

Package ‘icdhelper’

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Title Simple 'ICD-10' Code Descriptions

Version 0.1.2

Description Provides utilities to retrieve and manage 'ICD-10' code descriptions from 'Excel' files. Supports vectors, data frame columns, and association rule outputs (e.g., 'arules' objects) that require mapping to 'ICD-10' descriptions. Designed to simplify processing of healthcare datasets.

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Encoding UTF-8

Imports readxl, arules, utils

RoxygenNote 7.3.3

NeedsCompilation no

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add_icd_desc *Add ICD-10 descriptions to a data frame*

Description

Add ICD-10 descriptions to a data frame

Usage

```
add_icd_desc(df, code_col = "code")
```

Arguments

df A data frame containing ICD codes.
code_col Column name with ICD codes.

Value

The input data frame with a new ICD_desc column.

Examples

```
df <- data.frame(code = c("A00", "B01"))  
add_icd_desc(df)
```

add_icd_desc_any *Add ICD-10 descriptions to a vector of codes*

Description

Add ICD-10 descriptions to a vector of codes

Usage

```
add_icd_desc_any(x)
```

Arguments

x A character vector of ICD codes.

Value

A character vector of descriptions.

Examples

```
add_icd_desc_any(c("A00", "B01"))
```

add_icd_desc_df	<i>Add ICD descriptions next to code column</i>
-----------------	---

Description

Takes a data frame with a code column and inserts a description column immediately after it.

Usage

```
add_icd_desc_df(df, code_col = "code", desc_col = "desc")
```

Arguments

df	A data frame.
code_col	Column name containing ICD codes.
desc_col	Name of the new description column.

Value

The input data frame with description column inserted after code_col.

Examples

```
df <- data.frame(code = c("A00", "B01"))
add_icd_desc_df(df)
```

add_proc_desc_any	<i>Add procedure descriptions to a vector of codes</i>
-------------------	--

Description

Add procedure descriptions to a vector of codes

Usage

```
add_proc_desc_any(x)
```

Arguments

x	A character vector of procedure codes.
---	--

Value

A character vector of descriptions.

Examples

```
add_proc_desc_any(c("001", "002"))
```

add_proc_desc_df *Add ICD-10-PCS descriptions to a data frame*

Description

Takes a data frame with a procedure code column and inserts a description column immediately after it.

Usage

```
add_proc_desc_df(df, proc_col = "proc", desc_col = "desc")
```

Arguments

df	A data frame.
proc_col	Column name containing procedure codes.
desc_col	Name of the new description column.

Value

The input data frame with description column inserted after proc_col.

Examples

```
df <- data.frame(proc = c("001", "002"))
add_proc_desc_df(df)
```

add_rule_desc *Add descriptions to rule table codes*

Description

Add descriptions to rule table codes

Usage

```
add_rule_desc(rules_df)
```

Arguments

rules_df	A data frame with LHS and RHS columns.
----------	--

Value

The same data frame with LHS_desc and RHS_desc added.

Examples

```
df <- data.frame(  
  LHS = c("{A00}", "{B01}"),  
  RHS = c("{C02}", "{D03}")  
)  
add_rule_desc(df)
```

icd_desc	<i>Get ICD-10 description for a code</i>
----------	--

Description

Looks up the description for one or more ICD-10 codes using the package dictionary.

Usage

```
icd_desc(code)
```

Arguments

code ICD-10 code(s), quoted or unquoted.

Value

A character vector of descriptions (NA if not found).

Examples

```
icd_desc("I10")  
icd_desc(c("I10", "E11"))
```

load_icd_dictionary	<i>Load ICD-10 dictionary</i>
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Description

Reads the ICD-10 code dictionary bundled inside the package.

Usage

```
load_icd_dictionary()
```

Value

A data frame with ICD-10 codes and descriptions.

References

World Health Organization (WHO) (2019). International Classification of Diseases (ICD-10). <https://www.who.int/standards/classifications/classification-of-diseases>

Examples

```
load_icd_dictionary()
```

load_proc_dictionary	<i>Load ICD-10-PCS procedure dictionary</i>
----------------------	---

Description

Reads the procedure code dictionary bundled inside the package.

Usage

```
load_proc_dictionary()
```

Value

A data frame with procedure codes and descriptions.

References

World Health Organization (WHO) (2019). International Classification of Diseases (ICD-10-PCS). <https://www.who.int/standards/classifications/classification-of-diseases>

Examples

```
load_proc_dictionary()
```

proc_desc	<i>Get ICD-10-PCS description for a procedure code</i>
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Description

Looks up the description for one or more ICD-10-PCS procedure codes using the package procedure dictionary.

Usage

```
proc_desc(code)
```

Arguments

code Procedure code(s)

Value

A character vector of descriptions (NA if not found)

Examples

```
proc_desc("001")
proc_desc(c("001", "002"))
```

proc_rules_with_desc *Add procedure descriptions to association rules*

Description

Add procedure descriptions to association rules

Usage

```
proc_rules_with_desc(rules)
```

Arguments

rules An object of class rules from 'arules'.

Value

A data.frame with descriptions placed next to lhs and rhs.

Examples

```
library(arules)
data("Adult")
rules <- apriori(Adult, parameter = list(supp = 0.5, conf = 0.9, maxlen = 2))
proc_rules_with_desc(rules)
```

rules_with_desc *Add ICD descriptions to association rules*

Description

Add ICD descriptions to association rules

Usage

```
rules_with_desc(rules)
```

Arguments

rules An object of class rules from 'arules'.

Value

A data.frame with descriptions placed next to lhs and rhs.

Examples

```
library(arules)
data("Adult")
rules <- apriori(Adult, parameter = list(supp = 0.5, conf = 0.9, maxlen = 2))
rules_with_desc(rules)
```

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