(bmrn) data completeness listing - dashboard requirements specifications (DRS)

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CONTENTS

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Data Completeness Dashboard

This is a dashboard for the data completeness listing (see the example stored in the `docs/Fields_DataCompleteness_270302_20210110.xlsx` file).

Document History

Changes to this document should be listed in the `Change Log` section below:

Change log

Version:
Date:
Description:
Modified pages:

Purpose

The purpose of this document is to serve as a guide to data scientists, app developers, system administrators, and data engineers who are responsible for the maintenance and deployment of the [complete-report] dashboard/app. This document should give the reader all of the information necessary to build, test, and deploy the dashboard/app.

Scope

The DRS document contains a complete description of the functionality of the [complete-report] dashboard. It consists of use cases, functional requirements and non-functional requirements, which, taken together form a complete description of the software.

Definitions, Acronyms and Abbreviations

Term: Listing **Definition:** output Excel file from SAS macro. In this dashboard, the listing is the `Fields_DataCompleteness_270302_YYYYMMDD.xlsx` file.

Term: `Dataset Name`
Definition: Name of source dataset.

Term: `Field Name`
Definition: Abbreviated name for variable in dataset.

Term: `SAS Label`
Definition: Plain language description of measurement

Term: `Number of Records Expected Without Not Done`
Definition: *???*

Term: `# Data Present`
Definition: `# Data Present` / Total

Term: `Percentage of Data Present (%)`
Definition: `# Data Present` / Total

Term: `# Missing`
Definition: non-present values

Term: `Percentage of Missing (%)`
Definition: `# Missing` / Total

Term: `Condition for Missing`
Definition: SAS code for missing values

Term:
Definition:

References

Applicable documents/inputs

The applicable documents/inputs are inputs to the dashboard/app. Any change to an applicable document or input is likely to impact the dashboard or app.

Applicable standards

R - R reference standard.

Reference documents

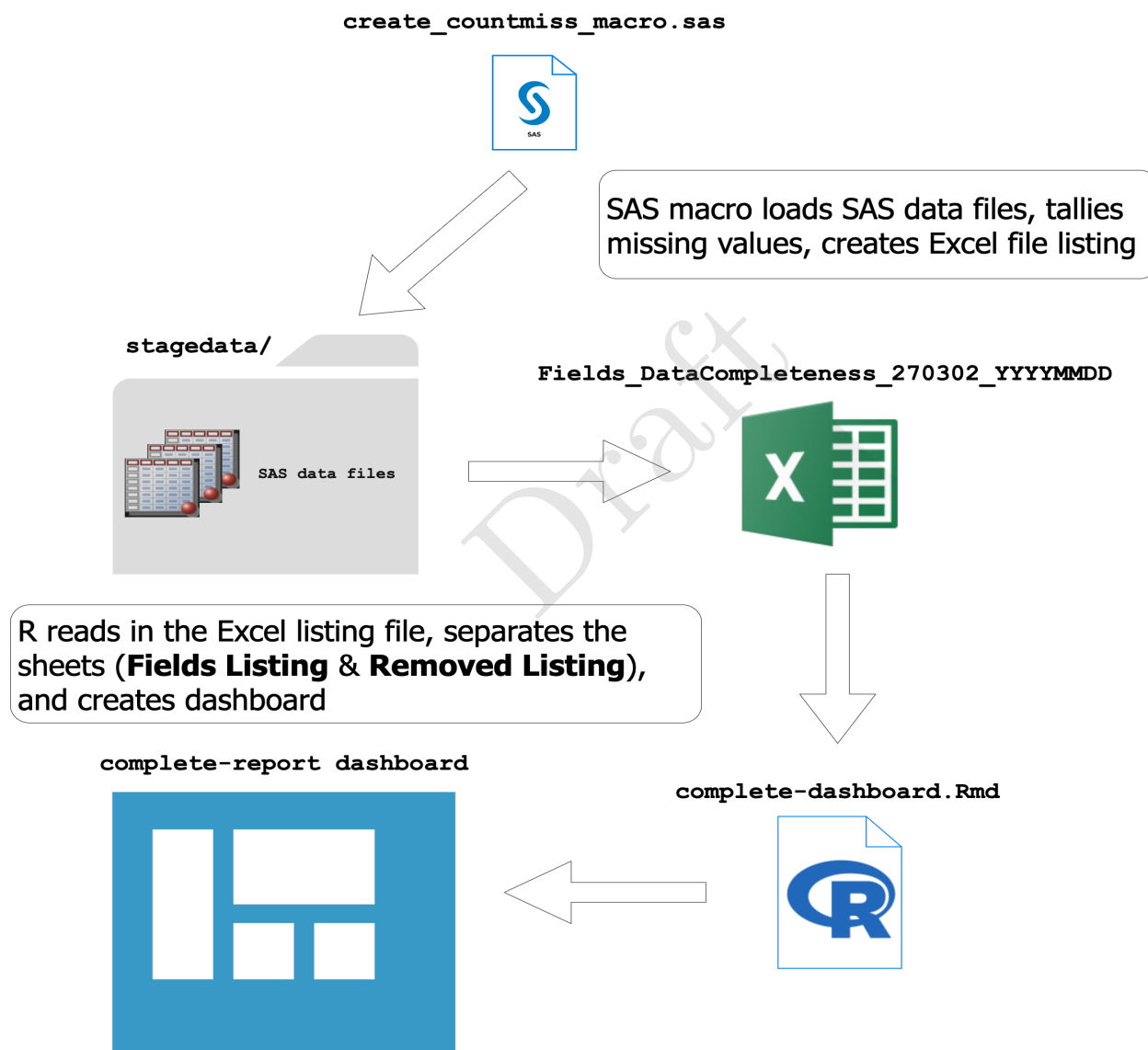The reference documents are of interest to the reader of the DRS.

OVERALL DESCRIPTION

This section describes the general factors that affect the dashboard/app and its requirements. This section does not state specific requirements. Instead, it provides an overview of those requirements, which are defined in detail in the 'REQUIREMENTS' section, and makes them easier to understand.

The [complete-report] dashboard is displays the information contained in the `Fields_DataCompleteness_270302_Y` excel files, which are distributed via outlook to identified audiences.

Dashboard/app perspective

The figure below gives an overview of the high level data flow between the [complete-report] dashboard and other files and components:

create_countmiss_macro.sas

SAS macro loads SAS data files, tallies missing values, creates Excel file listing

stagedata/

Fields_DataCompleteness_270302_YYYYMMDD

SAS data files

R reads in the Excel listing file, separates the sheets (**Fields Listing** & **Removed Listing**), and creates dashboard

complete-report dashboard

complete-dashboard.Rmd

Dashboard/app functions

The [complete-report] dashboard will provide a tabular summary of the completed study measurements by dataset, field, and corresponding SAS label.

User characteristics

The [complete-report] dashboard will be made available on the [shiny server]. The target audience is:

- CDM (entire group?)
- Data Managers
- [audience?]
- [audience?]

Constraints

The dashboard frontend shall be implemented using:

- SAS (calculations and summary report generation)

- Excel (output file from SAS)

- R (Excel file manipulation and shiny display)

Assumptions and dependencies

DASHBOARD/APP REQUIREMENTS

This section covers the specific requirements and design of the [complete-report] dashboard.

Dashboard/app overview

Mockup UI

The initial landing page (Fields Listing) is below.

Dataset Name	Field Name	SAS Label	Number of Records Expected Without Not Done	# Data Present	Percentage of Data Present (%)	# Missing	Percentage of Missing (%)	Condition for Missing
ENR	SUBJID	Subject ID	3	3	100	0	0	
SV	SVND	Check if not done	81	81	100	0	0	
SV	SVCOVID	If visit not done, was this due to COVID-19?	0	0		0		SVND=1
SV	SVSTDAT	Date of visit	81	81	100	0	0	SVND=0
SV	SVON	Standard Clinic	81	11	13.6	70	86.4	SVND=0
SV	SVVT	Virtual	81	11	13.6	70	86.4	SVND=0

The Removed Listing page is below:

Data Completeness Report (Beta)   Fields Listing   Removed Listing   </> Source Code

Dashboard use

Both the **Fields Listing** and **Removed Listing** sheets are presented in sortable and filterable tables.

- The tables displayed were generated on `2021-01-10` for study `270-302`.
- Use the empty boxes in each column to identify dataset, variables, or values.
- Click on the column names to sort the data.
- Beneath each table is a text-box for taking notes. These will be included in your downloaded report. Read more about markdown syntax here.

Report download

Select the document format and click the **Download** button.

Document format
- PDF   ○ Word

⬇ Download

Removed Listing Table

FormOID	FieldOID	SASLabel	No Records in Dataset	Removed Specify Variables
DSSF	DSTERM	Screen fail reason		Yes
DSSF	DSTERM	Screen fail reason	Yes	
DSSF	DSTERMOT	Other screen fail reason		Yes
DSSF	DSTERMOT	Other screen fail reason	Yes	
DSSF	PSUBJID	Prior Screen Fail Subject Number	Yes	
DSSF	SCRFDAT	Date of prior screen failure	Yes	
DM	ASIANSP	If Asian, please specify		Yes
MHH	BSLOC	if yes, list usual target joint		Yes
MHH	BSLOCSP	If Other, specify		Yes

1–10 of 131 rows   Show 10 ⇕   Previous **1** 2 3 4 5 … 14 Next

Removed Listing Notes

Enter markdown text below:

```
Please use **markdown** syntax!
```

Preview formatted text:

Please use **markdown** syntax!

Mockup Server

Use case overview

Below is an example note for the **Fields listing**:

```
**CMF** has 200 missing values.

`SAS Label` is `Bleed Visit Number`
```

Below is an example note for the **Removed listing**:

```
`DSTERMOT` has been removed.

The `SASLabel` is `Other screen fail reason`
```

Supplementary requirements

Functional requirements

Non-functional requirements

Security requirements

APPENDIXES

Logical data model