Package 'EAVA'

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Type Package

Title Deterministic Verbal Autopsy Coding with Expert Algorithm Verbal Autopsy

Version 1.0.0

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Description Expert Algorithm Verbal Autopsy assigns causes of death to 2016 WHO Verbal Autopsy Questionnaire data. odk2EAVA() converts data to a standard input format for cause of death determination building on the work of Thomas (2021) <https://cran.r-project.org/src/contrib/Archive/CrossVA/>. codEAVA() uses the presence and absence of signs and symptoms reported in the Verbal Autopsy interview to diagnose common causes of death. A deterministic algorithm assigns a single cause of death to each Verbal Autopsy interview record using a hierarchy of all common causes for neonates or children 1 to 59 months of age.

License GPL-2

Encoding UTF-8

LazyData true

Imports stringi, stringr

RoxygenNote 7.3.2

BugReports https://github.com/emilybrownwilson/EAVA/issues

Depends R (>= 2.10)

Suggests knitr, rmarkdown, testthat (>= 3.0.0)

VignetteBuilder knitr

Config/testthat/edition 3

NeedsCompilation no

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Repository CRAN

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codEAVA *codEAVA*

Description

Assigns cause of death by Verbal Autopsy Expert Algorithm

Usage

```
codEAVA(df, age_group)
```

Arguments

df	A data frame with 2016 WHO VA responses in openVA input format
age_group	Age group input, either "neonate" or "child"

Value

A two-column data frame with unique identifier and cause of death

Examples

```
{
# load embedded example data or data from WHO 2016 Verbal Autopsy Questionnaire
data <- as.data.frame(data_public)
# first run odk2EAVA()
output <- odk2EAVA(data, id_col  = "comsa_id")
# run codEAVA() for neonates and children 1-to-59 months of age
EAVA_neonate <- codEAVA(output, "neonate")
EAVA_child <- codEAVA(output, "child")
head(EAVA_neonate)
head(EAVA_child)
}
```

data_public *Example Data*

Description

A subset of mortaility surveilance data from the Countrywide Mortality Surveillance for Action project

Usage

```
data_public
```

Format

'data_public' is example data frame with 10 rows and 511 columns

Source

<https://comsamozambique.org/data-access>

odk2EAVA *odk2EAVA*

Description

Converts 2016 WHO verbal autopsy (VA) data to an input file for Expert Algorithm Verbal Autopsy cause of death assignment by the codEAVA() function

Usage

```
odk2EAVA(odk, id_col)
```

Arguments

odk	A data frame which used open data kit (odk) to obtain 2016 WHO VA questionnaire responses
id_col	A unique identifier for each record within the odk data frame

Value

A data frame that contains variable names and values which have been converted to openVA convention

References

Thomas J, Choi E, Li Z, Maire N, McCormick T, Byass P, Clark S (2021). CrossVA: Verbal Autopsy Data Transformation for InSilicoVA and InterVA5 Algorithms_. R package version 1.0.0, <https://CRAN.R-project.org/package=CrossVA>.

Examples

```
{
# load embedded example data or data from WHO 2016 Verbal Autopsy Questionnaire
data <- as.data.frame(data_public)
# run odk2EAVA()
output <- odk2EAVA(data, id_col  = "comsa_id")
# view data converted for use in codEAVA()
head(output)
}
```

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