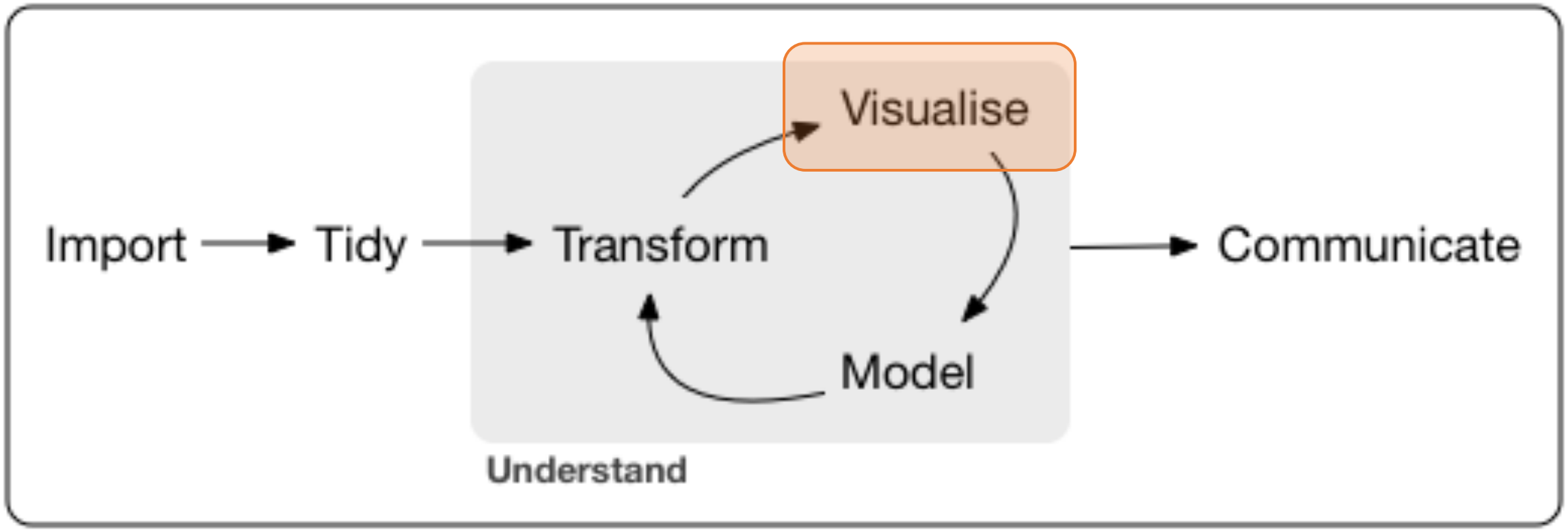
Week 9: Plotting with ggplot2 (III)


Visualise
Import
Tidy
Transform
Communicate
Model
Understand

What have we learned so far?

Geometric objects

- geom_point ( )
- geom_histogram ( )
- geom_bar ( )
- geom_boxplot ( )
- geom_col ( )

Scales

- scale_color_brewer ( )
- scale_color_manual ( )

Themes

- theme_bw ( )
- theme ( )

Let's get set

- Create an R project for this session and name it “session_9”
- Download the script file (.R) and place them in the folder “session_9”
- Open the script file
- Load the tidyverse package
- Import the data file and name it “sinai_covid”

Facets

- Another way to add additional variables, is to split your plot into subplots that each display one subset of the data.
  - facet_grid ()
  - facet_wrap ()

- ggarrange

Your turn! Exercise 1

- Plot the relationship between age (x) and Systolic BP (y) using geom_point, faceting by diabetes status

Your turn! Exercise 2

- Use geom_boxplot to plot the relationship between deceased_indicator (x) and age (y), faceting by facility

Adding a smooth line fitted to the data

- It can be hard to view trends with just points alone. Many times we wish to add a smoothing line in order to see what the trends look like. This can be especially helpful when trying to understand regressions.
  - geom_smooth ()

Your turn! Exercise 3

- Plot the relationship between diastolic_bp(x) and bmi (y), adding a fitted line by obesity status

- Add color by obesity status
- Add a title

Your turn! Exercise 4

- Try to recreate this plot