

Package ‘omock’

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Type Package

Title Creation of Mock Observational Medical Outcomes Partnership
Common Data Model

Version 0.1.0

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Description Creates mock data for testing and package development for the
Observational Medical Outcomes Partnership common data model. The
package offers functions crafted with pipeline-friendly
implementation, enabling users to effortlessly include only the
necessary tables for their testing needs.

License Apache License (>= 2)

URL <https://oxford-pharmacoepi.github.io/omock/>

Depends R (>= 2.10)

Imports cli, dplyr, lubridate, methods, omopgenerics (>= 0.0.3),
purrr, rlang, snakecase, stats, stringr

Suggests ggplot2, knitr, rmarkdown, testthat (>= 3.0.0)

VignetteBuilder knitr

Config/testthat/edition 3

Encoding UTF-8

RoxygenNote 7.3.1

NeedsCompilation no

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mockCdmFromTable	<i>The goal of this function is to create a mock Cdm reference from user self defined tables.</i>
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Description

The goal of this function is to create a mock Cdm reference from user self defined tables.

Usage

```
mockCdmFromTable(cdm, cohortTable = NULL, seed = 1)
```

Arguments

cdm	Name of the cdm object
cohortTable	List of user self defined cohort table
seed	random seed

Value

a cdm object

Examples

```
library(omock)
library(dplyr)
cdm <- mockCdmReference()

cohort <- dplyr::tibble(
  cohort_definition_id = c(1, 1, 2, 2, 1, 3, 3, 3, 1, 3),
  subject_id = c(1, 4, 2, 3, 5, 5, 4, 3, 3, 1),
  cohort_start_date = as.Date(
    c(
      "2020-04-01",
      "2021-06-01",
      "2022-05-22",
      "2010-01-01",
      "2019-08-01",
```

```
      "2019-04-07",
      "2021-01-01",
      "2008-02-02",
      "2009-09-09",
      "2021-01-01"
    )
  ),
  cohort_end_date = cohort_start_date)

cdm <- cdm |> mockCdmFromTable(cohortTable = list(cohort = cohort))
```

`mockCdmReference` *Function to create empty cdm reference for mock database*

Description

Function to create empty cdm reference for mock database

Usage

```
mockCdmReference(cdmName = "mock database")
```

Arguments

`cdmName` name of the mock cdm object

Value

an empty cdm object

Examples

```
library(omock)
cdm <- mockCdmReference()

cdm
```

mockCohort	<i>Function to generate synthetic Cohort</i>
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Description

Function to generate synthetic Cohort

Usage

```
mockCohort(  
  cdm,  
  tableName = "cohort",  
  numberCohorts = 1,  
  cohortName = paste0("cohort_", seq_len(numberCohorts)),  
  recordPerson = 1,  
  seed = 1  
)
```

Arguments

cdm	the CDM reference into which the synthetic cohort will be added
tableName	The name of the table within the CDM where the cohort data will be stored. Defaults to "cohort".
numberCohorts	The number of different cohorts to create within the table. Defaults to 1.
cohortName	The name(s) of the cohorts to be created. This can be a single name or a vector of names if multiple cohorts are being created. Defaults to generating names based on a sequence.
recordPerson	The expected number of records per person within each cohort. This can help simulate the frequency of observations for individuals in the cohort.
seed	A random seed to ensure reproducibility of the generated data.

Value

A cdm reference with the mock tables

Examples

```
library(omock)  
cdm <- mockCdmReference() |>  
  mockPerson(nPerson = 100) |>  
  mockObservationPeriod() |>  
  mockCohort(  
    tableName = "omock_example",  
    numberCohorts = 2,  
    cohortName = c("omock_cohort_1", "omock_cohort_2")  
  )
```

mockObservationPeriod *mockObservationPeriod*

Description

mockObservationPeriod

Usage

```
mockObservationPeriod(cdm, seed = 1)
```

Arguments

cdm	Name of the cdm object
seed	random seed

Value

a cdm object with mock observation table

Examples

```
library(omock)
cdm <- mockCdmReference() |>
  mockPerson(nPerson = 100) |>
  mockObservationPeriod()
```

mockPerson *mockPerson*

Description

mockPerson

Usage

```
mockPerson(
  cdm,
  nPerson = 10,
  birthRange = as.Date(c("1950-01-01", "2000-12-31")),
  proportionFemale = 0.5,
  seed = 1
)
```

Arguments

<code>cdm</code>	Name of the cdm object
<code>nPerson</code>	number of mock person to create in person table
<code>birthRange</code>	birthday range of the person in person table
<code>proportionFemale</code>	proportion of person in the person table are female
<code>seed</code>	random seed

Value

A cdm reference with the mock person table

Examples

```
library(omock)
cdm <- mockCdmReference() |>
  mockPerson(n = 100,
             birthRange = as.Date(c("1930-01-01", "2022-01-01"))
  )
```

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