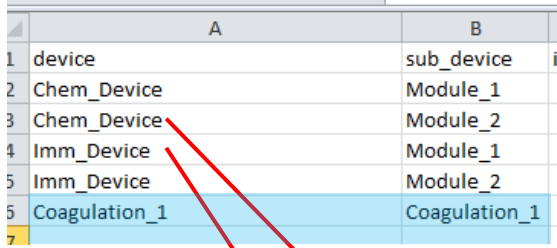# Introduction & Instructions

- For data import additional R function can be easily developed. CSV or other formats can be imported easily.
- For now, to facilitate process Excel files were used.
  - There are two files for data upload.
    - First file is for laboratories definitions.
    - Second file is for laboratory data.
- Options fields can be empty but column names still must be supplied.

1. Definitions Excel

- Information in the "Device Def" and "Test Group Def" sheets are sufficient for the current analytic calculations. However, for additional metrics other sheets are supplied.

1.1. Device Def

	Mandatory / Optional	Explanation
device	Mandatory	Device name. This must matched with field in laboratory data file. See figure below (red arrows). Only these devices listed here will be used in calculations.
sub_device	Mandatory	If device have modules that can be defined here. Otherwise it must be same with device. See figure below (blue box).
include	Mandatory	Must be 1
Test_per_hour	Mandatory	Device test throughput per hour. Numeric

1.2. Test Group Def

	Mandatory / Optional	Explanation
test_group	Mandatory	Field for grouping tests. This must matched with field in laboratory data file. See figure below (red arrows).Only these groups listed here will be used in calculations.
include	Mandatory	Must be 1
target_TAT_inlab	Optional	To calculate in time result metrics
target_TAT_inlab_stat	Optional	To calculate in time result metrics

1.3. Shift Def

In current version these definitions are not being used. Can be empty.

	Mandatory / Optional	Explanation
shit_name	Optional	Definition name
start_time	Optional	Shift start time
end_time	Optional	Shift end time

1.4. Test Group Test Def

In current version these definitions are not being used. Can be empty.

	Mandatory / Optional	Explanation
test_group		
test_name		
common_name		
include		

2. Laboratory Data Excel

- Shiny is limited to 10 MB file size. But this can be increased
- Excel sheet name must be "Lab Data"

	Mandatory / Optional	
index	Optional	Any id number
patient_id	Optional	Patient ID for further metrics
sample_id	Optional	Sample ID for further metrics
device	Mandatory	Device name. This must matched with field in laboratory definition file.
sub_device	Mandatory	If device have modules that can be defined here. Otherwise it must be same with device.
sampling_time*	Optional	Sampling time
receiving_time*	Mandatory	Laboratory Kabul receive time
device_order_time*	Optional	Device order time
sub_device_order_time*	Optional	Device module order time
result_time*	Mandatory	Device result time
first_validation_time*	Optional	First validation (e.g. technical)
validation_time*	Optional	Final validation
first_validation_staff	Optional	First validation staff code
validation_staff	Optional	Final validation staff code
test_group	Mandatory	Field for grouping tests. This must matched with field in laboratory definition file.
test_id	Optional	Test code (e.g. lab test code)
test_name	Mandatory	Test name

*These columns must be in Excel date-time format.