not run:
invokeGeneration(id = 13242, category = "cohort", baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

#### invokeIncidenceRateGeneration

Invoke generation of IncidenceRate id.

### Description

Invoke generation of IncidenceRate id.

#### Usage

invokeIncidenceRateGeneration(incidenceRateId, baseUrl, sourceKey)

# Arguments

incidenceRateId

An integer id representing the id that uniquely identifies a IncidenceRate

definition in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

sourceKey The source key for a CDM instance in WebAPI, as defined in the Config-

uration page

#### **Details**

Invoke the generation of IncidenceRate id in the WebApi.

#### Value

A tibble with job status information.

#### Examples

invokePathwayGeneration

Invoke generation of Pathway id.

### Description

Invoke generation of Pathway id.

#### Usage

invokePathwayGeneration(pathwayId, baseUrl, sourceKey)

# Arguments

pathwayId An integer id representing the id that uniquely identifies a Pathway defi-

nition in a WebApi instance.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

sourceKey The source key for a CDM instance in WebAPI, as defined in the Config-

uration page

### **Details**

Invoke the generation of Pathway id in the WebApi.

#### Value

A tibble with job status information.

58 isValidCohortId

```
is Valid Characterization Id\\
```

is Characterization id a valid definition in the WebApi. Stable

### Description

is Characterization id a valid definition in the WebApi. Stable

### Usage

```
isValidCharacterizationId(characterizationIds, baseUrl)
```

#### Arguments

characterizationIds

A list of integer id(s) of the Characterization to be tested for validity.

baseUrl

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an error.

#### Details

Checks if a set of id for a Characterization is valid. The following checks are performed. 1) checks if all the ids exists in the WebApi i.e. valid.

### Value

A logical vector indicating if an ID is valid.

# Examples

isValidCohortId

is Cohort id a valid definition in the WebApi. Stable

### Description

```
is Cohort id a valid definition in the WebApi. Stable
```

#### Usage

```
isValidCohortId(cohortIds, baseUrl)
```

isValidConceptSetId 59

### Arguments

cohortIds A list of integer id(s) of the Cohort to be tested for validity.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

#### **Details**

Checks if a set of id for a Cohort is valid. The following checks are performed. 1) checks if all the ids exists in the WebApi i.e. valid.

#### Value

A logical vector indicating if an ID is valid.

### Examples

```
## Not run:
isValidCohortId(cohortIds = c(13242, 3423, 34), baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

isValidConceptSetId

is ConceptSet id a valid definition in the WebApi. Stable

# Description

is ConceptSet id a valid definition in the WebApi. Stable

### Usage

```
isValidConceptSetId(conceptSetIds, baseUrl)
```

### Arguments

conceptSetIds A list of integer id(s) of the ConceptSet to be tested for validity.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

#### **Details**

Checks if a set of id for a ConceptSet is valid. The following checks are performed. 1) checks if all the ids exists in the WebApi i.e. valid.

### Value

A logical vector indicating if an ID is valid.

60 is ValidEstimation Id

### Examples

```
## Not run:
isValidConceptSetId(conceptSetIds = c(13242, 3423, 34), baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

isValidEstimationId

is Estimation id a valid definition in the WebApi. Stable

### Description

is Estimation id a valid definition in the WebApi. Stable

#### Usage

```
isValidEstimationId(estimationIds, baseUrl)
```

### Arguments

estimationIds A list of integer id(s) of the Estimation to be tested for validity.

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

Note, there is no trailing  $^{\prime}/^{\prime}.$  If trailing  $^{\prime}/^{\prime}$  is used, you may receive an

error.

#### **Details**

Checks if a set of id for a Estimation is valid. The following checks are performed. 1) checks if all the ids exists in the WebApi i.e. valid.

### Value

A logical vector indicating if an ID is valid.

```
## Not run:
isValidEstimationId(estimationIds = c(13242, 3423, 34), baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

isValidId 61

isValidId

Check if an id is valid. Stable

### Description

Check if an id is valid. Stable

#### Usage

```
isValidId(ids, baseUrl, category)
```

#### Arguments

ids A list of integer id(s) of the category to be tested for validity.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

category These are the categories in WebApi. The valid string options are 'concept-

Set', 'cohort', 'characterization', 'pathway, 'incidenceRate', 'estimation',

'prediction'.

#### **Details**

Checks if a set of id for a category is valid, i.e. checks if all the ids exists in the WebApi i.e. valid.

### Value

A logical vector indicating if an ID is valid.

### Examples

```
## Not run:
isValidId(ids = c(13242, 3423, 34), baseUrl = "http://server.org:80/WebAPI", category = "cohort")
## End(Not run)
```

### isValidIncidenceRateId

is IncidenceRate id a valid definition in the WebApi. Stable

### Description

is IncidenceRate id a valid definition in the WebApi. Stable

#### Usage

```
isValidIncidenceRateId(incidenceRateIds, baseUrl)
```

62 isValidPathwayId

### Arguments

incidenceRateIds

A list of integer id(s) of the IncidenceRate to be tested for validity.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

#### **Details**

Checks if a set of id for a IncidenceRate is valid. The following checks are performed. 1) checks if all the ids exists in the WebApi i.e. valid.

# Value

A logical vector indicating if an ID is valid.

### Examples

isValidPathwayId

is Pathway id a valid definition in the WebApi. Stable

### Description

is Pathway id a valid definition in the WebApi. Stable

# Usage

isValidPathwayId(pathwayIds, baseUrl)

### Arguments

pathwayIds A list of integer id(s) of the Pathway to be tested for validity.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

#### Details

Checks if a set of id for a Pathway is valid. The following checks are performed. 1) checks if all the ids exists in the WebApi i.e. valid.

### Value

A logical vector indicating if an ID is valid.

isValidPredictionId 63

### Examples

```
## Not run:
isValidPathwayId(pathwayIds = c(13242, 3423, 34), baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

isValidPredictionId

is Prediction id a valid definition in the WebApi. Stable

### Description

is Prediction id a valid definition in the WebApi. Stable

#### Usage

isValidPredictionId(predictionIds, baseUrl)

#### Arguments

predictionIds A list of integer id(s) of the Prediction to be tested for validity.

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

Note, there is no trailing  $^{\prime}/^{\prime}.$  If trailing  $^{\prime}/^{\prime}$  is used, you may receive an

error.

#### **Details**

Checks if a set of id for a Prediction is valid. The following checks are performed. 1) checks if all the ids exists in the WebApi i.e. valid.

### Value

A logical vector indicating if an ID is valid.

```
## Not run:
isValidPredictionId(predictionIds = c(13242, 3423, 34), baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

isValidSourceKey

Check if source key is valid. Stable

### Description

Check if source key is valid. Stable

#### Usage

```
isValidSourceKey(sourceKeys, baseUrl)
```

### Arguments

source Key(s) for a CDM instance in WebAPI, as defined in the

Configuration page.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

#### **Details**

Checks if a set of source Key(s) are valid, i.e. checks if all the source Key(s) exists in the WebApi i.e. valid.

### Value

A logical vector indicating if an ID is valid.

# Examples

postCharacterizationDefinition

Post Characterization definition. Maturing

# Description

Post Characterization definition. Maturing

#### Usage

postCharacterizationDefinition(name, characterizationDefinition, baseUrl)

postCohortDefinition 65

#### Arguments

name

A valid name for the definition. WebApi will use this name (if valid) as the name of the definition. WebApi checks for validity, such as uniqueness, absence of unacceptable character etc. An error might be thrown.

characterizationDefinition

An R list object containing the expression for the specification. This will be converted to JSON expression by function and posted into the WebApi. Note: only limited checks are performed in R to check the validity of this  $\dot{}$ 

expression.

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". Note, there is no trailing '/' is used, you may receive an

error.

#### **Details**

Post Characterization definition to WebAPI

#### Value

This function will return a dataframe object with one row describing the posted WebApi expression and its details. If unsuccessful a STOP message will be shown.

## Examples

postCohortDefinition Post Cohort definition. Maturing

#### Description

Post Cohort definition. Maturing

### Usage

```
postCohortDefinition(name, cohortDefinition, baseUrl)
```

#### Arguments

name

A valid name for the definition. WebApi will use this name (if valid) as the name of the definition. WebApi checks for validity, such as uniqueness, absence of unacceptable character etc. An error might be thrown.

### cohortDefinition

An R list object containing the expression for the specification. This will be converted to JSON expression by function and posted into the WebApi. Note: only limited checks are performed in R to check the validity of this expression.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

#### **Details**

Post Cohort definition to WebAPI

### Value

This function will return a dataframe object with one row describing the posted WebApi expression and its details. If unsuccessful a STOP message will be shown.

#### Examples

postConceptSetDefinition

Post ConceptSet definition. Maturing

### Description

Post ConceptSet definition. Maturing

#### Usage

postConceptSetDefinition(name, conceptSetDefinition, baseUrl)

### Arguments

name

A valid name for the definition. WebApi will use this name (if valid) as the name of the definition. WebApi checks for validity, such as uniqueness, absence of unacceptable character etc. An error might be thrown.

conceptSetDefinition

An R list object containing the expression for the specification. This will be converted to JSON expression by function and posted into the WebApi. Note: only limited checks are performed in R to check the validity of this

expression.

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

# Details

Post ConceptSet definition to WebAPI

postDefinition 67

#### Value

This function will return a dataframe object with one row describing the posted WebApi expression and its details. If unsuccessful a STOP message will be shown.

### Examples

postDefinition

Post a definition into WebApi Maturing

#### Description

Post a definition into WebApi Maturing

### Usage

```
postDefinition(baseUrl, name, category, definition)
```

# Arguments

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

name A valid name for the definition. WebApi will use this name (if valid) as the

name of the definition. WebApi checks for validity, such as uniqueness,

absence of unacceptable character etc. An error might be thrown.

category These are the categories in WebApi. The valid string options are 'concept-

Set', 'cohort', 'characterization', 'pathway, 'incidenceRate', 'estimation',

'prediction'.

definition An R list object containing the expression for the specification. This will

be converted to JSON expression by function and posted into the WebApi. Note: only limited checks are performed in R to check the validity of this

expression.

#### Details

Post a definition into WebAPI. Currently only cohort and concept-set are supported.

### Value

This function will return a dataframe object with one row describing the posted WebApi expression and its details. If unsuccessful a STOP message will be shown.

#### Examples

postEstimationDefinition

Post Estimation definition. Maturing

### Description

Post Estimation definition. Maturing

### Usage

```
postEstimationDefinition(name, estimationDefinition, baseUrl)
```

#### Arguments

name

A valid name for the definition. WebApi will use this name (if valid) as the name of the definition. WebApi checks for validity, such as uniqueness, absence of unacceptable character etc. An error might be thrown.

 ${\it estimation} \\ {\it Definition}$ 

An R list object containing the expression for the specification. This will be converted to JSON expression by function and posted into the WebApi. Note: only limited checks are performed in R to check the validity of this

expression.

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". Note, there is no trailing '/' is used, you may receive an

### Details

Post Estimation definition to WebAPI

error.

#### Value

This function will return a dataframe object with one row describing the posted WebApi expression and its details. If unsuccessful a STOP message will be shown.

#### postIncidenceRateDefinition

Post IncidenceRate definition. Maturing

### Description

Post IncidenceRate definition. Maturing

#### Usage

```
postIncidenceRateDefinition(name, incidenceRateDefinition, baseUrl)
```

### Arguments

name A valid name for the definition. WebApi will use this name (if valid) as the

name of the definition. WebApi checks for validity, such as uniqueness,

absence of unacceptable character etc. An error might be thrown.

incidence Rate Definition

An R list object containing the expression for the specification. This will be converted to JSON expression by function and posted into the WebApi. Note: only limited checks are performed in R to check the validity of this

expression.

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

### **Details**

Post IncidenceRate definition to WebAPI

### Value

This function will return a dataframe object with one row describing the posted WebApi expression and its details. If unsuccessful a STOP message will be shown.

postPathwayDefinition Post Pathway definition. Maturing

# Description

Post Pathway definition. Maturing

#### Usage

```
postPathwayDefinition(name, pathwayDefinition, baseUrl)
```

### Arguments

name

A valid name for the definition. WebApi will use this name (if valid) as the name of the definition. WebApi checks for validity, such as uniqueness, absence of unacceptable character etc. An error might be thrown.

pathwayDefinition

An R list object containing the expression for the specification. This will be converted to JSON expression by function and posted into the WebApi. Note: only limited checks are performed in R to check the validity of this  $\dot{}$ 

expression.

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

#### **Details**

Post Pathway definition to WebAPI

### Value

This function will return a dataframe object with one row describing the posted WebApi expression and its details. If unsuccessful a STOP message will be shown.

### postPredictionDefinition

Post Prediction definition. Maturing

### Description

Post Prediction definition. Maturing

#### Usage

```
postPredictionDefinition(name, predictionDefinition, baseUrl)
```

### Arguments

name

A valid name for the definition. WebApi will use this name (if valid) as the name of the definition. WebApi checks for validity, such as uniqueness, absence of unacceptable character etc. An error might be thrown.

predictionDefinition

An R list object containing the expression for the specification. This will be converted to JSON expression by function and posted into the WebApi. Note: only limited checks are performed in R to check the validity of this

expression.

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". Note, there is no trailing '/'. If trailing '/' is used, you may receive an error.

# Details

Post Prediction definition to WebAPI

### Value

This function will return a dataframe object with one row describing the posted WebApi expression and its details. If unsuccessful a STOP message will be shown.

72 resolveConceptSet

resolveConceptSet

Resolve a concept set to the included standard concept IDs Stable

#### Description

Resolve a concept set to the included standard concept IDs Stable

### Usage

```
resolveConceptSet(conceptSetDefinition, baseUrl, vocabularySourceKey = NULL)
```

### Arguments

```
conceptSetDefinition
```

A concept set definition, for example as obtained through the <code>getConceptSetDefinition</code> function, or taken from a cohort definition.

baseUr1

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

Note, there is no trailing '/'. If trailing '/' is used, you may receive an

error.

vocabularySourceKey

The source key of the Vocabulary. By default, the priority Vocabulary is

used.

#### **Details**

Resolve a concept set to the included standard concept IDs

### Value

A vector of standard concept ids.

# Index

| cancel Characterization Generation, $3$           | getCohortGenerationInformation, 32                |
|---|---|
| cancelCohortGeneration, 4                         | getCohortInclusionRulesAndCounts, 32              |
| cancelGeneration, 5                               | getCohortResults, 33                              |
| cancelIncidenceRateGeneration, 6                  | getCohortSql, 34                                  |
|   |   |
| cancelPathwayGeneration, 6                        | getConcepts, 34                                   |
| convertConceptSetDefinitionToTable, 7             | getConceptSetDefinition, 7, 35, 72                |
| createConceptSetWorkbook, 8                       | getConceptSetDefinitionsMetaData, $17$ , $36$     |
| ${\tt deleteCharacterizationDefinition},  9$      | ${\tt getConceptSetsFromCohortDefinition},\ 37$   |
| ${\tt deleteCohortDefinition},  9$                | getDefinition, $37$                               |
| ${\tt deleteConceptSetDefinition}, \ 10$          | getDefinitionsMetadata, $38$                      |
| deleteDefinition, 11                              | ${	t getEstimationDefinition},39$                 |
| ${\sf deleteEstimationDefinition},\ 12$           | getEstimationDefinitionsMetaData, 17,             |
| ${\tt deleteIncidenceRateDefinition},\ 12$        | 39  |
| deletePathwayDefinition, 13                       | getGenerationInformation, $40$                    |
| ${\tt deletePredictionDefinition},14$             | getIncidenceRateDefinition, 41                    |
| ${\sf detectCharacterizationsByName},15$          | <pre>getIncidenceRateDefinitionsMetaData,</pre>   |
| detectCohortsByName, 15                           | 18, 42  |
| ${\tt detectConceptSetsByName},16$                | <pre>getIncidenceRateGenerationInformation,</pre> |
| detectEstimationsByName, 17                       | 42  |
| detectIncidenceRatesByName, 18                    | <pre>getIncidenceRateResults, 43</pre>            |
| detectPathwaysByName, 18                          | getPathwayDefinition, 44                          |
| ${\tt detectPredictionsByName},19$                | getPathwayDefinitionsMetaData, $19,45$            |
|   | ${	t getPathwayGenerationInformation},45$         |
| exists ${\it CharacterizationName},20$            | getPathwayResults, $46$                           |
| existsCohortName, 21                              | getPersonProfile, 47                              |
| existsConceptSetName, 21                          | getPredictionDefinition, 48                       |
| existsEstimationName, 22                          | getPredictionDefinitionsMetaData, 20,             |
| existsIncidenceRateName, 23                       | 48  |
| existsPathwayName, $23$                           | getPriorityVocabularyKey, 49                      |
| exists $PredictionName,24$                        | getResults, 50                                    |
|   | getSourceConcepts, $50$                           |
| ${\tt getCdmSources}, 25$                         | getWebApiVersion, 51                              |
| ${\tt getCharacterizationDefinition}, 25$         |   |
| ${\tt getCharacterizationDefinitionsMetaData},$   | insertCohortDefinitionInPackage, $52$             |
| 15, 26  | ${\tt insertCohortDefinitionSetInPackage}, 53$    |
| ${\tt getCharacterizationGenerationInformation},$ | ${\tt invokeCharacterizationGeneration},\ 54$     |
| 27  | invokeCohortGeneration, $55$                      |
| ${	t getCharacterizationResults},27$              | invokeGeneration, $55$                            |
| ${\tt getCohortDefinition},28$                    | ${\tt invokeIncidenceRateGeneration}, 56$         |
| ${\tt getCohortDefinitionExpression}, 29$         | invokePathwayGeneration, $57$                     |
| ${\tt getCohortDefinitionName},30$                | is ${\sf ValidCharacterizationId},58$             |
| getCohortDefinitionsMetaData, $16$ , $30$         | $\verb isValidCohortId , 58 $                     |
| ${\tt getCohortDefinitionSql}, 31$                | $\verb isValidConceptSetId , 59 $                 |
|   |   |

74 INDEX

```
isValidEstimationId, 60
isValidId, 61
{\tt isValidIncidenceRateId},\, {\tt 61}
isValidPathwayId, 62
isValidPredictionId, 63
\verb|isValidSourceKey|, 64|
postCharacterizationDefinition, 64
\verb"postCohortDefinition", 65"
\verb"postConceptSetDefinition", 66
postDefinition, 67
postEstimationDefinition, 68
postIncidenceRateDefinition, 69
{\tt postPathwayDefinition},\,70
{\tt postPredictionDefinition},\,71
{\tt resolveConceptSet}, 72
str\_detect, 15-19
```