Data Dictionary for Type 1 Hospitals Data Capture Tool

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Load packages for dat dictionary creation

```
library(dataMeta)
library (tidyverse)
library(here)
```

Read csv funtion to look collected dataset.

```
CollectedData=read_csv(here("RefData", "CollectedData_final.csv"))
glimpse(CollectedData)
```

##Creating Variable Description

```
variable_description <- c("The index column that allows us to link the data
collected to the original ae_attendances data in the 'RefData' folder.",
"The month that this activity relates to, stored as a date (1st of each month).",
"The Organisation data service (ODS) code for the organisation. If you want to
know the organisation associated with a particular ODS code, you can look it up
from the following address: https://odsportal.digital.nhs.uk/Organisation/Search.",
"The number of attendances for this department type at this organisation for
this month.","The number of attendances that breached the four-hour target.",
"The consent from the end-user to process and share the data collected with
the data capture tool.")
print(variable_description)
```

Creating Variable types

```
glimpse(CollectedData)
```

We have three quantitative values (measured values) variables and three fixed values (allowable values or codes) variables.

```
variable_type <- c(0, 1, 1, 0, 0,1)
print(variable_type)
```

###**Building Data Linker for connection between Collected Data and Data Dictionary

```
linker<-build_linker(CollectedData, variable_description, variable_type)
print(linker)
```

Data dictionary

```
dictionary <- build_dict(my.data = CollectedData, linker = linker)
glimpse(dictionary)
```

```
dictionary[5,4]<-"NHS Trust - CAMBRIDGE UNIVERSITY HOSPITALS NHS FOUNDATION TRUST"
dictionary[6,4]<-"NHS Trust - NORFOLK AND NORWICH UNIVERSITY HOSPITALS NHS FOUNDATION TRUST"
dictionary[7,4]<-"NHS Trust - UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST "
dictionary[8,4]<-"NHS Trust - EAST CHESHIRE NHS TRUST "
dictionary[9,4]<-"NHS Trust - SALISBURY NHS FOUNDATION TRUST "
dictionary[10,4]<-"NHS Trust - BIRMINGHAM WOMEN'S AND CHILDREN'S NHS FOUNDATION TRUST "
dictionary[11,4]<-"NHS Trust - WIRRAL UNIVERSITY TEACHING HOSPITAL NHS FOUNDATION TRUST "
dictionary[12,4]<-"NHS Trust - LONDON NORTH WEST UNIVERSITY HEALTHCARE NHS TRUST "
dictionary[13,4]<-"NHS Trust - MEDWAY NHS FOUNDATION TRUST "
dictionary[14,4]<-"NHS Trust - WESTON AREA HEALTH NHS TRUST"
dictionary[15,4]<-"NHS Trust - EAST SUFFOLK AND NORTH ESSEX NHS FOUNDATION TRUST "
```

Let's save the data dictionary for CollectedData to the 'RefData' folder

```
glimpse(dictionary)
write_csv(dictionary, here("RefData", "CollectedData_Datadictionary.csv"))
```

Append data dictionary to the CollectedData

Create main_string for attributes

```
main_string <- "This data describes the NHS England accident and emergency
(A&E) attendances and breaches of four-hour wait time target data of Type 1
Hospitals from the *NHSRdatasets* package collected by the data capture tool."
main_string
```

Incorporate attributes as metada

```
complete_CollectedData <- incorporate_attr(my.data = CollectedData,
data.dictionary = dictionary,main_string = main_string)
attributes(complete_CollectedData)$author[1]<-"B199291"
complete_CollectedData
attributes(complete_CollectedData)
```

Save the CollectedData with attributes

```
save_it(complete_CollectedData, here("RefData", "complete_CollectedData"))
```