Using Quarto to showcase an ecosystem of open-source R packages for Pharmacometrics

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Quarto is awesome

Welcome to Quarto

Quarto is an open-source scientific and technical publishing system built on Pandoc

- Create dynamic content with Python, R, Julia, and Observable.
- Author documents as plain text markdown or Jupyter notebooks.
- Publish high-quality articles, reports, presentations, websites, blogs, and books in HTML, PDF, MS Word, ePub, and more.
- Author with scientific markdown, including equations, citations, crossrefs, figure panels, callouts, advanced layout, and more.

Get Started

Guide



Sorry, this is not a Quarto tutorial...

If that's what you're looking for, there are many excellent resources online:

- RStudio blog introduction
- Quarto.org documentation: <u>installation</u> and <u>tutorials</u>
- Recent <u>rstudio::conf presentation</u>
- Plenty of user blog posts:
 - NASA Openscapes
 - Appsilon





This is a success story, involving Quarto

Some highlights include:

- The power and beauty of developing your own ecosystem of R packages
- The importance of good examples and documentation
- How Quarto makes it easy to tie it all together and share your success with others

The MeRGE website, built with Quarto: <u>https://merge.metrumrg.com/zy8x3BETA7R5Ph/</u>



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What is MeRGE?

Metrum

Research

Ecosystem

Group

The







What is MeRGE?

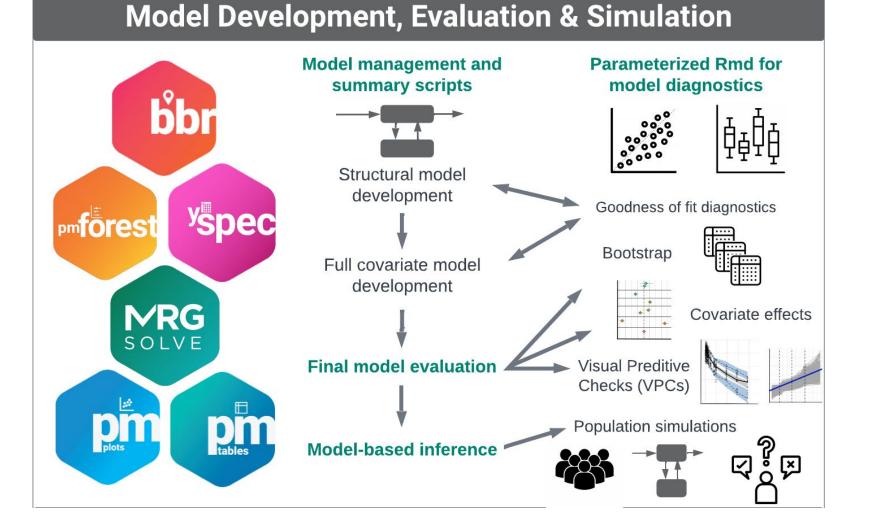
The

Metrum

Research

Group

Ecosystem







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Our journey to the MeRGE Expo

- Sharing code is better than writing new code...
- Getting code from a shared repo is better than sharing code...
- Using a package is better than copy/pasting from a repo...
- Having an ecosystem of packages is better than having one "kitchen sink" package...
- Having examples to show you how to use the ecosystem is better than trying to figure it out for yourself from documentation...
- Having those examples on a nice-looking website is the best.



Quarto tips and tricks

- Versatile and easy-to-manipulate layouts
 - Blog vs. Listing vs. Sidebar
 - Control layout and content ordering in one place
- Using_variables.yaml
 - Consistent descriptions and links for ecosystem packages
 - Linking to related articles or scripts in repo
- Code and narrative live together
 - \circ Updates made in one place
 - Ability to render interactive RMDs from Quarto articles
- Quickly render and preview your content





MeRGE website: <u>https://merge.metrumrg.com/zy8x3BETA7R5Ph/</u>

Accompanying code repo:

https://github.com/metrumresearchgroup/expo1-nonmem-foce/

This website is still under development and feedback is welcome!





Thank You!



