Add dynamic elements to your report

Instructions

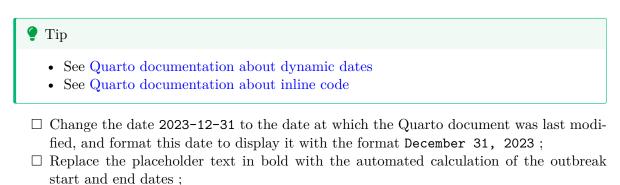Hélène Langet

2024-11-25

Table of contents

1 Exercise objectives

- This exercise builds on the previous exercise where you learnt to build a simple MS Word report ;
- Open the Quarto document `exercise4.qmd` in RStudio;
- All text formatted in bold is a placeholder and should be replaced with appropriate automated calculations or cross-references.
- Complete each of the following tasks and render the document after each task or set of tasks to track your progress.

2 Improve navigation and readability

> **💡 Tip**
>
> - See [Quarto documentation about MS Word table of contents](#)

☐ Insert a table of contents to the Quarto document ;
☐ Automatically number the different sections of the Quarto document ;
☐ Configure the table of contents to only display two levels of section headings.

3 Implement dynamic calculations

> **💡 Tip**
>
> - See [Quarto documentation about dynamic dates](#)
> - See [Quarto documentation about inline code](#)

☐ Change the date `2023-12-31` to the date at which the Quarto document was last modified, and format this date to display it with the format `December 31, 2023` ;
☐ Replace the placeholder text in bold with the automated calculation of the outbreak start and end dates ;

"*The outbreak ran from **date** to **date***"

☐ Replace the placeholder text in bold with the automated calculation of the number of cases, confirmed cases and deaths.

"*Over the studied period, there were **N** cases, including **N** confirmed cases and **N** confirmed deaths.*"
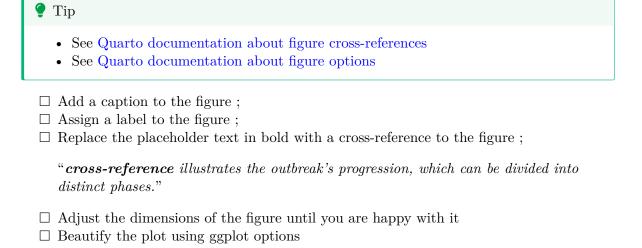
4 Create and reference publication-ready tables

> **💡 Tip**
>
> - See [gtsummary documentation about summary tables](#)
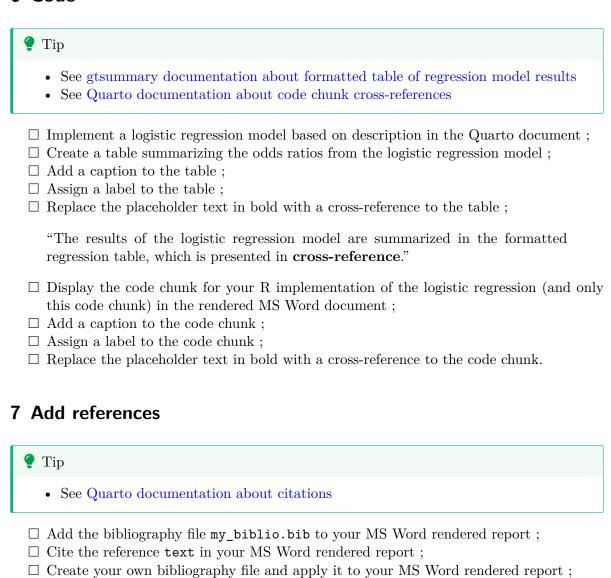> - See [Quarto documentation about table cross-references](#)
>
> Other R packages include [flextable](#) and [gt](#)

☐ Create a table summarising the demographic characteristics and outcome frequency of all cases ;
☐ Add a caption to the table ;
☐ Assign a label to the table ;
☐ Replace the placeholder text in bold with a cross-reference to the table ;

"**cross-reference** *provides a summary of the demographic characteristics and the outcome proportion for the overall population*"

☐ Create a table summarising the demographic characteristics of individuals who died versus those who are still alive ;
☐ Add a caption to the table ;
☐ Assign a label to the table ;
☐ Replace the placeholder text in bold with a cross-reference to the table.

"*while* **cross-reference** *compares the demographic characteristics of individuals who died versus those who are still alive*"

5 Customise figures

> 💡 Tip
>
> - See Quarto documentation about figure cross-references
> - See Quarto documentation about figure options

☐ Add a caption to the figure ;
☐ Assign a label to the figure ;
☐ Replace the placeholder text in bold with a cross-reference to the figure ;

"**cross-reference** *illustrates the outbreak's progression, which can be divided into distinct phases.*"

☐ Adjust the dimensions of the figure until you are happy with it
☐ Beautify the plot using ggplot options

6 Code

> 💡 Tip
>
> - See gtsummary documentation about formatted table of regression model results
> - See Quarto documentation about code chunk cross-references

☐ Implement a logistic regression model based on description in the Quarto document ;
☐ Create a table summarizing the odds ratios from the logistic regression model ;
☐ Add a caption to the table ;
☐ Assign a label to the table ;
☐ Replace the placeholder text in bold with a cross-reference to the table ;

"The results of the logistic regression model are summarized in the formatted regression table, which is presented in **cross-reference**."

☐ Display the code chunk for your R implementation of the logistic regression (and only this code chunk) in the rendered MS Word document ;
☐ Add a caption to the code chunk ;
☐ Assign a label to the code chunk ;
☐ Replace the placeholder text in bold with a cross-reference to the code chunk.

7 Add references

> 💡 Tip
>
> - See Quarto documentation about citations

☐ Add the bibliography file `my_biblio.bib` to your MS Word rendered report ;
☐ Cite the reference `text` in your MS Word rendered report ;
☐ Create your own bibliography file and apply it to your MS Word rendered report ;

8 Finalise your MS Word report

> 💡 Tip
>
> See Quarto documentation about Word templates

☐ Apply the Swiss TPH template `swisstph_template.docx` to your MS Word rendered report ;

☐ Create your own template and apply it to your MS Word rendered report.