



## The Challenge

In the spring of 2018, NHS Scotland expressed a need to move from their existing software, SPSS and SAS, to using R. The difficulty they faced was that there are over two hundred data scientists in NHS Scotland, which made training everyone in the new software a logistical challenge.

To overcome this difficulty, we used the tidyverse, an opinionated collection of R packages designed for data science, to create a tailored R course, which included notes, the course package, and practical exercises and solutions.

## The Solution

We delivered the training course on-site across eight different dates. The course participants were from a wide range of backgrounds. To keep them engaged, we developed a wide range of practical materials. We also ran RStudio and R in the cloud, which meant that the course participants could use the backup solution if they didn't have the correct software installed.

We coupled our eight training sessions with a one-to-one consultancy provision. This provision meant that, two weeks after the course, our participants were able to submit questions to us about their current work and get our feedback.

## The Results

NHS Scotland is rapidly moving forward with using R, and is in the process of creating exciting and useful dashboards using R/Shiny. However, making a public-facing dashboard presents a range of additional challenges, such as security, and dashboard speed.

We have been able to provide practical advice on how to optimise and deploy NHS Scotland's dashboard applications. In addition, we have also provided a general code review and given practical pointers on how to structure code and work in a team via Git.

200  
DATA  
SCIENTISTS

1:1  
CONSULTANCY

CODE REVIEW  
AND  
PRACTICAL  
POINTERS

Using a variety  
of tools

