

# Packages for Organized Project Material and Effective Analysis

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R/Medicine 2024



Consortium for  
Statistics in  
Disease Surveillance

[www.csids.no](http://www.csids.no)

<https://github.com/csids/2024-r-medicine-org-and-plnr>



# 'org' — Organizing projects

Three types of project material:

## 1. Data

- Encrypted
- Not stored on the cloud

## 2. Results

- Immediately shared with collaborators (cloud?)
- Results archived over time

## 3. Code

- Version control
- Publicly accessible
- One sequential pipeline

Additional problem:

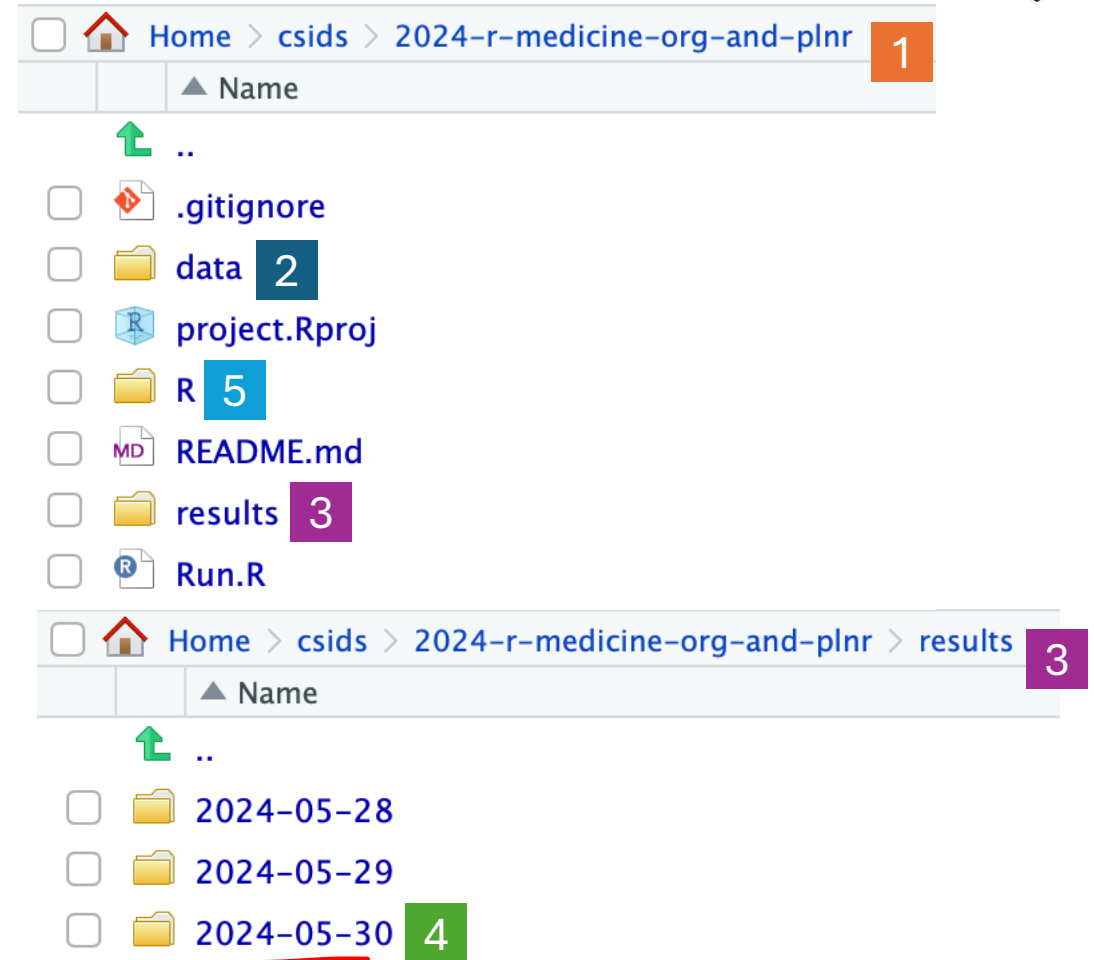
- Will your code run on multiple computers?





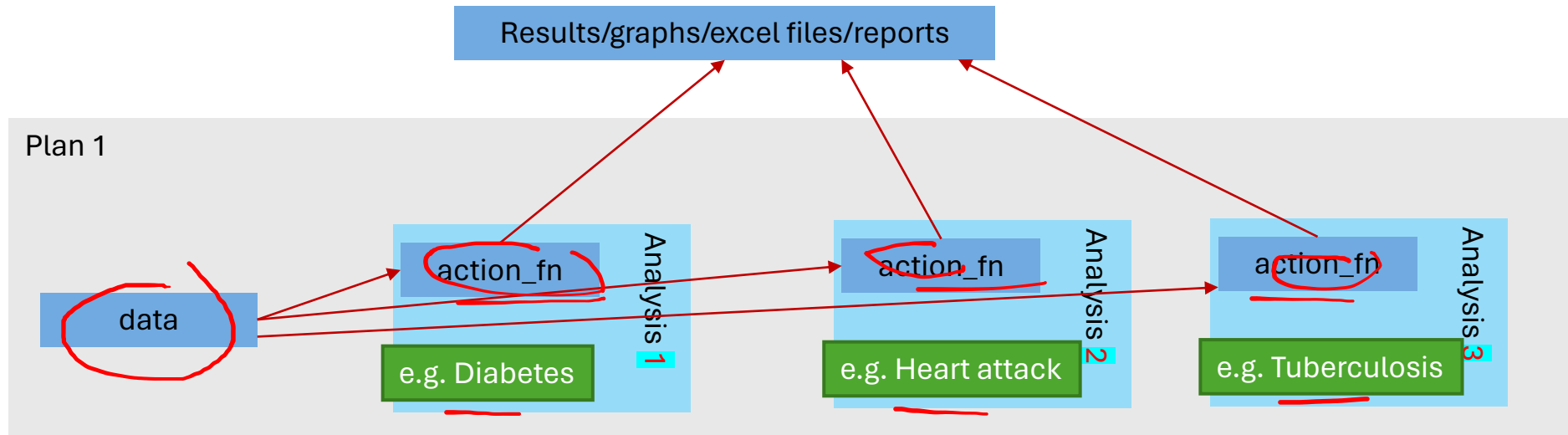
# 'org' — Organizing projects

```
> project <- org::initialize_project(  
+   env      = .GlobalEnv,  
+   -home   = c(  
+     "~/csids/2024-r-medicine-org-and-plnr/", 1  
+     "/project1/2024-r-medicine-org-and-plnr" 1  
+   ),  
+   -data   = c(  
+     "~/csids/2024-r-medicine-org-and-plnr/data", 2  
+     "/project1/2024-r-medicine-org-and-plnr/data" 2  
+   ),  
+   -results = c(  
+     "~/csids/2024-r-medicine-org-and-plnr/results", 3  
+     "/project1/2024-r-medicine-org-and-plnr/results" 3  
+   ),  
+   folders_to_be_sourced = "R" 5  
+ )  
Sourcing all code inside ~/csids/2024-r-medicine-org-and-plnr/R into R_GlobalEnv  
>  
> library(data.table)  
> library(ggplot2)  
> library(magrittr)  
>  
org::project$data 2  
[1] "~/csids/2024-r-medicine-org-and-plnr/data/" 2  
> org::project$results_today  
[1] "~/csids/2024-r-medicine-org-and-plnr/results/2024-05-30/" 4
```



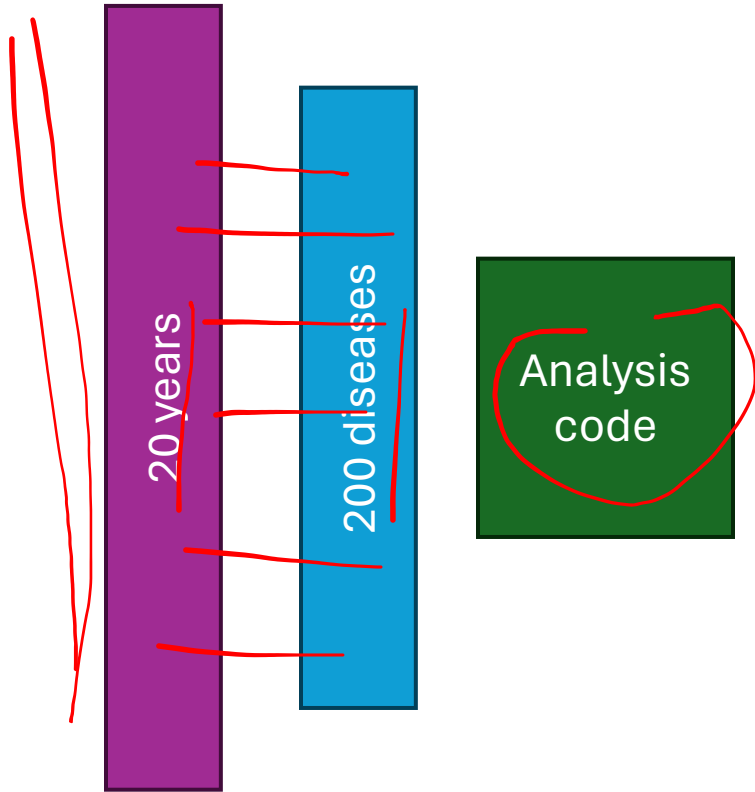


# 'plnr' — Effective analysis

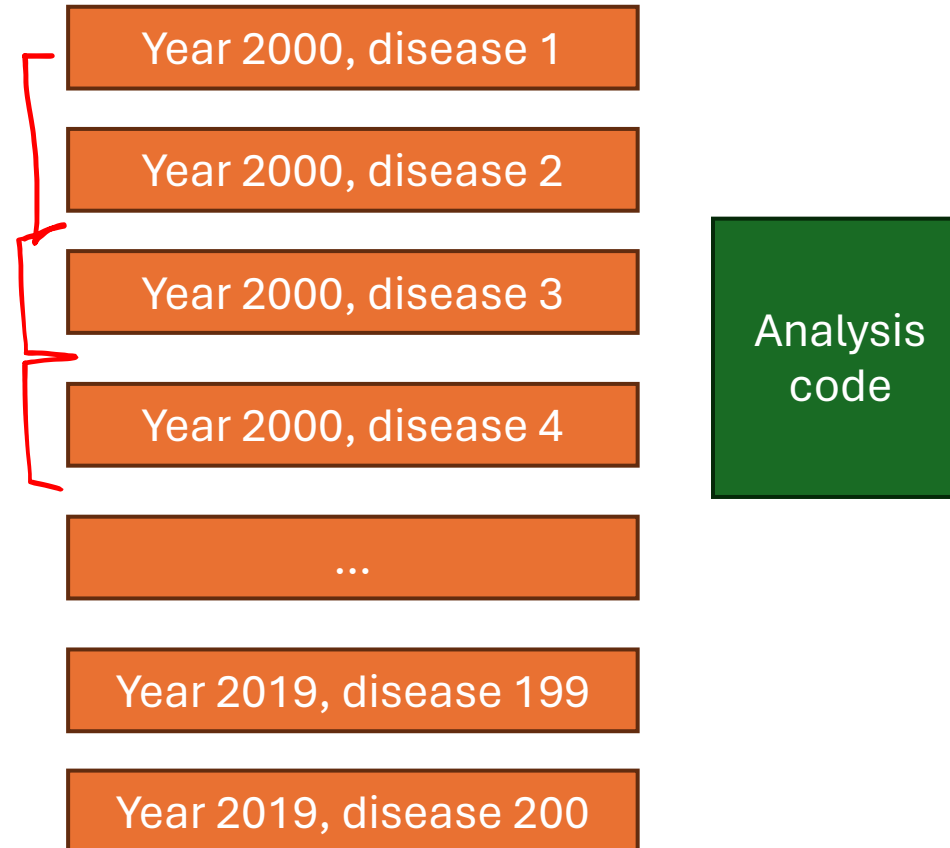


# 'plnr' — Effective analysis

Multiple loops

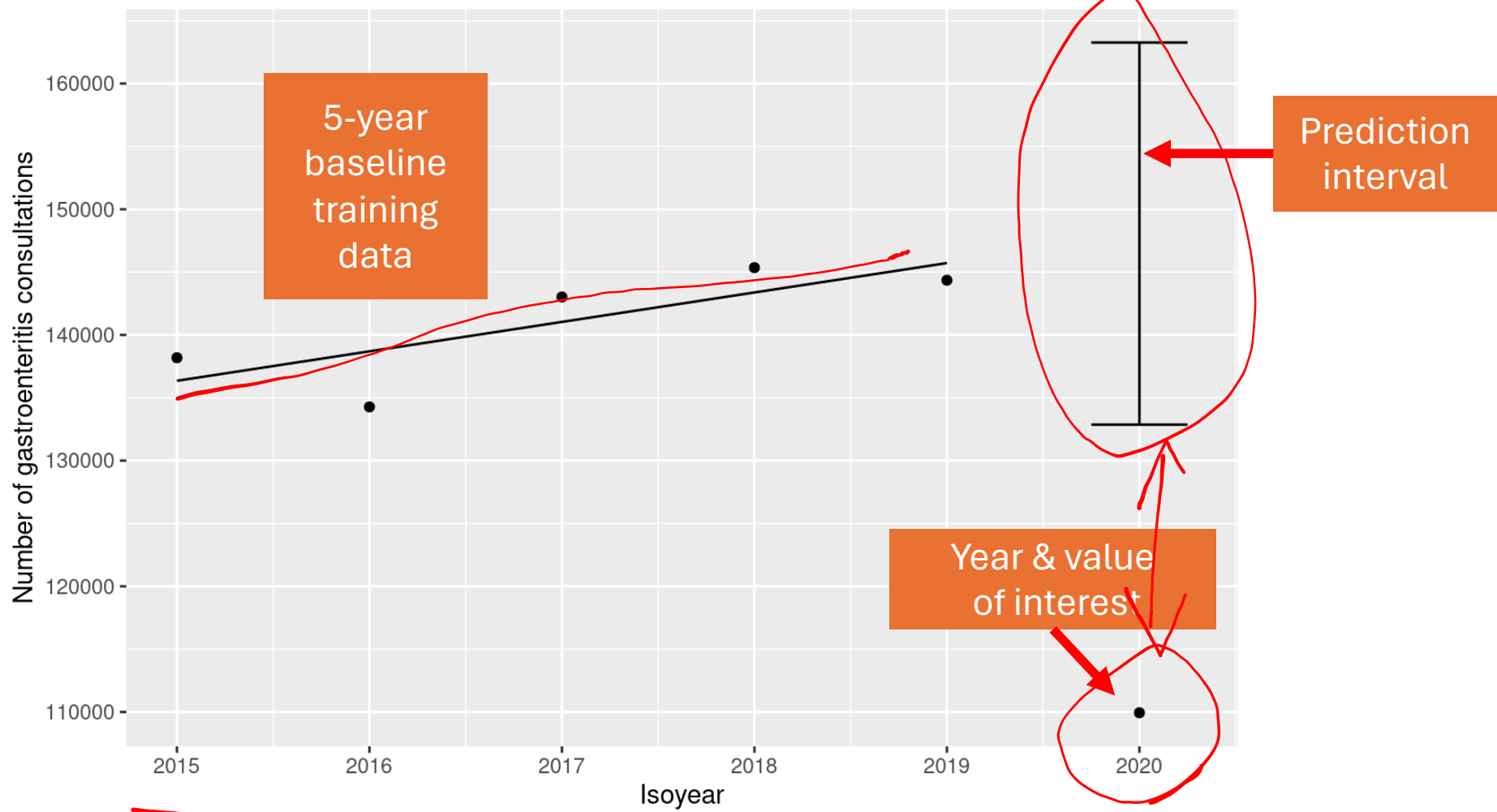


One loop





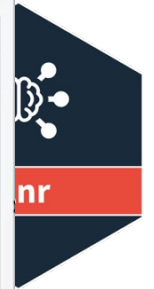
# 'plnr' — Effective analysis



```
Run.R x clean_data.R x
Source on Save
Run Source
1 project <- org::initialize_project(
2   env = .GlobalEnv,
3   home = c(
4     "~/csids/2024-r-medicine-org-and-plnr/",
5     "/project1/2024-r-medicine-org-and-plnr"
6   ),
7   data = c(
8     "~/csids/2024-r-medicine-org-and-plnr/data",
9     "/project1/2024-r-medicine-org-and-plnr/data"
10  ),
11  results = c(
12    "~/csids/2024-r-medicine-org-and-plnr/results",
13    "/project1/2024-r-medicine-org-and-plnr/results"
14  ),
15  folders_to_be_sourced = "R"
16 )
17
18 library(data.table)
19 library(ggplot2)
20 library(magrittr)
21
22 org::project$data
23 org::project$results_today
24
25 # We begin by defining a new plan
26 p <- plnr::Plan$new()
27
28 # We add sources of data
29 # We can add data directly
30 p$add_data(
31   name = "gastro",
32   direct = readRDS(file.path(org::project$data, "gastroenteritis.RDS"))
33 )
34
35 # Add the argsets
36 for(i in c(
37   "nation_nor",
38   "county_nor03",
39   "county_nor11",
40   "county_nor15",
41   "county_nor18",
42   "county_nor31",
43   "county_nor32",
44   "county_nor33",
45   "county_nor34"
46 ))
1:8 (Top Level)
Copilot: Not signed in. R Script
```

Console Terminal Background Jobs
R 4.3.2 · ~/csids/2024-r-medicine-org-and-plnr/
R version 4.3.2 (2023-10-31) -- "Eye Holes"
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Platform: x86\_64-pc-linux-gnu (64-bit)
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'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.
> |

Files Plots Packages Help Viewer Presentation
Zoom Export
Environment History Connections Build Git Tutorial



Thank you



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Statistics in  
Disease Surveillance



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