Code for study assessing the impact and cost-effectiveness of maternal vaccination and long-acting monoclonal antibodies agaisnt RSV in England and Wales

Installation

Though this repository is set up like an R package, I reccommend you clone this package from Github and work through the vignettes. The code depends on several packages on CRAN, which should install autmatically by running the `R/main.R` script via the `pacman` package. There is another package on this Github account which runs the RSV models, `rsvie`, which also needs to be installed. This can be done by installing the `devtools` packages and calling

```
library(devtools)
github_install("dchodge/rsvie")
library(rsvie)
```

Overview of repository

The information in `data/`, `data-raw/`, and `datasource/` relate to the England and Wales specific information parameterising the burden, risk of outcomes, costs and QALY loss. For further information on how this works, please see the `rsvie` package.

The `figs/` folder contains all the figures used in the manuscript and supplementary.

The `outputs/` folder contains large RDS files which contain all the information about the impact and cost-effectiveness of each model after running the simulations via the 'rsvie; package.

The `R/` folder contains all the code used to run the models, process the outputs and plot the figures.

Explaination of vignettes

The `run_figs.Rmd` vignette recreates all the figures and supplementary figures in the manuscript.

The `get_metrics.Rmd` vignette recreates the values quoted in the results section of the manuscript.

The `rshiny.Rmd` vignette creates a local RShiny app which allows the user to explore the impact on the cost-effectiveness analysis when changing covarage, and combined cost of purchasing and administration per dose of long-acting monoclonals and maternal vaccination.

Contact

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