

R for Health Data Research

Dr Ewan Carr

Department of Biostatistics and Health Informatics
King's College London

January 2025





Denmark Hill Campus

**Institute of Psychiatry,
Psychology & Neuroscience**

Social, Genetic &





Run, or he's going to tell us about
again!

R

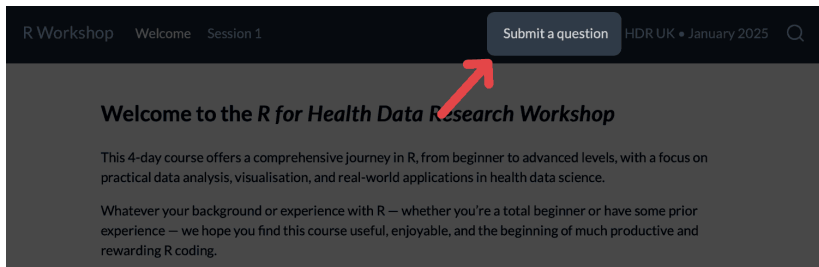
Course materials

tinyurl.com/hdr-january2025

- This page hosts all lectures and practicals for the course.
- Book mark the page; it will updated over time.
- The page will be available until at least one week after the last session. Download any materials you want to keep after that.

Submit your questions

- Click the “Submit a question” link to send me questions during the week. (I won’t check this during the live session).
- Each Friday, I will answer any questions received with a short video.



The screenshot shows the top navigation bar of the 'R Workshop' website. The navigation bar is dark with white text. On the left, it says 'R Workshop', 'Welcome', and 'Session 1'. On the right, there is a button labeled 'Submit a question', followed by 'HDR UK • January 2025' and a search icon. A red arrow points from the bottom towards the 'Submit a question' button. Below the navigation bar, the main content area has a dark background. It features the heading 'Welcome to the R for Health Data Research Workshop' in a bold, italicized font. Below this heading, there are two paragraphs of text. The first paragraph describes the course as a 4-day journey in R, from beginner to advanced levels, focusing on practical data analysis, visualization, and real-world applications in health data science. The second paragraph states that the course is suitable for both total beginners and those with prior experience, aiming to be useful, enjoyable, and the beginning of productive and rewarding R coding.

R Workshop Welcome Session 1

Submit a question HDR UK • January 2025

Welcome to the *R for Health Data Research Workshop*

This 4-day course offers a comprehensive journey in R, from beginner to advanced levels, with a focus on practical data analysis, visualisation, and real-world applications in health data science.

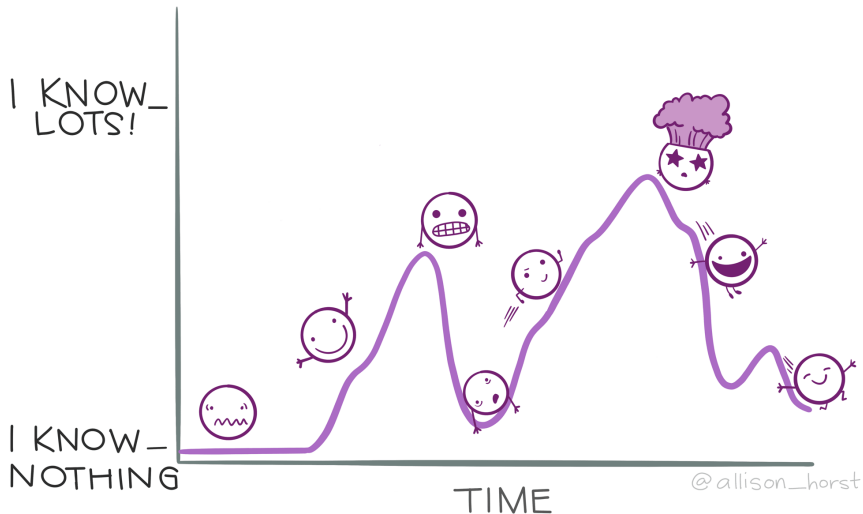
Whatever your background or experience with R — whether you’re a total beginner or have some prior experience — we hope you find this course useful, enjoyable, and the beginning of much productive and rewarding R coding.

Homework

- The sessions are spread over four weeks, allowing time for the material to sink in before moving on.
- Some practicals will contain more exercises than we have time for during class.
- If you have time, you may want to attempt these in your own time, before the next class.

(This is entirely optional).

Setting expectations



Learning new things is hard, especially when you're used to another way of working (e.g., another package or language, such as Stata, SPSS or Python).

I tried to learn R about five times before it stuck.

Some tips:

- Expect confusion. It's inevitable; you're not doing anything wrong.
- Mistakes are normal, even after many years of using R.
- Allow time; things will take (much) longer at first.
- It can help to use R for a specific project, before switching completely.

R programmers after 10 years

- Have to Google everything
- Regularly copy/paste from StackOverflow
- Make mistakes
- Ask for help
- Read the documentation
- Spend hours debugging their code only to find they missed a comma somewhere...



How this course will run

This is a large, online class with a mix of lectures and practical sessions.

- During the lectures:
 - Post any questions in the chat.
 - Listen or type along – whichever works best for you.
- During the practicals:
 - Post any questions in the chat or put a hand up.
 - You're welcome to unmute yourself and share screen.
 - I will use messages in the chat to check your progress.
 - I will go through the exercises at the end.
- After the session:
 - Review the material and recordings and (optionally) have a go at the homework exercises.
 - Submit questions for the Q&A.

EVERY QUESTION IS HELPFUL.

Someone else is almost certainly
wondering the same thing.