e-Rum2020
VIRTUAL CONFERENCE
17/20 JUNE
MILANO

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05_PrescRiptions

A UNIFIED APPROACH FOR WRITING AUTOMATIC REPORTS

Parameterization and Generalization of R-Markdown

Render functions + 📦 = 🧡

Render functions can be implemented in **R-packages**, with
the following **Advantages**

➔ Retrieve information with custom functions

➔ Develop analytical functions outside of render

➔ Render recalls given functions, thus simplifying

➔ Better version control and documentation

➔ Fast development with *roxygen*

The Project

PrescRiptions gitbook

Objectives

➔ **Analysis** analyse English NHS presentation level data to identify specific prescription patterns operating at individual practice level and for specific prescription class.

➔ **Dissemination** make the resources available to the wider research community via R.

➔ **Education** use the developed material for R education purposes.

Data

➔ **Practice level Data:**
  ◆ Prescription data
  ◆ GP Addresses
  ◆ Chemical substance names

➔ **British National Formulary:** allows to organise prescriptions in clusters (e.g. antibiotics)

➔ **Practice demographics:** registered patients by age and gender

➔ **Quality Outcome Frameworks (QOF):** indicators related to the management of common conditions, public health concerns and preventative services at the practice level

Key functions

monthlyDataImport() -> for monthly data download

generateSummaries() -> regional and BNF code summaries

gpSummaries() -> GP-level summaries

plpdDemogBridge() -> used to match prescription and demographical data

renderMonthlyReport() -> … and, of course, a *render function* for a *monthly report*!

Package

PrescRiptions

Your turn: Exercise 12

E12_PrescRiptions.R

Play with package Functions and produce different reports

using the function **renderMonthlyReport**().
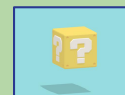
Time: 5 min

Questions

Next up: conclusions