



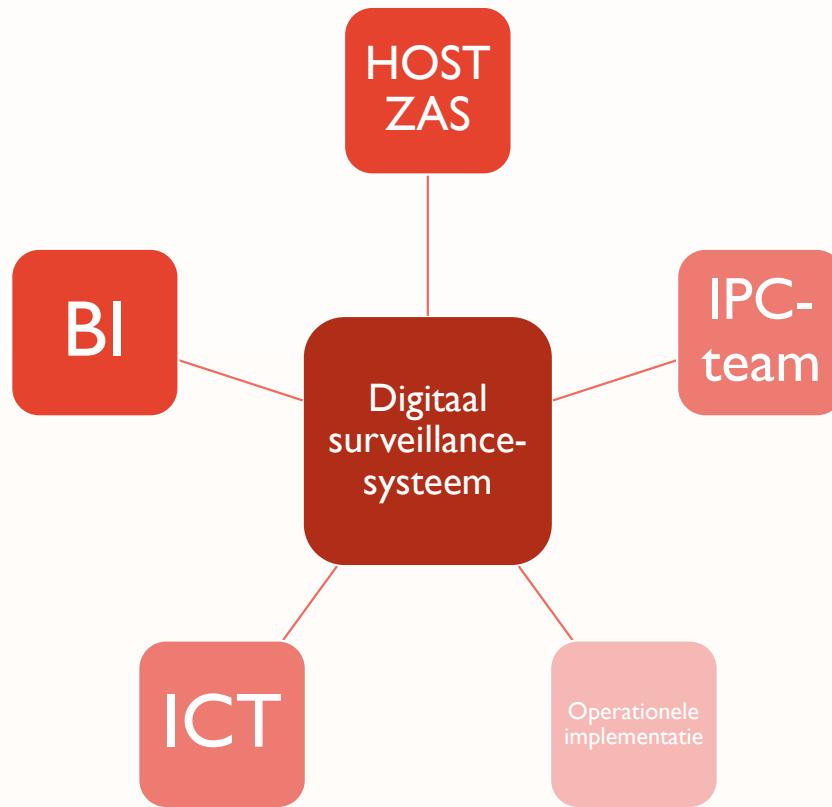
# **Surveillance of Antimicrobial Consumption**

Sam Van Goethem – HOST arts

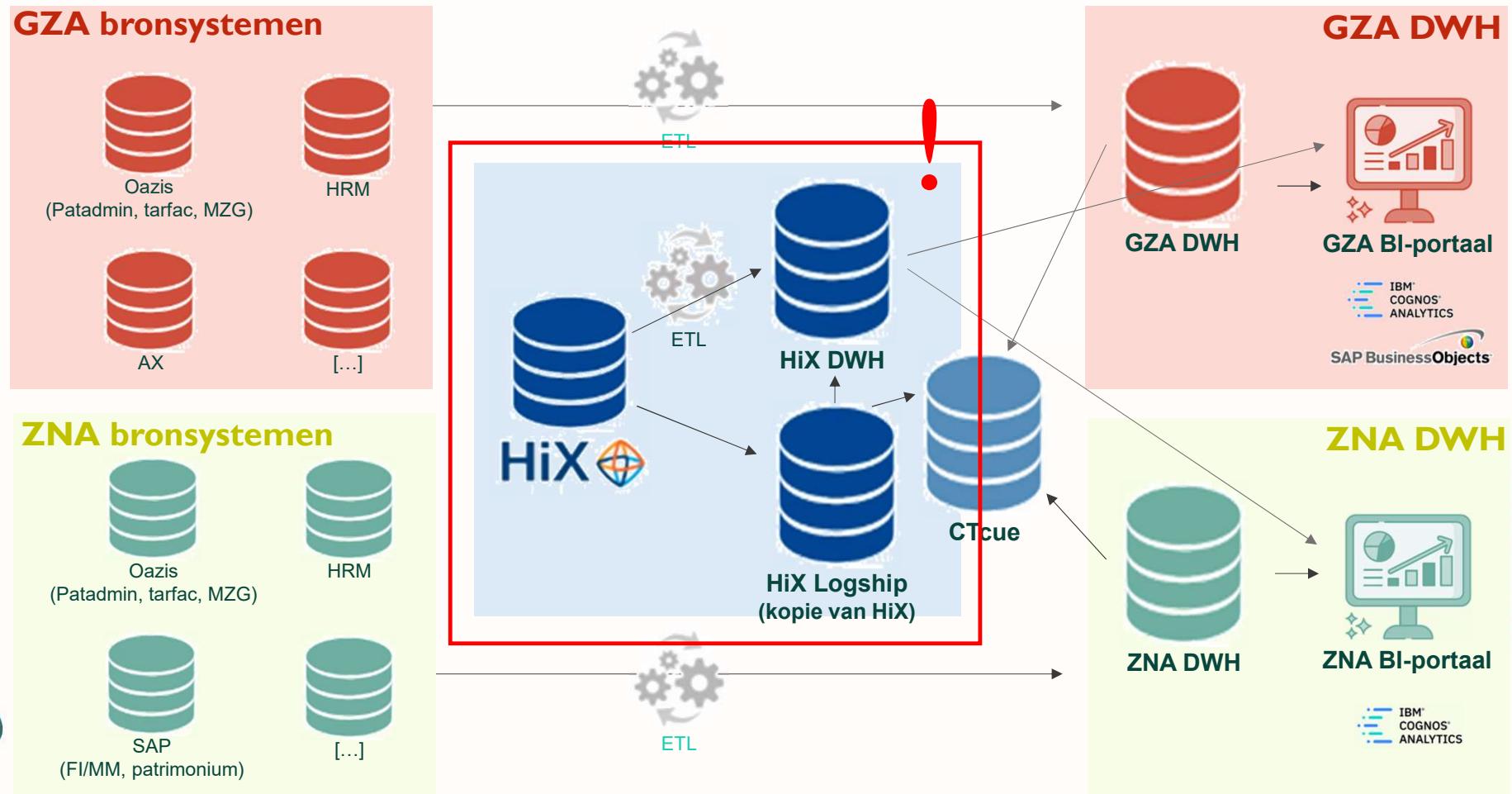
17 november 2023

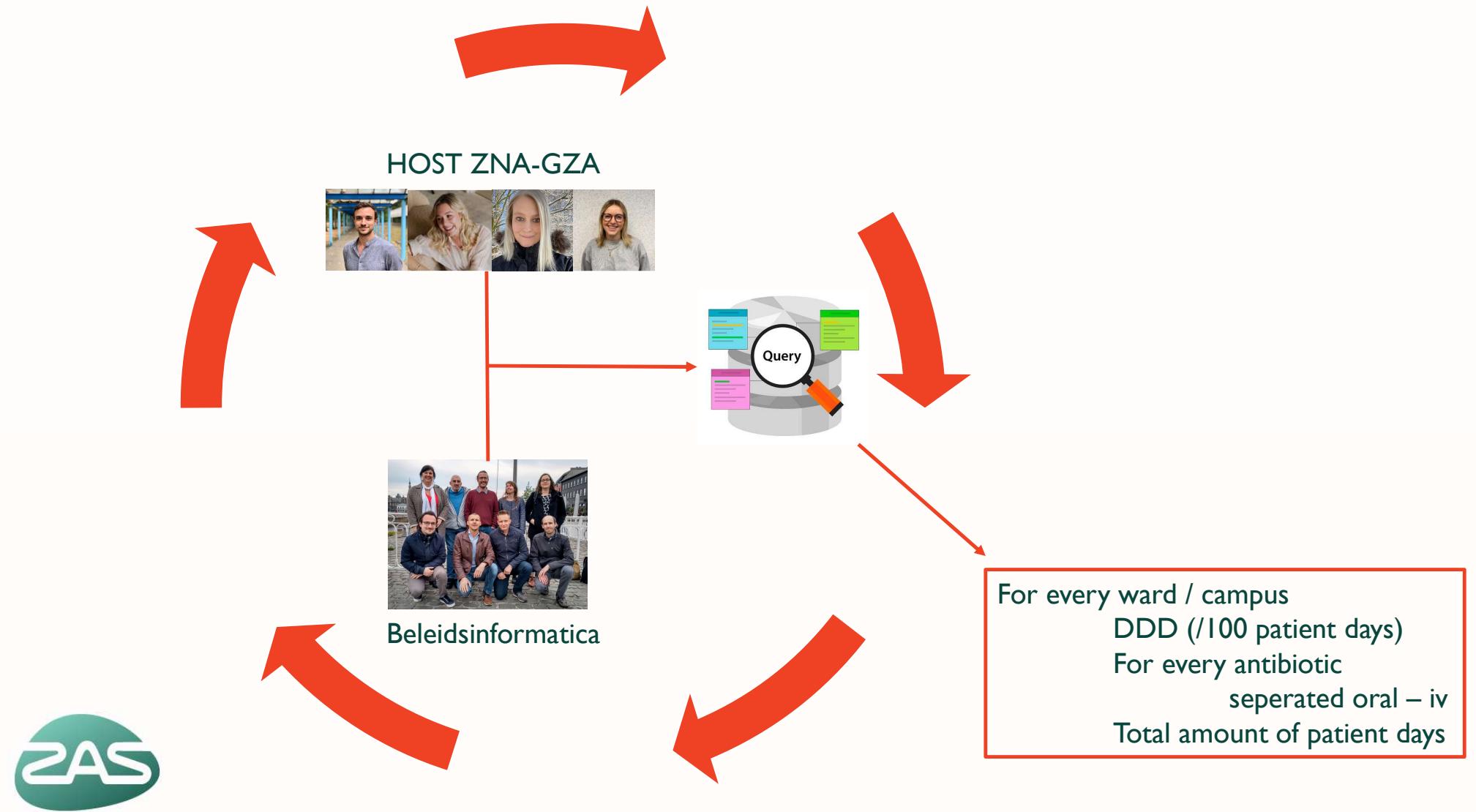
ZIEKENHUIS *aan*  
*de* STROOM

# Which players are involved?



# ZAS BI-environment







Difficult to start using R

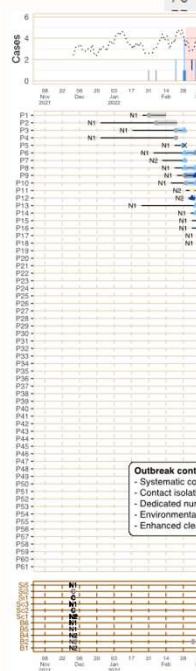
Not supported by ICT/BI



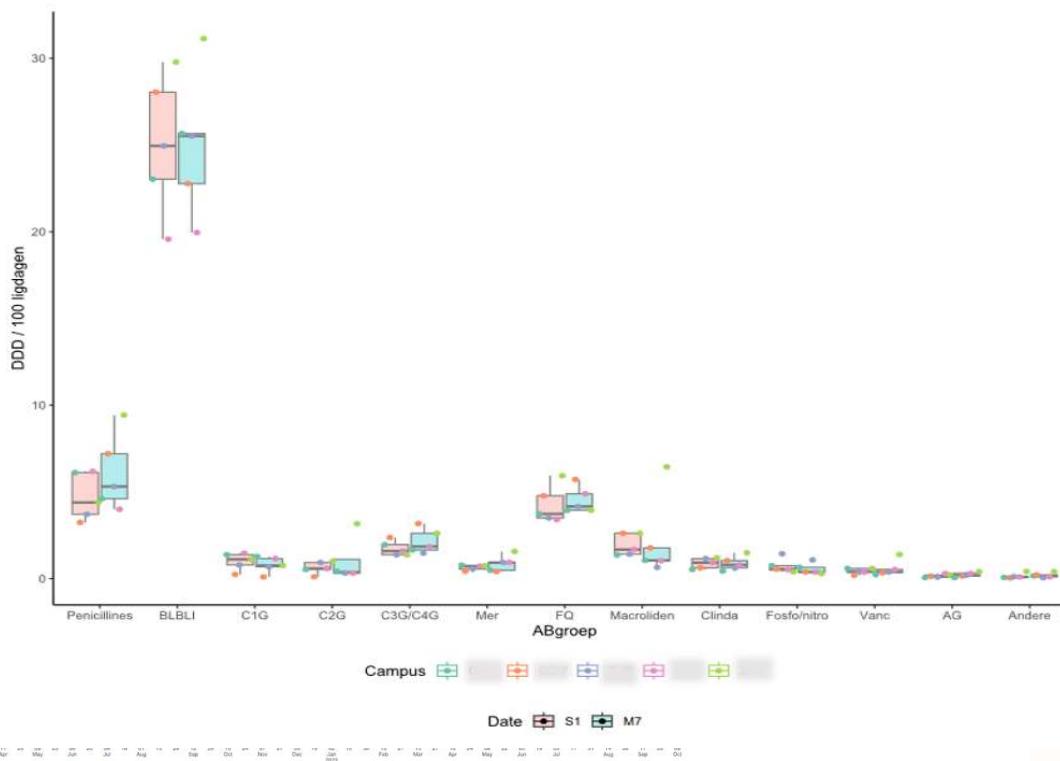
Experienced users in team

Open source

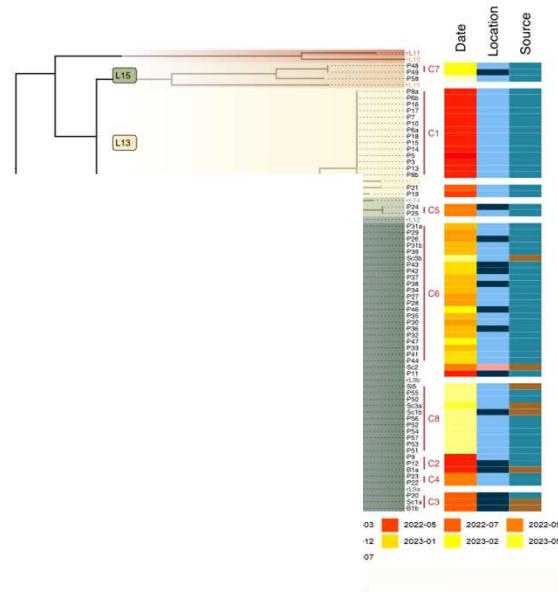
Automate analysis!



```
67 Artsen <- Datavs[!duplicated(Datavs[c("voorschrijver ID", "voorschrijver naam"))]
68 Artsen <- Artsen[,c("voorschrijver ID", "voorschrijver naam")]
69 Afdelingen <- Total[,c(4,7)]
70 colnames(Afdelingen) <- c("Campus","Afdeling")
```



```
114 IPALL <- rbind(IPFQ,IPCL)
115 IPALLTA <- aggregate(IPALL$DDDT, by = list(IPALL$Afdeling), FUN = sum)
116 colnames(IPALLTA) <- c("Afdeling", "DDDT")
117 TPAL10A <- aggregate(TPAL10$DDDT, by = list(TPAL10$Afdeling), FUN = sum)
```



N



# phind

phind

how can i automatically run an R script from my windows terminal on a monthly basis

Q

Pair Programmer

GPT-4

Alternatively, you can use the `taskscheduleR` package in R to schedule your R scripts. This package provides functions to create, list, and delete tasks in the Windows Task Scheduler. Here's an example of how to use it:

```
# Install the package
install.packages("taskscheduleR")

# Load the package
library(taskscheduleR)

# Create a task
taskscheduler_create(taskname = "my_task",
                      rscript = "C:/path/to/your/script.R",
                      schedule = "MONTHLY",
                      starttime = "00:00")
```



This will create a task that runs your R script once a month at midnight [r-bloggers.com](http://r-bloggers.com).



## ANSWER | PHIND V7 MODEL

To automatically run an R script from your Windows terminal on a monthly basis, you can use the Windows Task Scheduler. Here's a step-by-step guide on how to do this:

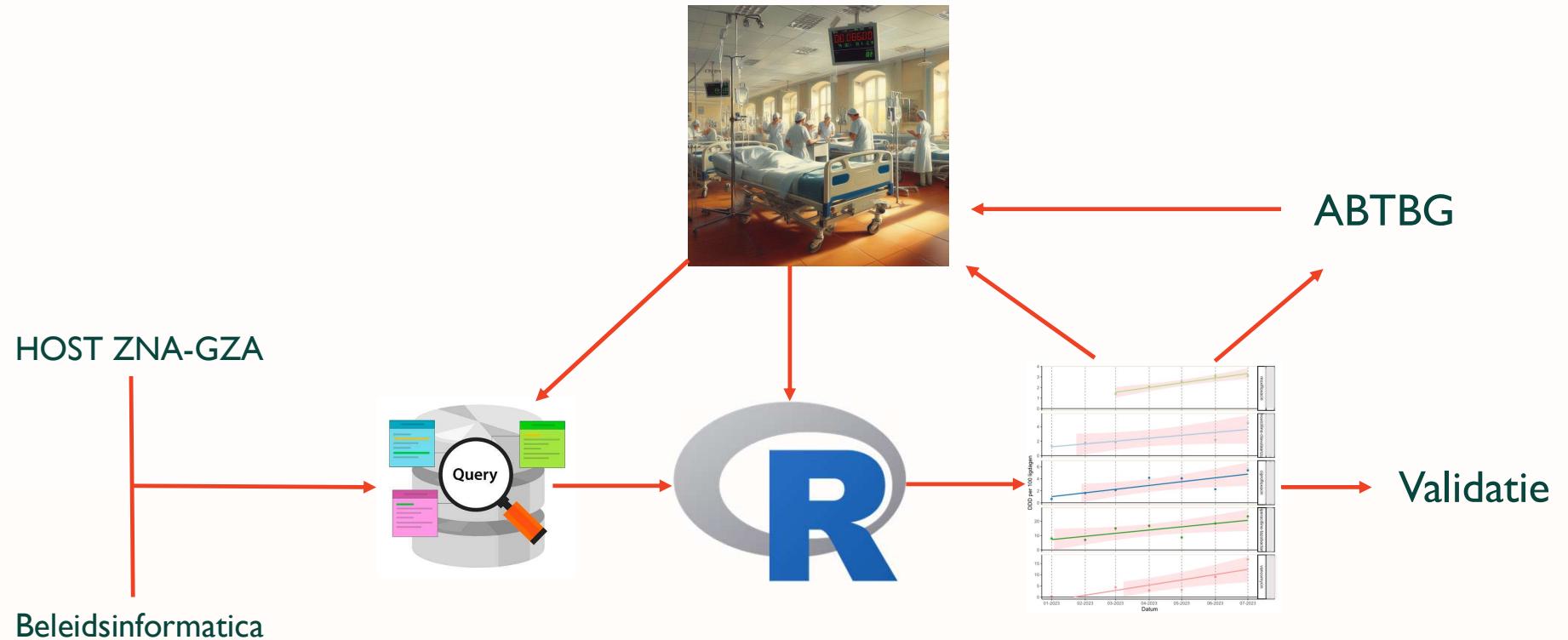
1. Open the Task Scheduler: You can do this by searching for it in the Start Menu of your computer. It should be found under Windows Administrative Tools [seancarney.ca](#).
2. Create a new basic task: Once the Task Scheduler opens, click on "Create basic task..." from the Actions box on the right side of the window [seancarney.ca](#).
3. Name and describe your new task: Provide a clear name and a brief description of what the task does. This is important for distinguishing between different automated tasks [seancarney.ca](#).
4. Choose how often your task should run: In this case, you would select "Monthly" [seancarney.ca](#).
5. Specify when your task should run: Decide on the exact timing of when the task will occur. The Task Scheduler provides lots of options and flexibility so you can create tasks that operate on complex schedules [seancarney.ca](#).
6. Specify which program to run: Here, you'll need to tell the Task Scheduler which program you want to run. Assuming that you've added R to your path, you will type in `Rscript.exe` in the Program/script box, and you'll type in the full path to your R script in the Add arguments (optional) box. Remember that `Rscript.exe` is a command-line program and, as such, it has trouble if the path to your R script contains spaces. If the path to your R script has spaces in it, wrap the entire path in double quotes [seancarney.ca](#).

Here's an example of how the command might look:

```
"C:\Program Files\R\R-3.0.2\bin\x64\Rscript.exe" "C:\path\to\your\script.R"
```



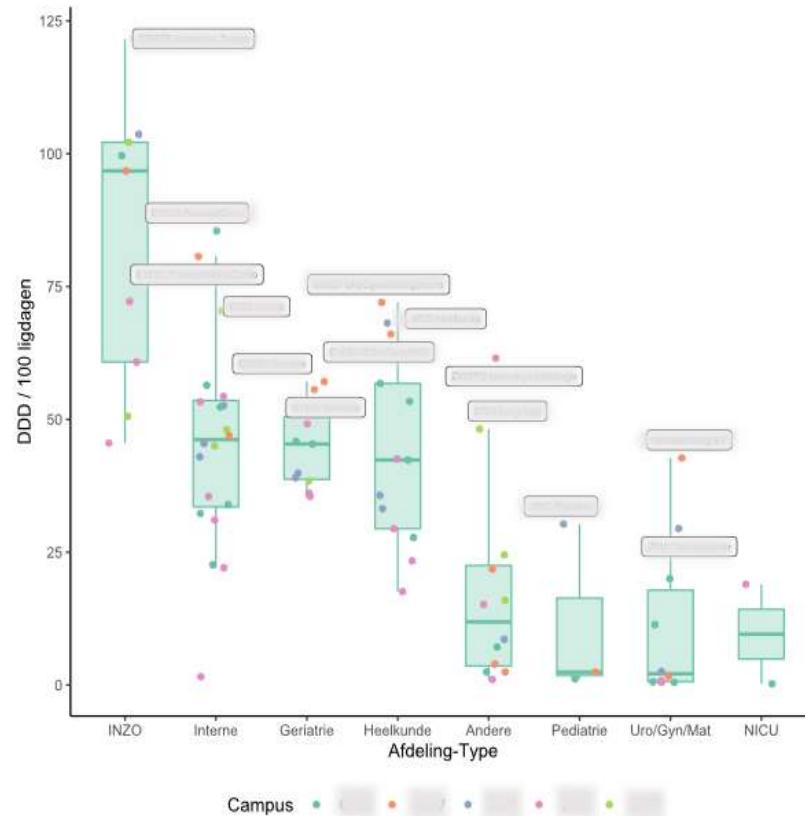
7. Finish the task creation: Click "Finish" to create the task. The task will now run your R script on the schedule you specified [stackoverflow.com](#).



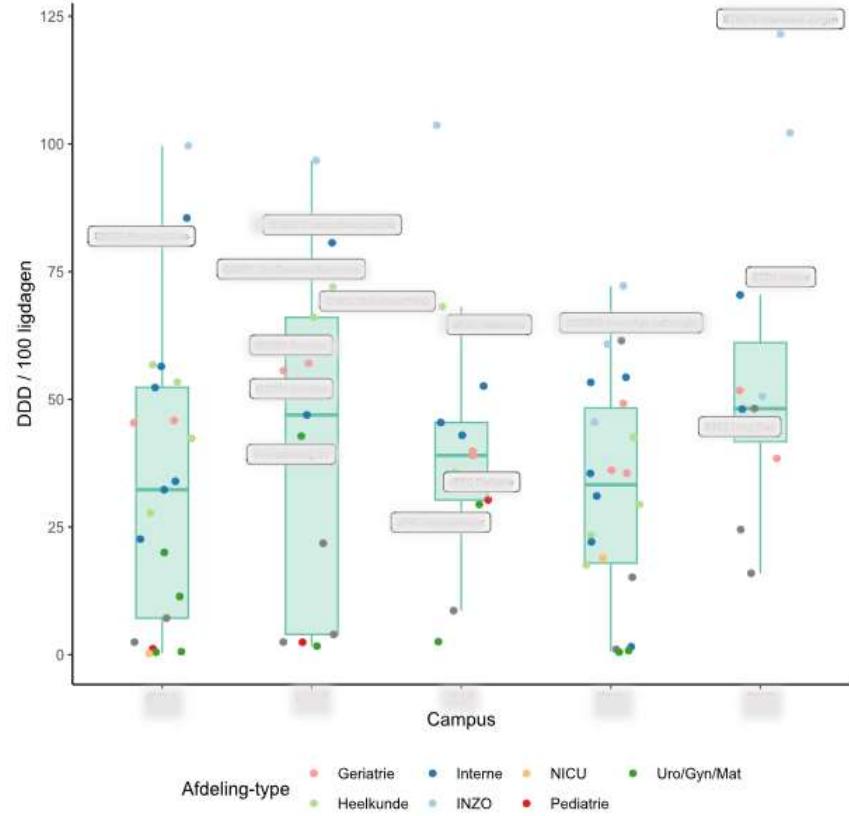
# Results

## Total consumption comparison (campus – ward - ...)

Periode: okt 2022 - okt 2023



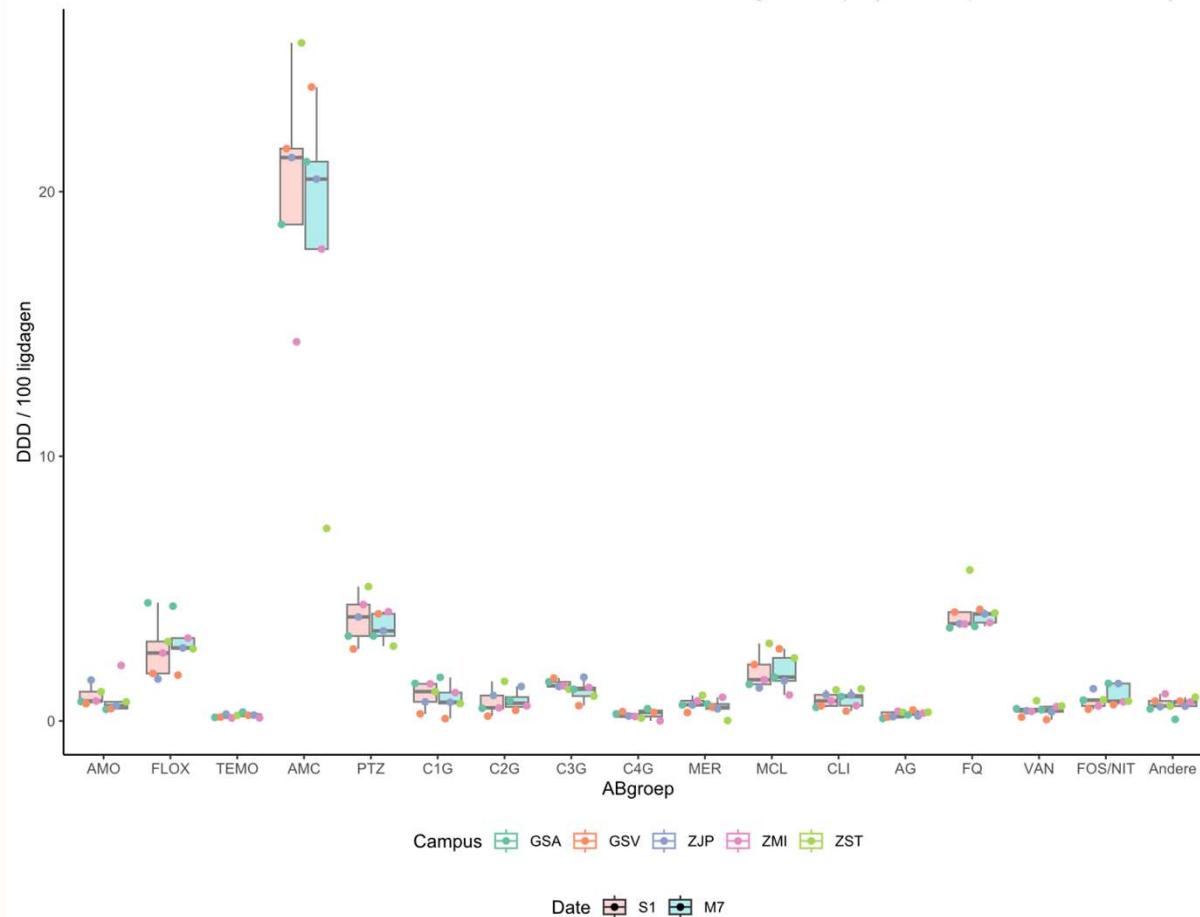
Periode: okt 2022 - okt 2023



# Results

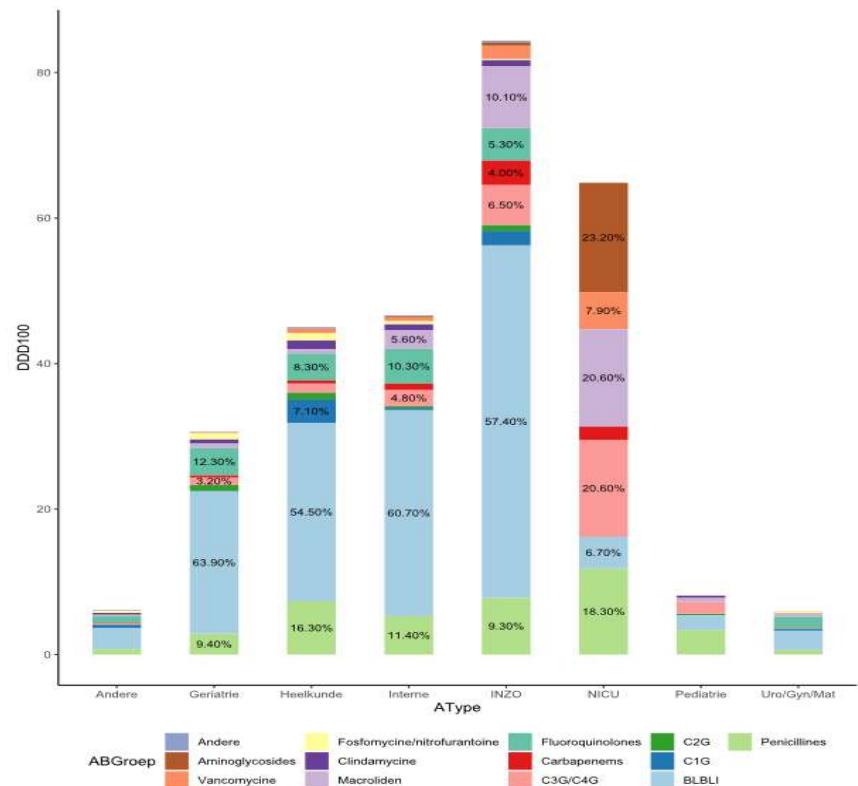
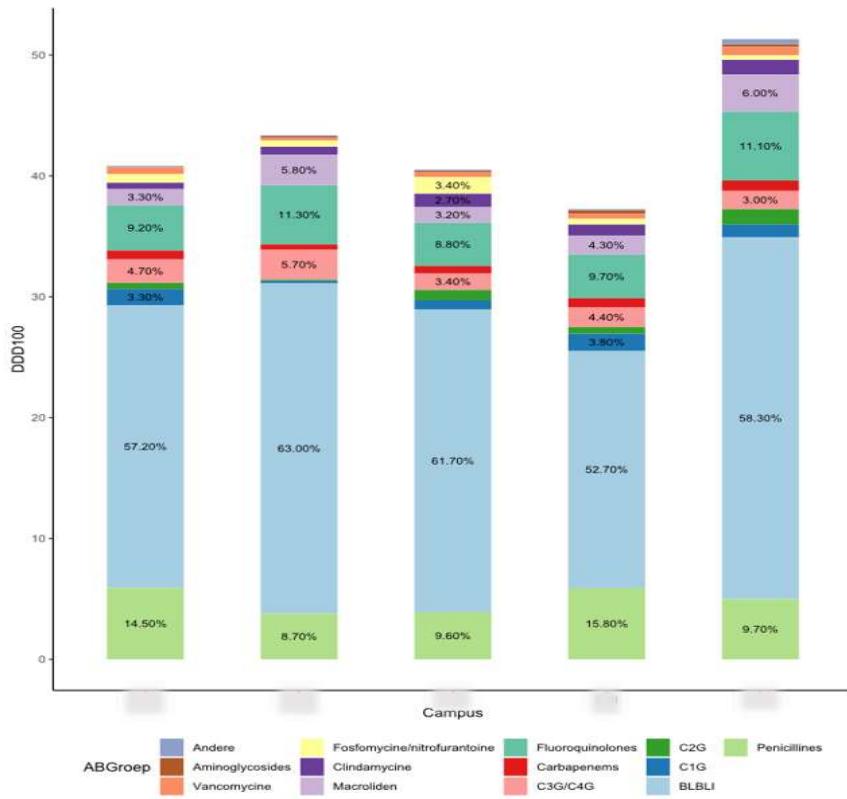
Difference: last year vs last 2 months

Periode: okt 2022 - aug 2023 (S1) EN sep 2023 - okt 2023 (M7)



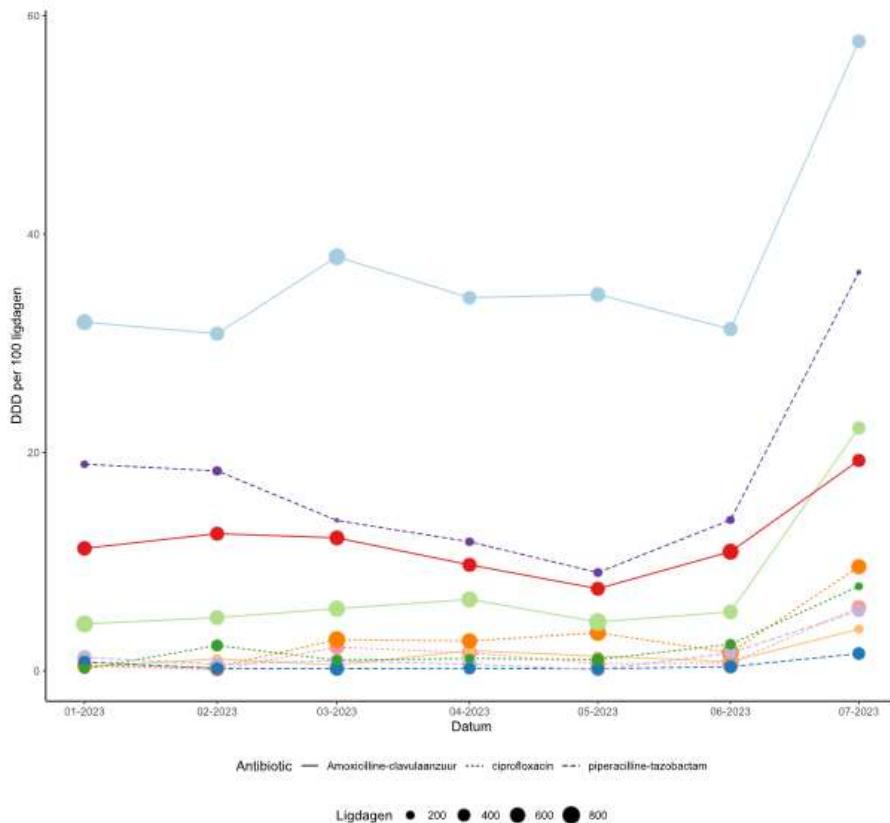
# Results

Consumption – distribution (campus – ward - ...)



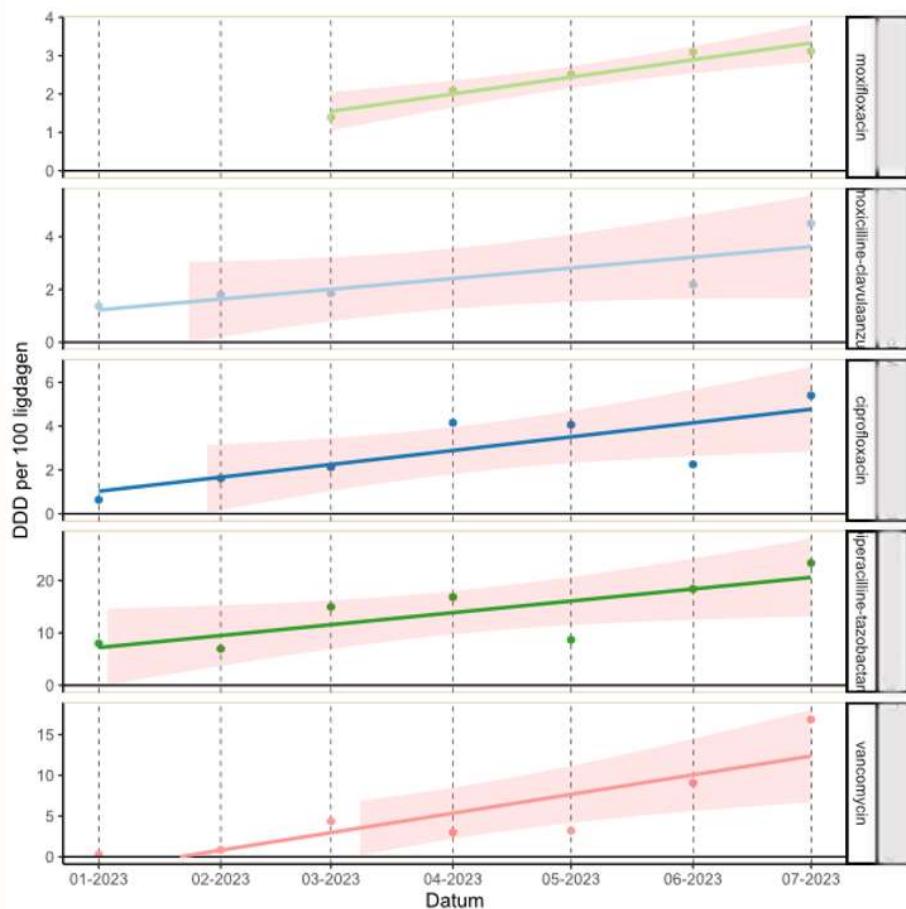
# Results

## Panic Values



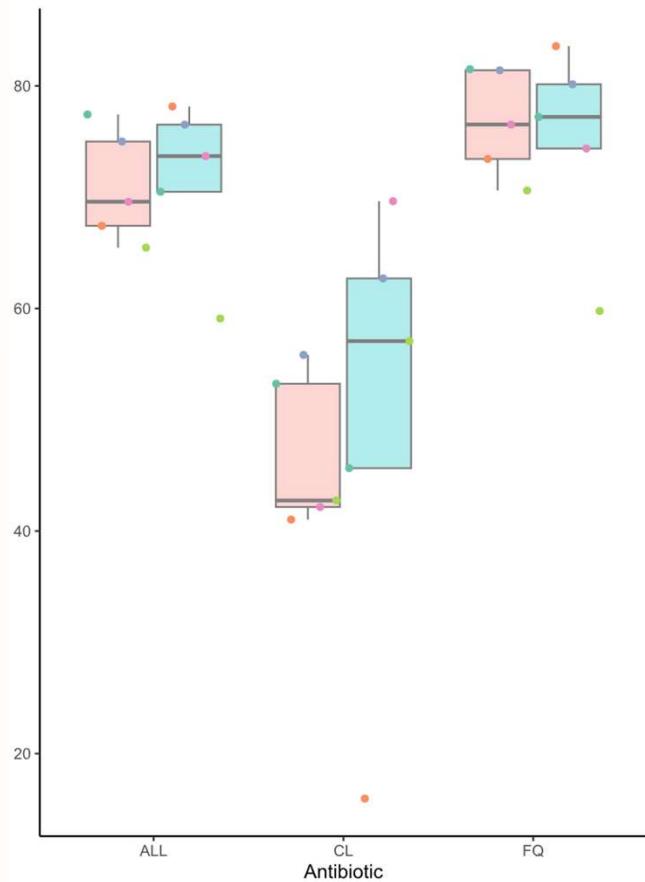
# Results

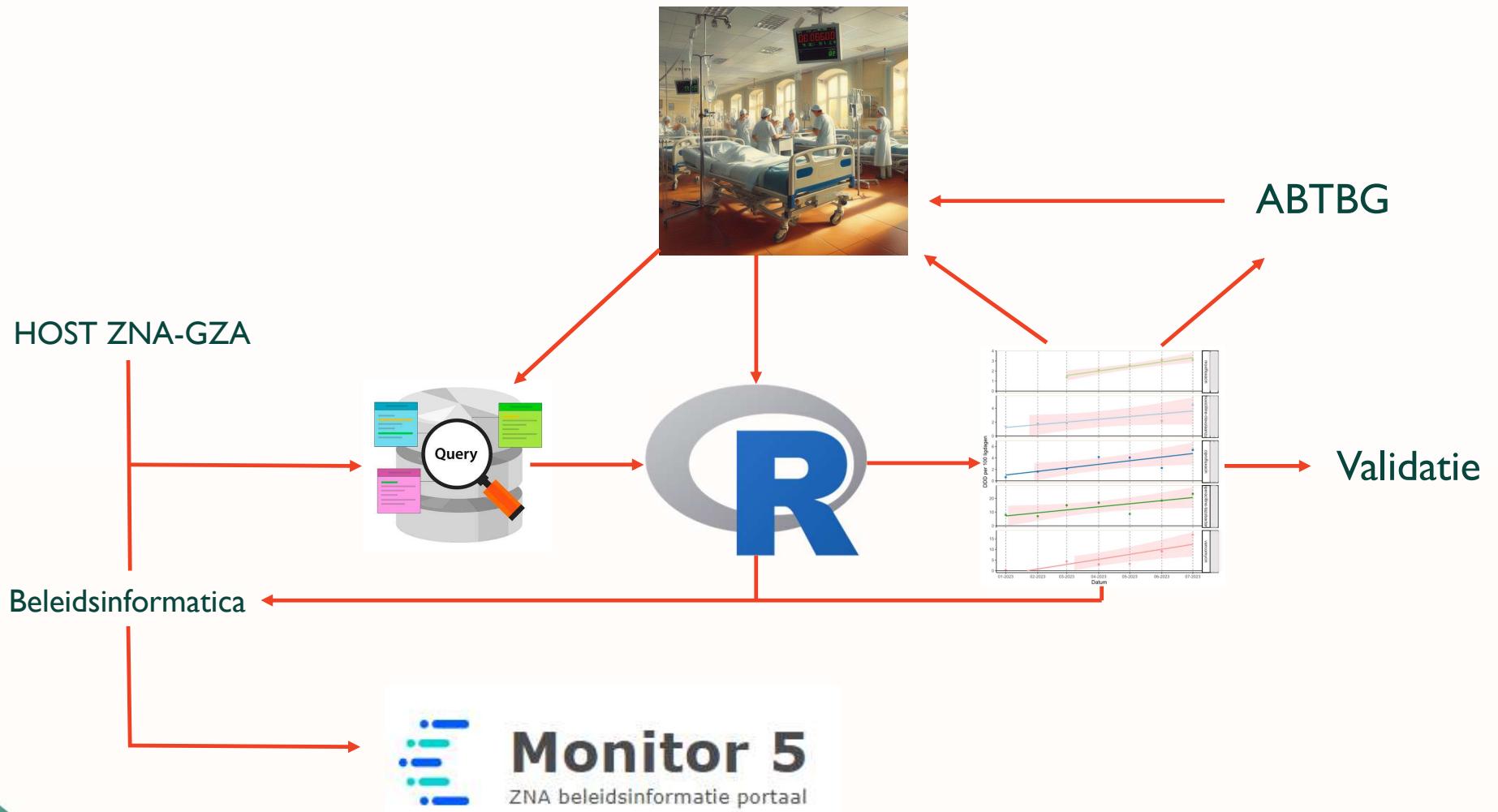
Upward trends in AB consumption (campus / ward / total)



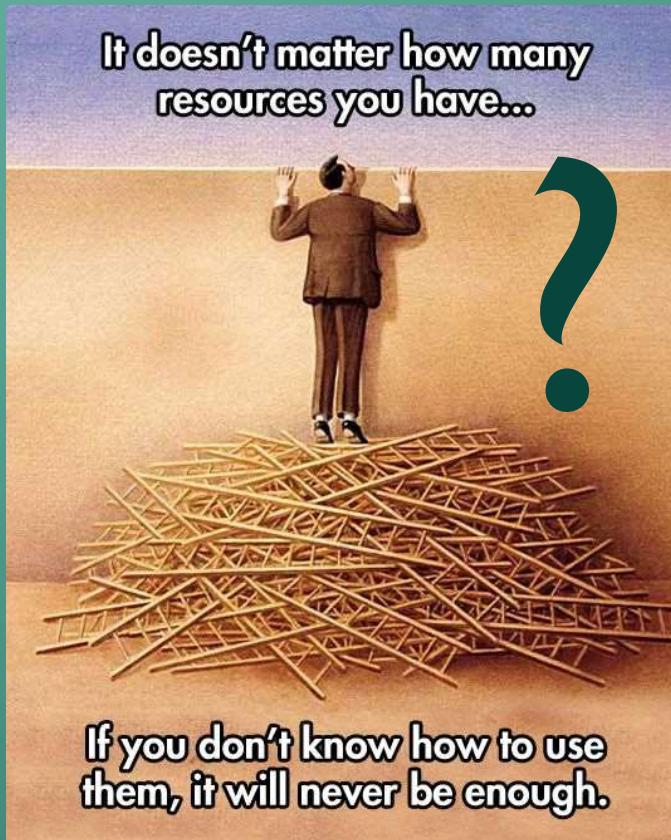
# Results

IV-PO switch (campus – ward – physician)





# Implementation for 2024



# Implementation

IV-PO switch

voorschrijver	DDDT	DDDO	IPR	Antibiotic
A	219.33333	188.50	85.94225	ALL
B	175.00000	170.50	97.42857	ALL
C	110.41667	88.25	79.92453	ALL
A	189.75000	160.25	84.45323	FQ
B	155.25000	153.75	99.03382	FQ
C	84.00000	75.00	89.28571	FQ
A	29.58333	28.25	95.49296	CL
B	19.75000	16.75	84.81013	CL
C	26.41667	13.25	50.15773	CL



# Periodical Consumption report

Week – month – quarter – semi-annual – yearly → ?





Questions/suggestions popping up later?  
✉ HOST@GZA-ZNA.be





Ziekenhuis aan de Stroom  
[ZAS] is het netwerk van  
ZNA en GZA Ziekenhuizen

