# Dashboards project

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# 1 Introduction

# 1.1 Executive summary

The dashboards project is a project at FHI concerned with running automated analyses on data.

In principle, the dashboards project is split up into three parts:

- 1. The overarching infrastructure (i.e. Docker containers, continuous integration, chron jobs, etc.)
- 2. The R package for each automated analysis
- 3. The R executable for each automated analysis

#### 1.2 What is an automated analysis?

An automated analysis is any analysis that:

- 1. Will be repeated multiple times in the future
- 2. Always has an input dataset with consistent file structure
- 3. Always has the same expected output (e.g. tables, graphs, reports)

#### 1.3 Why not have one project for each automated analysis?

Automated analyses have a lot of code and infrastructure in common.

Automated analyses:

- 1. Need their code to be tested via unit testing to ensure the results are correct
- 2. Need their code to be tested via integration testing to ensure everything runs
- 3. Need to be run at certain times
- 4. Need to be able to send emails notifying people that the analyses have finished running
- 5. Need to make their results accessible to the relevant people

By combining them all in one umbrella project we can force everyone to use the same infrastructure, so we:

- 1. Only need to solve a problem once
- 2. Only need to maintain one system
- 3. Can easily work on multiple projects, as we all speak the same language

### 1.4 Important repositories

#### 1.4.1 Infrastructure

https://github.com/raubreywhite/dashboards control/ (private)

This contains the Docker files, cronfiles, all bash scripts, etc.

https://folkehelseinstituttet.github.io/dashboards/ (this one)

This contains the R executable for each automated analysis.

https://folkehelseinstituttet.github.io/fhi/

This is an R package that contains helper functions.

#### 1.4.2 Automated analyses

https://folkehelseinstituttet.github.io/dashboards\_sykdomspuls/

https://folkehelseinstituttet.github.io/dashboards\_normomo/

https://folkehelseinstituttet.github.io/dashboards\_sykdomspuls\_pdf/

https://folkehelseinstituttet.github.io/dashboards\_sykdomspuls\_log/

# 2 Executable for each automated analysis

Each automated analysis has its own R package (e.g. sykdomspuls).

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