

# Package ‘CirceR’

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**Type** Package

**Title** Construct Cohort Inclusion and Restriction Criteria Expressions

**Version** 1.3.3

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**Description** Wraps the 'CIRCE' (<<https://github.com/ohdsi/circe-be>>) 'Java' library allowing cohort definition expressions to be edited and converted to 'Markdown' or 'SQL'.

**License** Apache License 2.0

**URL** <https://ohdsi.github.io/CirceR/>, <https://github.com/OHDSI/CirceR/>

**BugReports** <https://github.com/OHDSI/CirceR/issues/>

**SystemRequirements** Java (>= 8)

**Depends** R (>= 3.5.0)

**Imports** rJava, RJSONIO

**Suggests** testthat, knitr, rmarkdown

**NeedsCompilation** no

**RoxygenNote** 7.3.1

**Language** en-US

**Encoding** UTF-8

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buildCohortQuery      *Build cohort SQL*

---

### Description

Generates the OMOP CDM Sql to generate the cohort expression

### Usage

buildCohortQuery(expression, options)

### Arguments

expression      result of cohortExpressionFromJson containing the cohort expression.  
options          The options built using createGenerateOptions()

### Value

A character vector containing the OHDSI Sql for the cohort expression

---

buildConceptSetQuery      *Build conceptset SQL*

---

### Description

Generates the OMOP CDM Sql to resolve the concept set expression

### Usage

buildConceptSetQuery(conceptSetJSON)

### Arguments

conceptSetJSON    a string containing the JSON for the conceptset expression.

### Value

A character vector containing the OHDSI Sql for the conceptset expression

---

cohortDefinitionJson *An example cohort definition*

---

**Description**

An example cohort definition

**Usage**

```
data(cohortDefinitionJson)
```

**Format**

A character vector containing a JSON string

**Details**

An example cohort expression in JSON format

---

cohortExpressionFromJson

*Render read JSON into a CohortExpression instance*

---

**Description**

Reads a String (json) and deserializes it into a org.ohdsi.circe.cohortdefinition.CohortExpression

**Usage**

```
cohortExpressionFromJson(expressionJson)
```

**Arguments**

expressionJson A character vector containing the cohort expression.

**Value**

A java instance of org.ohdsi.circe.cohortdefinition.CohortExpression.

cohortPrintFriendly     *Render cohort print-friendly*

---

**Description**

Generates a print-friendly (human-readable) representation of the cohort definition. This can for example be used in a study protocol.

**Usage**

```
cohortPrintFriendly(expression)
```

**Arguments**

expression     A character vector or result of cohortExpressionFromJson containing the cohort expression.

**Value**

A character vector containing the markdown.

---

conceptSetExpressionFromJson  
                                  *Render read JSON into a ConceptSetExpression instance*

---

**Description**

Reads a String (json) and deserializes it into a org.ohdsi.circe.vocabulary.CohortExpression

**Usage**

```
conceptSetExpressionFromJson(expressionJson)
```

**Arguments**

expressionJson     A character vector containing the cohort expression.

**Value**

A java instance of org.ohdsi.circe.cohortdefinition.CohortExpression.

---

conceptSetJson      *An example concept set*

---

**Description**

An example concept set

**Usage**

data(conceptSetJson)

**Format**

A character vector containing a JSON string

**Details**

An example concept set in JSON format

---

conceptSetListJson      *An example concept set list*

---

**Description**

An example concept set list

**Usage**

data(conceptSetListJson)

**Format**

A character vector containing a JSON string

**Details**

An example concept set list in JSON format

---

```
conceptSetListPrintFriendly
```

*Render conceptSet array for print-friendly*

---

### Description

Generates a print-friendly (human-readable) representation of an array of concept sets. This can for example be used in a study protocol.

### Usage

```
conceptSetListPrintFriendly(conceptSetList)
```

### Arguments

`conceptSetList` A `ConceptSet[]` (from `cohortExpression.conceptSets`), a JSON string, or a list from `RJSONIO::fromJson`

### Value

A character vector containing the markdown.

---

```
conceptSetPrintFriendly
```

*Render conceptSet array for print-friendly*

---

### Description

Generates a print-friendly (human-readable) representation of a single concept set. This can for example be used in a study protocol.

### Usage

```
conceptSetPrintFriendly(conceptSet)
```

### Arguments

`conceptSet` A `ConceptSet` (from `cohortExpression.conceptSets[i]`), a JSON string, or a list from `RJSONIO::fromJson`

### Value

A character vector containing the markdown.

---

createGenerateOptions *Create Generation Options*

---

### Description

Creates the generation options object for use in generateSql()

### Usage

```
createGenerateOptions(  
    cohortIdFieldName,  
    cohortId,  
    cdmSchema,  
    targetTable,  
    resultSchema,  
    vocabularySchema,  
    generateStats  
)
```

### Arguments

cohortIdFieldName	The field that contains the cohortId in the cohort table.
cohortId	The generated cohort ID.
cdmSchema	The value of the CDM schema.
targetTable	the cohort table name.
resultSchema	the schema the cohort table belongs to.
vocabularySchema	the schema of the vocabulary tables (defaults to cdmSchema)
generateStats	a boolean representing if the query should include inclusion rule statistics calculation

### Value

A jObj that can be passed to generateSql().

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