Comparing Analysis Method Implementations in Software (CAMIS): An open source repository to document differences in statistical methodology across software

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Statisticians and programmers working in multiple software systems (e.g. SAS, R, Python), will have found differences in analysis results that warrant further exploration and justification. Whilst some industries, may accept results not being the same as long as they are “close”, the more highly regulated medical research industry, generally uses double programming to validate results, which requires an identical match in results. This can be very challenging and highly time consuming to investigate and justify any differences, particularly when accompanying documentation doesn’t fully explain the approach used by the software. Reasons for discrepancies may include; differences in statistical methods, options, convergence algorithms and rounding methods.  In the majority of cases, the conclusion is that neither software is incorrect but they do things differently.  On rarer occasions, one piece of software may have errors/bugs and as such is inferior to another for a specific analysis.  As statisticians become ever more multi-lingual (using R, SAS, Python and other software), being able to quickly identify reasons for differences will be a key feature to the statistician’s toolkit.

Comparing Analysis Method Implementations in Software (CAMIS) is a collaboration between PHUSE, the R Validation Hub, PSI AIMS and the R consortium. The project is investigating differences and similarities between SAS and R, storing code, case studies, results, differences and findings in an open source github repository.  In the near future, the project will expand to include any open source software such as python and julia.  This talk will discuss the roadmap for the future of the project describing how you can contribute. With open source collaboration into the repository, the project aims to be the single go to repository for all statisticians and programmers to reference. https://psiaims.github.io/CAMIS/

**Medical Statistics -Stream.**

Your preference for type of presentation (see notes below)

Intended audience – who will gain most from attending your talk/viewing your poster

Whether the presenting author is in the first 10 years of their career – this is to help ensure we give younger presenters an opportunity to participate

Whether the presenting author is a Chartered Statistician – this has no impact on review grade

You are asked ‘Is your presentation of potential media or public interest? If yes, how, and to what audiences? – this is to enable us to identify talks/posters that would potentially be of interest to the media or the wider world in general. It does not affect the chances of the abstract being selected for presentation

Deadlines:

• First deadline – 5 April – last date for submission for contributed talks

• Second deadline – 10 May – last date for submission for rapid-fire talks

• Third deadline – 21 June – last possible date for submission for contributed posters

[Contributed talks](https://app.oxfordabstracts.com/stages/5283/submitter) (20 minutes including questions) - Wednesday 5 April  
[Rapid-fire talks](https://app.oxfordabstracts.com/stages/5284/submitter) (5 minutes with option of poster) - Wednesday 10 May  
[Poster presentations](https://app.oxfordabstracts.com/stages/5285/submitter) (A0 **landscape** poster) - Wednesday 21 June

Decisions on abstracts submitted by the first deadline will be communicated by mid-May

We normally receive far more abstracts for oral presentation than we can accommodate in the conference programme so we will offer either a rapid-fire talk or a poster presentation as an alternative to those abstracts for which talk slots cannot be provided.

5. ALL presenters whose abstracts are accepted for presentation – whether for a talk or poster – are required to respond to the acceptance email to confirm their participation. All presenters must complete their registration with payment no later than 1 August or risk their presentation being removed from the programme. Presenters must register for at least the day of their presentation. There are no discounts or expenses available for contributed talk and poster presenters. 6. All contributed presentations are planned to take place in-person in Harrogate.

NOTE: I signed in with Dr.lyn.taylor google account.

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