Appendix 1. Past experience with R and economic modelling in R of the modellers

This appendix outlined the past experience of the modellers with using R and economic modelling in R before the initiation of this 'Excel to R' CVD model conversion project (April 2019).

Modeller initials	**Past** experience with R and economic modelling in R
JR	• One-year experience with R, in economic modelling • Previously built a Markov model in R using HEEMOD and a decision tree analysis
HH	• 7 years experience with R, primarily in data analysis • 1.5 years working with a policy model in R
YX	• 1.5 years experience with R, primarily in Shiny app development and data analysis • Zero experience in economic modelling with R
EG	• 5 years experience with R in economic modelling • Previously hand coded a Markov model and a discrete event simulation model

Appendix 2. Coding suggestions from peer reviewers

In the peer review process we received some very helpful suggestions on coding so we have compiled them together here. Hope these would benefit the audience of this paper.

- The code should be separated into smaller functions.
- The code should be easy to follow when embedded within a single R Markdown file. Note that this file should not be long, but should use modular functions created from external files.
- The mathematical details of the model should be mapped in a clear way to the code, ideally within the R Markdown file, to enhance the transparency of the code.
- It is recommended to turn the model into an R package and using pkgdown (https://pkgdown.r-lib.org/) to create a website. This will create automatic links to all functions called in in the R Markdown files (and require the authors to document these functions). One example is the GitHub repository containing the DARTH groups coding framework (https://darth-git.github.io/darthpack/). The R Markdown file should be similar to the "Articles" on darthpack website.
- It is recommended to use an R package such as renv (https://github.com/rstudio/renv) to manage dependencies. That way a user can ensure they install all the correct packages and the same versions of the packages used by the authors.