

# Package ‘PatientProfiles’

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**Type** Package

**Title** Identify Characteristics of Patients in the OMOP Common Data Model

**Version** 1.5.0

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**Description** Identify the characteristics of patients in data mapped to the Observational Medical Outcomes Partnership (OMOP) common data model.

**License** Apache License (>= 2)

**Encoding** UTF-8

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**Imports** cli, clock, dplyr, lifecycle, omopgenerics (>= 1.3.1), purrr, rlang, stringr, tidyr

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---

<i>addAge</i>	<i>Compute the age of the individuals at a certain date</i>
---------------	---

---

### Description

Compute the age of the individuals at a certain date

### Usage

```
addAge(
  x,
  indexDate = "cohort_start_date",
  ageName = "age",
  ageGroup = NULL,
  ageMissingMonth = 1,
  ageMissingDay = 1,
  ageImposeMonth = FALSE,
  ageImposeDay = FALSE,
  ageUnit = "years",
  missingAgeGroupValue = "None",
  name = NULL
)
```

### Arguments

<i>x</i>	Table with individuals in the cdm.
<i>indexDate</i>	Variable in <i>x</i> that contains the date to compute the demographics characteristics.
<i>ageName</i>	Age variable name.
<i>ageGroup</i>	if not NULL, a list of <i>ageGroup</i> vectors.

ageMissingMonth      Month of the year assigned to individuals with missing month of birth.  
 ageMissingDay      day of the month assigned to individuals with missing day of birth.  
 ageImposeMonth      TRUE or FALSE. Whether the month of the date of birth will be considered as missing for all the individuals.  
 ageImposeDay      TRUE or FALSE. Whether the day of the date of birth will be considered as missing for all the individuals.  
 ageUnit              Unit for age it can either be 'years', 'months' or 'days'.  
 missingAgeGroupValue      Value to include if missing age.  
 name                Name of the new table, if NULL a temporary table is returned.

**Value**

tibble with the age column added.

**Examples**

```

library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addAge()
  
```

---

<code>addAgeQuery</code>	<i>Query to add the age of the individuals at a certain date</i>
--------------------------	--

---

**Description**

Same as `addAge()`, except query is not computed to a table.

**Usage**

```

addAgeQuery(
  x,
  indexDate = "cohort_start_date",
  ageName = "age",
  ageGroup = NULL,
  ageMissingMonth = 1,
  ageMissingDay = 1,
  ageImposeMonth = FALSE,
  ageImposeDay = FALSE,
  ageUnit = "years",
  missingAgeGroupValue = "None"
)
  
```

**Arguments**

x	Table with individuals in the cdm.
indexDate	Variable in x that contains the date to compute the demographics characteristics.
ageName	Age variable name.
ageGroup	if not NULL, a list of ageGroup vectors.
ageMissingMonth	Month of the year assigned to individuals with missing month of birth.
ageMissingDay	day of the month assigned to individuals with missing day of birth.
ageImposeMonth	TRUE or FALSE. Whether the month of the date of birth will be considered as missing for all the individuals.
ageImposeDay	TRUE or FALSE. Whether the day of the date of birth will be considered as missing for all the individuals.
ageUnit	Unit for age it can either be 'years', 'months' or 'days'.
missingAgeGroupValue	Value to include if missing age.

**Value**

tibble with the age column added.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addAgeQuery()
```

---

addBirthday

*Add the birth day of an individual to a table*

---

**Description****[Experimental]**

The function accounts for leap years and corrects the invalid dates to the next valid date.

**Usage**

```
addBirthday(  
  x,  
  birthday = 0,  
  birthdayName = "birthday",  
  ageMissingMonth = 1L,  
  ageMissingDay = 1L,  
  ageImposeMonth = FALSE,  
  ageImposeDay = FALSE,  
  name = NULL  
)
```

**Arguments**

x	Table with individuals in the cdm.
birthday	Number of birth day.
birthdayName	Birth day variable name.
ageMissingMonth	Month of the year assigned to individuals with missing month of birth.
ageMissingDay	day of the month assigned to individuals with missing day of birth.
ageImposeMonth	TRUE or FALSE. Whether the month of the date of birth will be considered as missing for all the individuals.
ageImposeDay	TRUE or FALSE. Whether the day of the date of birth will be considered as missing for all the individuals.
name	Name of the new table, if NULL a temporary table is returned.

**Value**

The table with a new column containing the birth day.

**Examples**

```
library(PatientProfiles)  
library(dplyr)  
  
cdm <- mockPatientProfiles(source = "duckdb")  
  
cdm$cohort1 |>  
  addBirthday() |>  
  glimpse()  
  
cdm$cohort1 |>  
  addBirthday(birthday = 5, birthdayName = "bithday_5th") |>  
  glimpse()
```

---

addBirthdayQuery	<i>Add the birth day of an individual to a table</i>
------------------	--

---

### Description

**[Experimental]** Same as addBirthday(), except query is not computed to a table.

The function accounts for leap years and corrects the invalid dates to the next valid date.

### Usage

```
addBirthdayQuery(  
  x,  
  birthdayName = "birthday",  
  birthday = 0,  
  ageMissingMonth = 1,  
  ageMissingDay = 1,  
  ageImposeMonth = FALSE,  
  ageImposeDay = FALSE  
)
```

### Arguments

x	Table with individuals in the cdm.
birthdayName	Birth day variable name.
birthday	Number of birth day.
ageMissingMonth	Month of the year assigned to individuals with missing month of birth.
ageMissingDay	day of the month assigned to individuals with missing day of birth.
ageImposeMonth	TRUE or FALSE. Whether the month of the date of birth will be considered as missing for all the individuals.
ageImposeDay	TRUE or FALSE. Whether the day of the date of birth will be considered as missing for all the individuals.

### Value

The table with a query that add the new column containing the birth day.

### Examples

```
library(PatientProfiles)  
library(dplyr)  
  
cdm <- mockPatientProfiles(source = "duckdb")  
  
cdm$cohort1 |>  
  addBirthdayQuery() |>
```

```

glimpse()

cdm$cohort1 |>
  addBirthdayQuery(birthday = 5) |>
  glimpse()

```

---

addCategories	<i>Categorize a numeric variable</i>
---------------	--------------------------------------

---

### Description

Categorize a numeric variable

### Usage

```

addCategories(
  x,
  variable,
  categories,
  missingCategoryValue = "None",
  overlap = FALSE,
  includeLowerBound = TRUE,
  includeUpperBound = TRUE,
  name = NULL
)

```

### Arguments

x	Table with individuals in the cdm.
variable	Target variable that we want to categorize.
categories	List of lists of named categories with lower and upper limit.
missingCategoryValue	Value to assign to those individuals not in any named category. If NULL or NA, missing values will not be changed.
overlap	TRUE if the categories given overlap.
includeLowerBound	Whether to include the lower bound in the group.
includeUpperBound	Whether to include the upper bound in the group.
name	Name of the new table, if NULL a temporary table is returned.

### Value

The x table with the categorical variable added.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

result <- cdm$cohort1 |>
  addAge() |>
  addCategories(
    variable = "age",
    categories = list("age_group" = list(
      "0 to 39" = c(0, 39), "40 to 79" = c(40, 79), "80 to 150" = c(80, 150)
    ))
  )
```

---

addCdmName	<i>Add cdm name</i>
------------	---------------------

---

**Description**

Add cdm name

**Usage**

```
addCdmName(table, cdm = omopgenerics::cdmReference(table))
```

**Arguments**

table	Table in the cdm
cdm	A cdm reference object

**Value**

Table with an extra column with the cdm names

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addCdmName()
```

---

addCohortIntersectCount

*It creates columns to indicate number of occurrences of intersection with a cohort*

---

### Description

It creates columns to indicate number of occurrences of intersection with a cohort

### Usage

```
addCohortIntersectCount(
  x,
  targetCohortTable,
  targetCohortId = NULL,
  indexDate = "cohort_start_date",
  censorDate = NULL,
  targetStartDate = "cohort_start_date",
  targetEndDate = "cohort_end_date",
  window = list(c(0, Inf)),
  nameStyle = "{cohort_name}_{window_name}",
  name = NULL
)
```

### Arguments

x	Table with individuals in the cdm.
targetCohortTable	name of the cohort that we want to check for overlap.
targetCohortId	vector of cohort definition ids to include.
indexDate	Variable in x that contains the date to compute the intersection.
censorDate	whether to censor overlap events at a specific date or a column date of x.
targetStartDate	date of reference in cohort table, either for start (in overlap) or on its own (for incidence).
targetEndDate	date of reference in cohort table, either for end (overlap) or NULL (if incidence).
window	window to consider events of.
nameStyle	naming of the added column or columns, should include required parameters.
name	Name of the new table, if NULL a temporary table is returned.

### Value

table with added columns with overlap information.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addCohortIntersectCount(
    targetCohortTable = "cohort2"
  )
```

---

addCohortIntersectDate

*Date of cohorts that are present in a certain window*

---

**Description**

Date of cohorts that are present in a certain window

**Usage**

```
addCohortIntersectDate(
  x,
  targetCohortTable,
  targetCohortId = NULL,
  indexDate = "cohort_start_date",
  censorDate = NULL,
  targetDate = "cohort_start_date",
  order = "first",
  window = c(0, Inf),
  nameStyle = "{cohort_name}_{window_name}",
  name = NULL
)
```

**Arguments**

x	Table with individuals in the cdm.
targetCohortTable	Cohort table to.
targetCohortId	Cohort IDs of interest from the other cohort table. If NULL, all cohorts will be used with a time variable added for each cohort of interest.
indexDate	Variable in x that contains the date to compute the intersection.
censorDate	whether to censor overlap events at a specific date or a column date of x.
targetDate	Date of interest in the other cohort table. Either cohort_start_date or cohort_end_date.

order	date to use if there are multiple records for an individual during the window of interest. Either first or last.
window	Window of time to identify records relative to the indexDate. Records outside of this time period will be ignored.
nameStyle	naming of the added column or columns, should include required parameters.
name	Name of the new table, if NULL a temporary table is returned.

**Value**

x along with additional columns for each cohort of interest.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addCohortIntersectDate(targetCohortTable = "cohort2")
```

---

addCohortIntersectDays

*It creates columns to indicate the number of days between the current table and a target cohort*

---

**Description**

It creates columns to indicate the number of days between the current table and a target cohort

**Usage**

```
addCohortIntersectDays(
  x,
  targetCohortTable,
  targetCohortId = NULL,
  indexDate = "cohort_start_date",
  censorDate = NULL,
  targetDate = "cohort_start_date",
  order = "first",
  window = c(0, Inf),
  nameStyle = "{cohort_name}_{window_name}",
  name = NULL
)
```

**Arguments**

x	Table with individuals in the cdm.
targetCohortTable	Cohort table to.
targetCohortId	Cohort IDs of interest from the other cohort table. If NULL, all cohorts will be used with a days variable added for each cohort of interest.
indexDate	Variable in x that contains the date to compute the intersection.
sensorDate	whether to censor overlap events at a specific date or a column date of x.
targetDate	Date of interest in the other cohort table. Either cohort_start_date or cohort_end_date.
order	date to use if there are multiple records for an individual during the window of interest. Either first or last.
window	Window of time to identify records relative to the indexDate. Records outside of this time period will be ignored.
nameStyle	naming of the added column or columns, should include required parameters.
name	Name of the new table, if NULL a temporary table is returned.

**Value**

x along with additional columns for each cohort of interest.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addCohortIntersectDays(targetCohortTable = "cohort2")
```

---

addCohortIntersectField

*It creates a column with the field of a desired intersection*

---

**Description**

It creates a column with the field of a desired intersection

**Usage**

```
addCohortIntersectField(
  x,
  targetCohortTable,
  field,
  targetCohortId = NULL,
  indexDate = "cohort_start_date",
  censorDate = NULL,
  targetDate = "cohort_start_date",
  order = "first",
  window = list(c(0, Inf)),
  nameStyle = "{cohort_name}_{field}_{window_name}",
  name = NULL
)
```

**Arguments**

<code>x</code>	Table with individuals in the cdm.
<code>targetCohortTable</code>	name of the cohort that we want to check for overlap.
<code>field</code>	Column of interest in the targetCohort.
<code>targetCohortId</code>	vector of cohort definition ids to include.
<code>indexDate</code>	Variable in <code>x</code> that contains the date to compute the intersection.
<code>censorDate</code>	whether to censor overlap events at a specific date or a column date of <code>x</code> .
<code>targetDate</code>	Date of interest in the other cohort table. Either <code>cohort_start_date</code> or <code>cohort_end_date</code> .
<code>order</code>	date to use if there are multiple records for an individual during the window of interest. Either first or last.
<code>window</code>	Window of time to identify records relative to the <code>indexDate</code> . Records outside of this time period will be ignored.
<code>nameStyle</code>	naming of the added column or columns, should include required parameters.
<code>name</code>	Name of the new table, if NULL a temporary table is returned.

**Value**

table with added columns with overlap information.

**Examples**

```
library(PatientProfiles)
library(dplyr)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort2 <- cdm$cohort2 |>
  mutate(even = if_else(subject_id %% 2, "yes", "no")) |>
  compute(name = "cohort2")
```

```
cdm$cohort1 |>
  addCohortIntersectFlag(
    targetCohortTable = "cohort2"
  )
```

---

addCohortIntersectFlag

*It creates columns to indicate the presence of cohorts*

---

### Description

It creates columns to indicate the presence of cohorts

### Usage

```
addCohortIntersectFlag(
  x,
  targetCohortTable,
  targetCohortId = NULL,
  indexDate = "cohort_start_date",
  censorDate = NULL,
  targetStartDate = "cohort_start_date",
  targetEndDate = "cohort_end_date",
  window = list(c(0, Inf)),
  nameStyle = "{cohort_name}_{window_name}",
  name = NULL
)
```

### Arguments

x	Table with individuals in the cdm.
targetCohortTable	name of the cohort that we want to check for overlap.
targetCohortId	vector of cohort definition ids to include.
indexDate	Variable in x that contains the date to compute the intersection.
censorDate	whether to censor overlap events at a specific date or a column date of x.
targetStartDate	date of reference in cohort table, either for start (in overlap) or on its own (for incidence).
targetEndDate	date of reference in cohort table, either for end (overlap) or NULL (if incidence).
window	window to consider events of.
nameStyle	naming of the added column or columns, should include required parameters.
name	Name of the new table, if NULL a temporary table is returned.

**Value**

table with added columns with overlap information.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addCohortIntersectFlag(
    targetCohortTable = "cohort2"
  )
```

---

addCohortName	<i>Add cohort name for each cohort_definition_id</i>
---------------	--

---

**Description**

Add cohort name for each cohort\_definition\_id

**Usage**

```
addCohortName(cohort)
```

**Arguments**

cohort                    cohort to which add the cohort name

**Value**

cohort with an extra column with the cohort names

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")
cdm$cohort1 |>
  addCohortName()
```

---

addConceptIntersectCount

*It creates column to indicate the count overlap information between a table and a concept*

---

### Description

It creates column to indicate the count overlap information between a table and a concept

### Usage

```
addConceptIntersectCount(
  x,
  conceptSet,
  indexDate = "cohort_start_date",
  censorDate = NULL,
  window = list(c(0, Inf)),
  targetStartDate = "event_start_date",
  targetEndDate = "event_end_date",
  inObservation = TRUE,
  nameStyle = "{concept_name}_{window_name}",
  name = NULL
)
```

### Arguments

x	Table with individuals in the cdm.
conceptSet	Concept set list.
indexDate	Variable in x that contains the date to compute the intersection.
censorDate	whether to censor overlap events at a date column of x
window	window to consider events in.
targetStartDate	Event start date to use for the intersection.
targetEndDate	Event end date to use for the intersection.
inObservation	If TRUE only records inside an observation period will be considered.
nameStyle	naming of the added column or columns, should include required parameters.
name	Name of the new table, if NULL a temporary table is returned.

### Value

table with added columns with overlap information

**Examples**

```

library(PatientProfiles)
library(omopgenerics, warn.conflicts = TRUE)
library(dplyr, warn.conflicts = TRUE)

cdm <- mockPatientProfiles(source = "duckdb")

concept <- tibble(
  concept_id = c(1125315),
  domain_id = "Drug",
  vocabulary_id = NA_character_,
  concept_class_id = "Ingredient",
  standard_concept = "S",
  concept_code = NA_character_,
  valid_start_date = as.Date("1900-01-01"),
  valid_end_date = as.Date("2099-01-01"),
  invalid_reason = NA_character_
) |>
  mutate(concept_name = paste0("concept: ", .data$concept_id))
cdm <- insertTable(cdm, "concept", concept)

cdm$cohort1 |>
  addConceptIntersectCount(conceptSet = list("acetaminophen" = 1125315))

```

---

**addConceptIntersectDate**

*It creates column to indicate the date overlap information between a table and a concept*

---

**Description**

It creates column to indicate the date overlap information between a table and a concept

**Usage**

```

addConceptIntersectDate(
  x,
  conceptSet,
  indexDate = "cohort_start_date",
  censorDate = NULL,
  window = list(c(0, Inf)),
  targetDate = "event_start_date",
  order = "first",
  inObservation = TRUE,
  nameStyle = "{concept_name}_{window_name}",
  name = NULL
)

```

**Arguments**

x	Table with individuals in the cdm.
conceptSet	Concept set list.
indexDate	Variable in x that contains the date to compute the intersection.
sensorDate	whether to censor overlap events at a date column of x
window	window to consider events in.
targetDate	Event date to use for the intersection.
order	last or first date to use for date/days calculations.
inObservation	If TRUE only records inside an observation period will be considered.
nameStyle	naming of the added column or columns, should include required parameters.
name	Name of the new table, if NULL a temporary table is returned.

**Value**

table with added columns with overlap information

**Examples**

```
library(PatientProfiles)
library(omopgenerics, warn.conflicts = TRUE)
library(dplyr, warn.conflicts = TRUE)

cdm <- mockPatientProfiles(source = "duckdb")

concept <- tibble(
  concept_id = c(1125315),
  domain_id = "Drug",
  vocabulary_id = NA_character_,
  concept_class_id = "Ingredient",
  standard_concept = "S",
  concept_code = NA_character_,
  valid_start_date = as.Date("1900-01-01"),
  valid_end_date = as.Date("2099-01-01"),
  invalid_reason = NA_character_
) |>
  mutate(concept_name = paste0("concept: ", .data$concept_id))
cdm <- insertTable(cdm, "concept", concept)

cdm$cohort1 |>
  addConceptIntersectDate(conceptSet = list("acetaminophen" = 1125315))
```

---

addConceptIntersectDays

*It creates column to indicate the days of difference from an index date to a concept*

---

### Description

It creates column to indicate the days of difference from an index date to a concept

### Usage

```
addConceptIntersectDays(
  x,
  conceptSet,
  indexDate = "cohort_start_date",
  censorDate = NULL,
  window = list(c(0, Inf)),
  targetDate = "event_start_date",
  order = "first",
  inObservation = TRUE,
  nameStyle = "{concept_name}_{window_name}",
  name = NULL
)
```

### Arguments

x	Table with individuals in the cdm.
conceptSet	Concept set list.
indexDate	Variable in x that contains the date to compute the intersection.
censorDate	whether to censor overlap events at a date column of x
window	window to consider events in.
targetDate	Event date to use for the intersection.
order	last or first date to use for date/days calculations.
inObservation	If TRUE only records inside an observation period will be considered.
nameStyle	naming of the added column or columns, should include required parameters.
name	Name of the new table, if NULL a temporary table is returned.

### Value

table with added columns with overlap information

**Examples**

```

library(PatientProfiles)
library(omopgenerics, warn.conflicts = TRUE)
library(dplyr, warn.conflicts = TRUE)

cdm <- mockPatientProfiles(source = "duckdb")

concept <- tibble(
  concept_id = c(1125315),
  domain_id = "Drug",
  vocabulary_id = NA_character_,
  concept_class_id = "Ingredient",
  standard_concept = "S",
  concept_code = NA_character_,
  valid_start_date = as.Date("1900-01-01"),
  valid_end_date = as.Date("2099-01-01"),
  invalid_reason = NA_character_
) |>
  mutate(concept_name = paste0("concept: ", .data$concept_id))
cdm <- insertTable(cdm, "concept", concept)

cdm$cohort1 |>
  addConceptIntersectDays(conceptSet = list("acetaminophen" = 1125315))

```

---

**addConceptIntersectField**

*It adds a custom column (field) from the intersection with a certain table subsetted by concept id. In general it is used to add the first value of a certain measurement.*

---

**Description**

It adds a custom column (field) from the intersection with a certain table subsetted by concept id. In general it is used to add the first value of a certain measurement.

**Usage**

```

addConceptIntersectField(
  x,
  conceptSet,
  field,
  indexDate = "cohort_start_date",
  censorDate = NULL,
  window = list(c(0, Inf)),
  targetDate = "event_start_date",

```

```

    order = "first",
    inObservation = TRUE,
    allowDuplicates = FALSE,
    nameStyle = "{field}_{concept_name}_{window_name}",
    name = NULL
  )

```

### Arguments

x	Table with individuals in the cdm.
conceptSet	Concept set list.
field	Column in the standard omop table that you want to add.
indexDate	Variable in x that contains the date to compute the intersection.
sensorDate	Whether to censor overlap events at a date column of x
window	Window to consider events in.
targetDate	Event date to use for the intersection.
order	'last' or 'first' to refer to which event consider if multiple events are present in the same window.
inObservation	If TRUE only records inside an observation period will be considered.
allowDuplicates	Whether to allow multiple records with same conceptSet, person_id and targetDate. If switched to TRUE, the created new columns (field) will be collapsed to a character vector separated by ; to account for multiple values per person.
nameStyle	naming of the added column or columns, should include required parameters.
name	Name of the new table, if NULL a temporary table is returned.

### Value

Table with the field value obtained from the intersection

### Examples

```

library(PatientProfiles)
library(omopgenerics, warn.conflicts = TRUE)
library(dplyr, warn.conflicts = TRUE)

cdm <- mockPatientProfiles(source = "duckdb")

concept <- tibble(
  concept_id = c(1125315),
  domain_id = "Drug",
  vocabulary_id = NA_character_,
  concept_class_id = "Ingredient",
  standard_concept = "S",
  concept_code = NA_character_,
  valid_start_date = as.Date("1900-01-01"),
  valid_end_date = as.Date("2099-01-01"),

```

```

    invalid_reason = NA_character_
  ) |>
  mutate(concept_name = paste0("concept: ", .data$concept_id))
cdm <- insertTable(cdm, "concept", concept)

cdm$cohort1 |>
  addConceptIntersectField(
    conceptSet = list("acetaminophen" = 1125315),
    field = "drug_type_concept_id"
  )

```

---

addConceptIntersectFlag

*It creates column to indicate the flag overlap information between a table and a concept*

---

### Description

It creates column to indicate the flag overlap information between a table and a concept

### Usage

```

addConceptIntersectFlag(
  x,
  conceptSet,
  indexDate = "cohort_start_date",
  censorDate = NULL,
  window = list(c(0, Inf)),
  targetStartDate = "event_start_date",
  targetEndDate = "event_end_date",
  inObservation = TRUE,
  nameStyle = "{concept_name}_{window_name}",
  name = NULL
)

```

### Arguments

x	Table with individuals in the cdm.
conceptSet	Concept set list.
indexDate	Variable in x that contains the date to compute the intersection.
censorDate	whether to censor overlap events at a date column of x
window	window to consider events in.
targetStartDate	Event start date to use for the intersection.

targetEndDate Event end date to use for the intersection.  
 inObservation If TRUE only records inside an observation period will be considered.  
 nameStyle naming of the added column or columns, should include required parameters.  
 name Name of the new table, if NULL a temporary table is returned.

**Value**

table with added columns with overlap information

**Examples**

```
library(PatientProfiles)
library(omopgenerics, warn.conflicts = TRUE)
library(dplyr, warn.conflicts = TRUE)

cdm <- mockPatientProfiles(source = "duckdb")

concept <- tibble(
  concept_id = c(1125315),
  domain_id = "Drug",
  vocabulary_id = NA_character_,
  concept_class_id = "Ingredient",
  standard_concept = "S",
  concept_code = NA_character_,
  valid_start_date = as.Date("1900-01-01"),
  valid_end_date = as.Date("2099-01-01"),
  invalid_reason = NA_character_
) |>
  mutate(concept_name = paste0("concept: ", .data$concept_id))
cdm <- insertTable(cdm, "concept", concept)

cdm$cohort1 |>
  addConceptIntersectFlag(conceptSet = list("acetaminophen" = 1125315))
```

---

addConceptName	<i>Add concept name for each concept_id</i>
----------------	---

---

**Description**

Add concept name for each concept\_id

**Usage**

```
addConceptName(table, column = NULL, nameStyle = "{column}_name")
```

**Arguments**

table	cdm_table that contains column.
column	Column to add the concept names from. If NULL any column that its name ends with concept_id will be used.
nameStyle	Name of the new column.

**Value**

table with an extra column with the concept names.

**Examples**

```
library(PatientProfiles)
library(omock)
library(dplyr, warn.conflicts = FALSE)

cdm <- mockCdmFromDataset(datasetName = "GiBleed", source = "duckdb")

cdm$drug_exposure |>
  addConceptName(column = "drug_concept_id", nameStyle = "drug_name") |>
  glimpse()

cdm$drug_exposure |>
  addConceptName() |>
  glimpse()
```

---

addDateOfBirth      *Add a column with the individual birth date*

---

**Description**

Add a column with the individual birth date

**Usage**

```
addDateOfBirth(
  x,
  dateOfBirthName = "date_of_birth",
  missingDay = 1,
  missingMonth = 1,
  imposeDay = FALSE,
  imposeMonth = FALSE,
  name = NULL
)
```

**Arguments**

x	Table with individuals in the cdm.
dateOfBirthName	dateOfBirth column name.
missingDay	day of the month assigned to individuals with missing day of birth.
missingMonth	Month of the year assigned to individuals with missing month of birth.
imposeDay	TRUE or FALSE. Whether the day of the date of birth will be considered as missing for all the individuals.
imposeMonth	TRUE or FALSE. Whether the month of the date of birth will be considered as missing for all the individuals.
name	Name of the new table, if NULL a temporary table is returned.

**Value**

The function returns the table x with an extra column that contains the date of birth.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addDateOfBirth()
```

---

addDateOfBirthQuery     *Query to add a column with the individual birth date*

---

**Description**

Same as addDateOfBirth(), except query is not computed to a table.

**Usage**

```
addDateOfBirthQuery(
  x,
  dateOfBirthName = "date_of_birth",
  missingDay = 1,
  missingMonth = 1,
  imposeDay = FALSE,
  imposeMonth = FALSE
)
```

**Arguments**

x	Table with individuals in the cdm.
dateOfBirthName	dateOfBirth column name.
missingDay	day of the month assigned to individuals with missing day of birth.
missingMonth	Month of the year assigned to individuals with missing month of birth.
imposeDay	TRUE or FALSE. Whether the day of the date of birth will be considered as missing for all the individuals.
imposeMonth	TRUE or FALSE. Whether the month of the date of birth will be considered as missing for all the individuals.

**Value**

The function returns the table x with an extra column that contains the date of birth.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addDateOfBirthQuery()
```

---

addDeathDate	<i>Add date of death for individuals. Only death within the same observation period than indexDate will be observed.</i>
--------------	--

---

**Description**

Add date of death for individuals. Only death within the same observation period than indexDate will be observed.

**Usage**

```
addDeathDate(
  x,
  indexDate = "cohort_start_date",
  censorDate = NULL,
  window = c(0, Inf),
  deathDateName = "date_of_death",
  name = NULL
)
```

**Arguments**

x	Table with individuals in the cdm.
indexDate	Variable in x that contains the window origin.
sensorDate	Name of a column to stop followup.
window	window to consider events over.
deathDateName	name of the new column to be added.
name	Name of the new table, if NULL a temporary table is returned.

**Value**

table x with the added column with death information added.

**Examples**

```
library(PatientProfiles)
cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addDeathDate()
```

---

addDeathDays	<i>Add days to death for individuals. Only death within the same observation period than indexDate will be observed.</i>
--------------	--

---

**Description**

Add days to death for individuals. Only death within the same observation period than indexDate will be observed.

**Usage**

```
addDeathDays(
  x,
  indexDate = "cohort_start_date",
  sensorDate = NULL,
  window = c(0, Inf),
  deathDaysName = "days_to_death",
  name = NULL
)
```

**Arguments**

x	Table with individuals in the cdm.
indexDate	Variable in x that contains the window origin.
sensorDate	Name of a column to stop followup.
window	window to consider events over.
deathDaysName	name of the new column to be added.
name	Name of the new table, if NULL a temporary table is returned.

**Value**

table x with the added column with death information added.

**Examples**

```
library(PatientProfiles)
cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addDeathDays()
```

---

addDeathFlag	<i>Add flag for death for individuals. Only death within the same observation period than indexDate will be observed.</i>
--------------	---

---

**Description**

Add flag for death for individuals. Only death within the same observation period than indexDate will be observed.

**Usage**

```
addDeathFlag(
  x,
  indexDate = "cohort_start_date",
  sensorDate = NULL,
  window = c(0, Inf),
  deathFlagName = "death",
  name = NULL
)
```

**Arguments**

x	Table with individuals in the cdm.
indexDate	Variable in x that contains the window origin.
sensorDate	Name of a column to stop followup.
window	window to consider events over.
deathFlagName	name of the new column to be added.
name	Name of the new table, if NULL a temporary table is returned.

**Value**

table x with the added column with death information added.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addDeathFlag()
```

---

addDemographics	<i>Compute demographic characteristics at a certain date</i>
-----------------	--

---

**Description**

Compute demographic characteristics at a certain date

**Usage**

```
addDemographics(
  x,
  indexDate = "cohort_start_date",
  age = TRUE,
  ageName = "age",
  ageMissingMonth = 1,
  ageMissingDay = 1,
  ageImposeMonth = FALSE,
  ageImposeDay = FALSE,
  ageUnit = "years",
  ageGroup = NULL,
  missingAgeGroupValue = "None",
  sex = TRUE,
```

```

sexName = "sex",
missingSexValue = "None",
priorObservation = TRUE,
priorObservationName = "prior_observation",
priorObservationType = "days",
futureObservation = TRUE,
futureObservationName = "future_observation",
futureObservationType = "days",
dateOfBirth = FALSE,
dateOfBirthName = "date_of_birth",
name = NULL
)

```

### Arguments

x	Table with individuals in the cdm.
indexDate	Variable in x that contains the date to compute the demographics characteristics.
age	TRUE or FALSE. If TRUE, age will be calculated relative to indexDate.
ageName	Age variable name.
ageMissingMonth	Month of the year assigned to individuals with missing month of birth.
ageMissingDay	day of the month assigned to individuals with missing day of birth.
ageImposeMonth	TRUE or FALSE. Whether the month of the date of birth will be considered as missing for all the individuals.
ageImposeDay	TRUE or FALSE. Whether the day of the date of birth will be considered as missing for all the individuals.
ageUnit	Unit for age it can either be 'years', 'months' or 'days'.
ageGroup	if not NULL, a list of ageGroup vectors.
missingAgeGroupValue	Value to include if missing age.
sex	TRUE or FALSE. If TRUE, sex will be identified.
sexName	Sex variable name.
missingSexValue	Value to include if missing sex.
priorObservation	TRUE or FALSE. If TRUE, days of between the start of the current observation period and the indexDate will be calculated.
priorObservationName	Prior observation variable name.
priorObservationType	Whether to return a "date" or the number of "days".
futureObservation	TRUE or FALSE. If TRUE, days between the indexDate and the end of the current observation period will be calculated.

futureObservationName	Future observation variable name.
futureObservationType	Whether to return a "date" or the number of "days".
dateOfBirth	TRUE or FALSE, if true the date of birth will be return.
dateOfBirthName	dateOfBirth column name.
name	Name of the new table, if NULL a temporary table is returned.

**Value**

cohort table with the added demographic information columns.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addDemographics()
```

---

addDemographicsQuery *Query to add demographic characteristics at a certain date*

---

**Description**

Same as addDemographics(), except query is not computed to a table.

**Usage**

```
addDemographicsQuery(
  x,
  indexDate = "cohort_start_date",
  age = TRUE,
  ageName = "age",
  ageMissingMonth = 1,
  ageMissingDay = 1,
  ageImposeMonth = FALSE,
  ageImposeDay = FALSE,
  ageUnit = "years",
  ageGroup = NULL,
  missingAgeGroupValue = "None",
  sex = TRUE,
```

```

    sexName = "sex",
    missingSexValue = "None",
    priorObservation = TRUE,
    priorObservationName = "prior_observation",
    priorObservationType = "days",
    futureObservation = TRUE,
    futureObservationName = "future_observation",
    futureObservationType = "days",
    dateOfBirth = FALSE,
    dateOfBirthName = "date_of_birth"
)

```

### Arguments

x	Table with individuals in the cdm.
indexDate	Variable in x that contains the date to compute the demographics characteristics.
age	TRUE or FALSE. If TRUE, age will be calculated relative to indexDate.
ageName	Age variable name.
ageMissingMonth	Month of the year assigned to individuals with missing month of birth.
ageMissingDay	day of the month assigned to individuals with missing day of birth.
ageImposeMonth	TRUE or FALSE. Whether the month of the date of birth will be considered as missing for all the individuals.
ageImposeDay	TRUE or FALSE. Whether the day of the date of birth will be considered as missing for all the individuals.
ageUnit	Unit for age it can either be 'years', 'months' or 'days'.
ageGroup	if not NULL, a list of ageGroup vectors.
missingAgeGroupValue	Value to include if missing age.
sex	TRUE or FALSE. If TRUE, sex will be identified.
sexName	Sex variable name.
missingSexValue	Value to include if missing sex.
priorObservation	TRUE or FALSE. If TRUE, days of between the start of the current observation period and the indexDate will be calculated.
priorObservationName	Prior observation variable name.
priorObservationType	Whether to return a "date" or the number of "days".
futureObservation	TRUE or FALSE. If TRUE, days between the indexDate and the end of the current observation period will be calculated.
futureObservationName	Future observation variable name.

futureObservationType      Whether to return a "date" or the number of "days".

dateOfBirth      TRUE or FALSE, if true the date of birth will be return.

dateOfBirthName      dateOfBirth column name.

**Value**

cohort table with the added demographic information columns.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addDemographicsQuery()
```

---

addFutureObservation      *Compute the number of days till the end of the observation period at a certain date*

---

**Description**

Compute the number of days till the end of the observation period at a certain date

**Usage**

```
addFutureObservation(
  x,
  indexDate = "cohort_start_date",
  futureObservationName = "future_observation",
  futureObservationType = "days",
  name = NULL
)
```

**Arguments**

x      Table with individuals in the cdm.

indexDate      Variable in x that contains the date to compute the demographics characteristics.

futureObservationName      Future observation variable name.

futureObservationType      Whether to return a "date" or the number of "days".

name      Name of the new table, if NULL a temporary table is returned.

**Value**

cohort table with added column containing future observation of the individuals.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addFutureObservation()
```

---

addFutureObservationQuery

*Query to add the number of days till the end of the observation period at a certain date*

---

**Description**

Same as addFutureObservation(), except query is not computed to a table.

**Usage**

```
addFutureObservationQuery(
  x,
  indexDate = "cohort_start_date",
  futureObservationName = "future_observation",
  futureObservationType = "days"
)
```

**Arguments**

**x** Table with individuals in the cdm.

**indexDate** Variable in x that contains the date to compute the demographics characteristics.

**futureObservationName** Future observation variable name.

**futureObservationType** Whether to return a "date" or the number of "days".

**Value**

cohort table with added column containing future observation of the individuals.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addFutureObservationQuery()
```

---

addInObservation	<i>Indicate if a certain record is within the observation period</i>
------------------	--

---

**Description**

Indicate if a certain record is within the observation period

**Usage**

```
addInObservation(
  x,
  indexDate = "cohort_start_date",
  window = c(0, 0),
  completeInterval = FALSE,
  nameStyle = "in_observation",
  name = NULL
)
```

**Arguments**

x	Table with individuals in the cdm.
indexDate	Variable in x that contains the date to compute the observation flag.
window	window to consider events of.
completeInterval	If the individuals are in observation for the full window.
nameStyle	Name of the new columns to create, it must contain "window_name" if multiple windows are provided.
name	Name of the new table, if NULL a temporary table is returned.

**Value**

cohort table with the added numeric column assessing observation (1 in observation, 0 not in observation).

## Examples

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addInObservation()
```

---

addInObservationQuery *Query to add a new column to indicate if a certain record is within the observation period*

---

## Description

Same as addInObservation(), except query is not computed to a table.

## Usage

```
addInObservationQuery(
  x,
  indexDate = "cohort_start_date",
  window = c(0, 0),
  completeInterval = FALSE,
  nameStyle = "in_observation"
)
```

## Arguments

x	Table with individuals in the cdm.
indexDate	Variable in x that contains the date to compute the observation flag.
window	window to consider events of.
completeInterval	If the individuals are in observation for the full window.
nameStyle	Name of the new columns to create, it must contain "window_name" if multiple windows are provided.

## Value

cohort table with the added numeric column assessing observation (1 in observation, 0 not in observation).

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addInObservationQuery()
```

---

addObservationPeriodId

*Add the ordinal number of the observation period associated that a given date is in.*

---

**Description**

Add the ordinal number of the observation period associated that a given date is in.

**Usage**

```
addObservationPeriodId(
  x,
  indexDate = "cohort_start_date",
  nameObservationPeriodId = "observation_period_id",
  name = NULL
)
```

**Arguments**

x	Table with individuals in the cdm.
indexDate	Variable in x that contains the date to compute the observation flag.
nameObservationPeriodId	Name of the new column.
name	Name of the new table, if NULL a temporary table is returned.

**Value**

Table with the current observation period id added.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addObservationPeriodId()
```

---

addObservationPeriodIdQuery

*Add the ordinal number of the observation period associated that a given date is in. Result is not computed, only query is added.*

---

**Description**

Add the ordinal number of the observation period associated that a given date is in. Result is not computed, only query is added.

**Usage**

```
addObservationPeriodIdQuery(
  x,
  indexDate = "cohort_start_date",
  nameObservationPeriodId = "observation_period_id"
)
```

**Arguments**

x                    Table with individuals in the cdm.  
indexDate           Variable in x that contains the date to compute the observation flag.  
nameObservationPeriodId  
                      Name of the new column.

**Value**

Table with the current observation period id added.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addObservationPeriodIdQuery()
```

---

addPriorObservation	<i>Compute the number of days of prior observation in the current observation period at a certain date</i>
---------------------	--

---

### Description

Compute the number of days of prior observation in the current observation period at a certain date

### Usage

```
addPriorObservation(  
  x,  
  indexDate = "cohort_start_date",  
  priorObservationName = "prior_observation",  
  priorObservationType = "days",  
  name = NULL  
)
```

### Arguments

x	Table with individuals in the cdm.
indexDate	Variable in x that contains the date to compute the demographics characteristics.
priorObservationName	Prior observation variable name.
priorObservationType	Whether to return a "date" or the number of "days".
name	Name of the new table, if NULL a temporary table is returned.

### Value

cohort table with added column containing prior observation of the individuals.

### Examples

```
library(PatientProfiles)  
  
cdm <- mockPatientProfiles(source = "duckdb")  
  
cdm$cohort1 |>  
  addPriorObservation()
```

---

`addPriorObservationQuery`

*Query to add the number of days of prior observation in the current observation period at a certain date*

---

### Description

Same as `addPriorObservation()`, except query is not computed to a table.

### Usage

```
addPriorObservationQuery(  
  x,  
  indexDate = "cohort_start_date",  
  priorObservationName = "prior_observation",  
  priorObservationType = "days"  
)
```

### Arguments

<code>x</code>	Table with individuals in the cdm.
<code>indexDate</code>	Variable in <code>x</code> that contains the date to compute the demographics characteristics.
<code>priorObservationName</code>	Prior observation variable name.
<code>priorObservationType</code>	Whether to return a "date" or the number of "days".

### Value

cohort table with added column containing prior observation of the individuals.

### Examples

```
library(PatientProfiles)  
  
cdm <- mockPatientProfiles(source = "duckdb")  
  
cdm$cohort1 |>  
  addPriorObservationQuery()
```

---

addSex	<i>Compute the sex of the individuals</i>
--------	---

---

**Description**

Compute the sex of the individuals

**Usage**

```
addSex(x, sexName = "sex", missingSexValue = "None", name = NULL)
```

**Arguments**

x	Table with individuals in the cdm.
sexName	Sex variable name.
missingSexValue	Value to include if missing sex.
name	Name of the new table, if NULL a temporary table is returned.

**Value**

table x with the added column with sex information.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addSex()
```

---

addSexQuery	<i>Query to add the sex of the individuals</i>
-------------	--

---

**Description**

Same as addSex(), except query is not computed to a table.

**Usage**

```
addSexQuery(x, sexName = "sex", missingSexValue = "None")
```

**Arguments**

x                    Table with individuals in the cdm.  
sexName            Sex variable name.  
missingSexValue    Value to include if missing sex.

**Value**

table x with the added column with sex information.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addSexQuery()
```

---

addTableIntersectCount

*Compute number of intersect with an omop table.*

---

**Description**

Compute number of intersect with an omop table.

**Usage**

```
addTableIntersectCount(
  x,
  tableName,
  indexDate = "cohort_start_date",
  censorDate = NULL,
  window = list(c(0, Inf)),
  targetStartDate = startDateColumn(tableName),
  targetEndDate = endDateColumn(tableName),
  inObservation = TRUE,
  nameStyle = "{table_name}_{window_name}",
  name = NULL
)
```

**Arguments**

x	Table with individuals in the cdm.
tableName	Name of the table to intersect with. Options: visit_occurrence, condition_occurrence, drug_exposure, procedure_occurrence, device_exposure, measurement, observation, drug_era, condition_era, specimen, episode.
indexDate	Variable in x that contains the date to compute the intersection.
sensorDate	whether to censor overlap events at a specific date or a column date of x.
window	window to consider events in.
targetStartDate	Column name with start date for comparison.
targetEndDate	Column name with end date for comparison.
inObservation	If TRUE only records inside an observation period will be considered.
nameStyle	naming of the added column or columns, should include required parameters.
name	Name of the new table, if NULL a temporary table is returned.

**Value**

table with added columns with intersect information.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addTableIntersectCount(tableName = "visit_occurrence")
```

---

addTableIntersectDate *Compute date of intersect with an omop table.*

---

**Description**

Compute date of intersect with an omop table.

**Usage**

```
addTableIntersectDate(
  x,
  tableName,
  indexDate = "cohort_start_date",
  sensorDate = NULL,
```

```

    window = list(c(0, Inf)),
    targetDate = startDateColumn(tableName),
    inObservation = TRUE,
    order = "first",
    nameStyle = "{table_name}_{window_name}",
    name = NULL
  )

```

### Arguments

x	Table with individuals in the cdm.
tableName	Name of the table to intersect with. Options: visit_occurrence, condition_occurrence, drug_exposure, procedure_occurrence, device_exposure, measurement, observation, drug_era, condition_era, specimen, episode.
indexDate	Variable in x that contains the date to compute the intersection.
sensorDate	whether to censor overlap events at a specific date or a column date of x.
window	window to consider events in.
targetDate	Target date in tableName.
inObservation	If TRUE only records inside an observation period will be considered.
order	which record is considered in case of multiple records (only required for date and days options).
nameStyle	naming of the added column or columns, should include required parameters.
name	Name of the new table, if NULL a temporary table is returned.

### Value

table with added columns with intersect information.

### Examples

```

library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addTableIntersectDate(tableName = "visit_occurrence")

```

---

addTableIntersectDays *Compute time to intersect with an omop table.*

---

### Description

Compute time to intersect with an omop table.

### Usage

```
addTableIntersectDays(
  x,
  tableName,
  indexDate = "cohort_start_date",
  censorDate = NULL,
  window = list(c(0, Inf)),
  targetDate = startDateColumn(tableName),
  inObservation = TRUE,
  order = "first",
  nameStyle = "{table_name}_{window_name}",
  name = NULL
)
```

### Arguments

x	Table with individuals in the cdm.
tableName	Name of the table to intersect with. Options: visit_occurrence, condition_occurrence, drug_exposure, procedure_occurrence, device_exposure, measurement, observation, drug_era, condition_era, specimen, episode.
indexDate	Variable in x that contains the date to compute the intersection.
censorDate	whether to censor overlap events at a specific date or a column date of x.
window	window to consider events in.
targetDate	Target date in tableName.
inObservation	If TRUE only records inside an observation period will be considered.
order	which record is considered in case of multiple records (only required for date and days options).
nameStyle	naming of the added column or columns, should include required parameters.
name	Name of the new table, if NULL a temporary table is returned.

### Value

table with added columns with intersect information.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addTableIntersectDays(tableName = "visit_occurrence")
```

---

**addTableIntersectField**

*Intersecting the cohort with columns of an OMOP table of user's choice. It will add an extra column to the cohort, indicating the intersected entries with the target columns in a window of the user's choice.*

---

**Description**

Intersecting the cohort with columns of an OMOP table of user's choice. It will add an extra column to the cohort, indicating the intersected entries with the target columns in a window of the user's choice.

**Usage**

```
addTableIntersectField(
  x,
  tableName,
  field,
  indexDate = "cohort_start_date",
  censorDate = NULL,
  window = list(c(0, Inf)),
  targetDate = startDateColumn(tableName),
  inObservation = TRUE,
  order = "first",
  allowDuplicates = FALSE,
  nameStyle = "{table_name}_{field}_{window_name}",
  name = NULL
)
```

**Arguments**

x	Table with individuals in the cdm.
tableName	Name of the table to intersect with. Options: visit_occurrence, condition_occurrence, drug_exposure, procedure_occurrence, device_exposure, measurement, observation, drug_era, condition_era, specimen, episode.

field	The columns from the table in tableName to intersect over. For example, if the user uses visit_occurrence in tableName then for field the possible options include visit_occurrence_id, visit_concept_id, visit_type_concept_id.
indexDate	Variable in x that contains the date to compute the intersection.
sensorDate	whether to censor overlap events at a specific date or a column date of x.
window	window to consider events in when intersecting with the chosen column.
targetDate	The dates in the target columns in tableName that the user may want to restrict to.
inObservation	If TRUE only records inside an observation period will be considered.
order	which record is considered in case of multiple records (only required for date and days options).
allowDuplicates	Whether to allow multiple records with same conceptSet, person_id and targetDate. If switched to TRUE, the created new columns (field) will be collapsed to a character vector separated by ; to account for multiple values per person.
nameStyle	naming of the added column or columns, should include required parameters.
name	Name of the new table, if NULL a temporary table is returned.

**Value**

table with added columns with intersect information.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addTableIntersectField(
    tableName = "visit_occurrence",
    field = "visit_concept_id",
    order = "last",
    window = c(-Inf, -1)
  )
```

---

addTableIntersectFlag *Compute a flag intersect with an omop table.*

---

**Description**

Compute a flag intersect with an omop table.

**Usage**

```
addTableIntersectFlag(
  x,
  tableName,
  indexDate = "cohort_start_date",
  censorDate = NULL,
  window = list(c(0, Inf)),
  targetStartDate = startDateColumn(tableName),
  targetEndDate = endDateColumn(tableName),
  inObservation = TRUE,
  nameStyle = "{table_name}_{window_name}",
  name = NULL
)
```

**Arguments**

x	Table with individuals in the cdm.
tableName	Name of the table to intersect with. Options: visit_occurrence, condition_occurrence, drug_exposure, procedure_occurrence, device_exposure, measurement, observation, drug_era, condition_era, specimen, episode.
indexDate	Variable in x that contains the date to compute the intersection.
censorDate	whether to censor overlap events at a specific date or a column date of x.
window	window to consider events in.
targetStartDate	Column name with start date for comparison.
targetEndDate	Column name with end date for comparison.
inObservation	If TRUE only records inside an observation period will be considered.
nameStyle	naming of the added column or columns, should include required parameters.
name	Name of the new table, if NULL a temporary table is returned.

**Value**

table with added columns with intersect information.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

cdm$cohort1 |>
  addTableIntersectFlag(tableName = "visit_occurrence")
```

---

availableEstimates	<i>Show the available estimates that can be used for the different variable_type supported.</i>
--------------------	---

---

**Description**

Show the available estimates that can be used for the different variable\_type supported.

**Usage**

```
availableEstimates(variableType = NULL, fullQuantiles = FALSE)
```

**Arguments**

variableType	A set of variable types.
fullQuantiles	Whether to display the exact quantiles that can be computed or only the qXX to summarise all of them.

**Value**

A tibble with the available estimates.

**Examples**

```
library(PatientProfiles)

availableEstimates()
availableEstimates("numeric")
availableEstimates(c("numeric", "categorical"))
```

---

benchmarkPatientProfiles	<i>Benchmark intersections and demographics functions for a certain source (cdm).</i>
--------------------------	---

---

**Description**

Benchmark intersections and demographics functions for a certain source (cdm).

**Usage**

```
benchmarkPatientProfiles(cdm, n = 50000, iterations = 1)
```

**Arguments**

- cdm            A cdm\_reference object.
- n             Size of the synthetic cohorts used to benchmark.
- iterations    Number of iterations to run the benchmark.

**Value**

A summarise\_result object with the summary statistics.

---

endDateColumn            *Get the name of the end date column for a certain table in the cdm*

---

**Description**

Get the name of the end date column for a certain table in the cdm

**Usage**

```
endDateColumn(tableName)
```

**Arguments**

- tableName     Name of the table.

**Value**

Name of the end date column in that table.

**Examples**

```
library(PatientProfiles)

endDateColumn("condition_occurrence")
```

---

filterCohortId	<i>Filter a cohort according to cohort_definition_id column, the result is not computed into a table. only a query is added. Used usually as internal functions of other packages.</i>
----------------	--

---

**Description**

Filter a cohort according to cohort\_definition\_id column, the result is not computed into a table. only a query is added. Used usually as internal functions of other packages.

**Usage**

```
filterCohortId(cohort, cohortId = NULL)
```

**Arguments**

cohort	A cohort_table object.
cohortId	A vector with cohort ids.

**Value**

A cohort\_table object.

---

filterInObservation	<i>Filter the rows of a cdm_table to the ones in observation that indexDate is in observation.</i>
---------------------	--

---

**Description**

Filter the rows of a cdm\_table to the ones in observation that indexDate is in observation.

**Usage**

```
filterInObservation(x, indexDate)
```

**Arguments**

x	A cdm_table object.
indexDate	Name of a column of x that is a date.

**Value**

A cdm\_table that is a subset of the original table.

**Examples**

```
## Not run:
library(PatientProfiles)
library(omock)

cdm <- mockCdmFromDataset(datasetName = "GiBleed", source = "duckdb")

cdm$condition_occurrence |>
  filterInObservation(indexDate = "condition_start_date")

## End(Not run)
```

---

mockDisconnect	<i>Deprecated</i>
----------------	-------------------

---

**Description**

Deprecated

**Usage**

```
mockDisconnect(cdm)
```

**Arguments**

cdm                    A cdm\_reference object.

---

mockPatientProfiles	<i>It creates a mock database for testing PatientProfiles package</i>
---------------------	---

---

**Description**

It creates a mock database for testing PatientProfiles package

**Usage**

```
mockPatientProfiles(
  numberIndividuals = 10,
  ...,
  source = "local",
  con = lifecycle::deprecated(),
  writeSchema = lifecycle::deprecated(),
  seed = lifecycle::deprecated()
)
```

**Arguments**

numberIndividuals	Number of individuals to create in the cdm reference.
...	User self defined tables to put in cdm, it can input as many as the user want.
source	Source for the mock cdm, it can either be 'local' or 'duckdb'.
con	deprecated.
writeSchema	deprecated.
seed	deprecated.

**Value**

A mock cdm\_reference object created following user's specifications.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles()
```

---

sourceConceptIdColumn *Get the name of the source concept\_id column for a certain table in the cdm*

---

**Description**

Get the name of the source concept\_id column for a certain table in the cdm

**Usage**

```
sourceConceptIdColumn(tableName)
```

**Arguments**

tableName	Name of the table.
-----------	--------------------

**Value**

Name of the source\_concept\_id column in that table.

**Examples**

```
library(PatientProfiles)

sourceConceptIdColumn("condition_occurrence")
```

---

standardConceptIdColumn

*Get the name of the standard concept\_id column for a certain table in the cdm*

---

**Description**

Get the name of the standard concept\_id column for a certain table in the cdm

**Usage**

```
standardConceptIdColumn(tableName)
```

**Arguments**

tableName      Name of the table.

**Value**

Name of the concept\_id column in that table.

**Examples**

```
library(PatientProfiles)

standardConceptIdColumn("condition_occurrence")
```

---

startDateColumn

*Get the name of the start date column for a certain table in the cdm*

---

**Description**

Get the name of the start date column for a certain table in the cdm

**Usage**

```
startDateColumn(tableName)
```

**Arguments**

tableName      Name of the table.

**Value**

Name of the start date column in that table.

**Examples**

```
library(PatientProfiles)

startDateColumn("condition_occurrence")
```

---

summariseResult	<i>Summarise variables using a set of estimate functions. The output will be a formatted summarised_result object.</i>
-----------------	--

---

**Description**

Summarise variables using a set of estimate functions. The output will be a formatted summarised\_result object.

**Usage**

```
summariseResult(
  table,
  group = list(),
  includeOverallGroup = FALSE,
  strata = list(),
  includeOverallStrata = TRUE,
  variables = NULL,
  estimates = NULL,
  counts = TRUE,
  weights = NULL
)
```

**Arguments**

table	Table with different records.
group	List of groups to be considered.
includeOverallGroup	TRUE or FALSE. If TRUE, results for an overall group will be reported when a list of groups has been specified.
strata	List of the stratifications within each group to be considered.
includeOverallStrata	TRUE or FALSE. If TRUE, results for an overall strata will be reported when a list of strata has been specified.
variables	Variables to summarise, it can be a list to point to different set of estimate names.
estimates	Estimates to obtain, it can be a list to point to different set of variables.
counts	Whether to compute number of records and number of subjects.
weights	Name of the column in the table that contains the weights to be used when measuring the estimates.

**Value**

A summarised\_result object with the summarised data of interest.

**Examples**

```
library(PatientProfiles)

cdm <- mockPatientProfiles(source = "duckdb")

x <- cdm$cohort1 |>
  addDemographics()

# summarise all variables with default estimates
result <- summariseResult(x)
result

# get only counts of records and subjects
result <- summariseResult(x, variables = character())
result

# specify variables and estimates
result <- summariseResult(
  table = x,
  variables = c("cohort_start_date", "age"),
  estimates = c("mean", "median", "density")
)
result

# different estimates for each variable
result <- summariseResult(
  table = x,
  variables = list(c("age", "prior_observation"), "sex"),
  estimates = list(c("min", "max"), c("count", "percentage"))
)
```

---

variableTypes	<i>Classify the variables between 5 types: "numeric", "categorical", "logical", "date", "integer", or NA.</i>
---------------	---

---

**Description**

Classify the variables between 5 types: "numeric", "categorical", "logical", "date", "integer", or NA.

**Usage**

```
variableTypes(table)
```

**Arguments**

table           Tibble.

**Value**

Tibble with the variables type and classification.

**Examples**

```
library(PatientProfiles)
library(dplyr, warn.conflicts = TRUE)

x <- tibble(
  person_id = c(1, 2),
  start_date = as.Date(c("2020-05-02", "2021-11-19")),
  asthma = c(0, 1)
)

variableTypes(x)
```

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