R Submission Pilot 3 Meeting Minutes

Pilot 3 Team

2023-02-11

Pilot 3 team should be able to see updated meeting minutes here on a weekly basis.

03 Feb 2023

R Consortium meeting conflict with Pilot 3 catch-up today

- 1. Joel & Phani
- ADAE in PR.

ACTION: message from Thomas to review this: https://pharmaverse.slack.com/archives/C04968ES7T4/p1675170902021159 need to check. Also need to implement solution for TRTEMFL discrepancy solution #38

- since we are matching with the original ADAE, if we update this we need to see if it creates discprenancies and need to document in our QC findings.
- 2. Kanjie
- Populated Value level metadata tab has been updated for ADAS
- Need to focus on quality of define
- 3. Nicole
- Reviewed Thomas's comments on ADLBC and addressed them.
- still have 30+ discrepant records particular to end of treatment. Endpoint variables are missing for those 30 values. In progress at this time.
- qa adlbc.R created and all match except for those 30 records.
- attribute discrepancies will need to check hours vs date. see how it impacts table program. if no impact we can document differences in QC findings wiki.
- 4. Declan
- No updates
- 5. Dadong
- Will move on to tables/graph tasks.
- 6. AOB
- Where to find table and graph programs.

ACTION for those that can work on updating the output programs, they can be found here:

https://github.com/RConsortium/submissions-pilot3-adam/tree/main/vignettes> Each of the .RMD scripts to Meeting Recording: https://drive.google.com/file/d/1D2sUlnpLaGV8BGb2GeS5tJePinOMRaEd/view

27Jan2023

- 1. Joel
- ADAE now has PR to main.
- diffdf() still showed a few messages with format.sas discrepancies.
- Next step to look into the Time to First Dermatologic Event table.
- Per Phani, Treatment-Emergent Flag has to be updated using #38 solution from Kaz
- 2. Ben S.
- no updates today
- working on admiral-Hackathon
- Phani asks if working on this Pilot3
- 3. Steven
- will follow up with Nicole on ADLBC
- 4. Kanjie
- need to add value-level metadata to define for ADAS and ADTTE, manually.
- 2 issues created
- we're updating define in google sheet then will download to excel to create a new define.xml
- Ben S. mentions metacore functions that could help generate define for us.
- 5. Kanjie demonstration on
- using metacore package to read in specs as an metacore object.
- we need to udpate define in order to best update the metadata when applied to the variables in our datasets.
- 6. Steven discussion on alternate eSUB package approach and discussion.
- Post meeting notes Joel brought this up to the R Consortium core group and they've strongly suggested we follow the same submission steps as Pilot 1 and 2 for consintency and knowing that FDA have already accepted the packages for these prior Pilots.
- This can be brought up again after Pilot 3 has been submitted.

Meeting Recording: https://drive.google.com/file/d/1 qA3ct8YtTLvronKCsviVBiRuD7LmEcx/view

20Jan2023

- 1. Joel
- ADAE reviewing FLP script, also added back ADSL variables. Look into missing ADAE variables, but seems the select() function in the script was just missing the variables we needed.
- DATASET.JSON not ready for this Pilot 3 FDA submission yet, but still looking at using .xpt for this
 pilot.
- Still reviewing comments and updates to proposal.
- 2. Phani
- ADAE variables are available that Joel mentioned.
- Looking into ADAE labels to finalize.
- After ADAE will pick up new issues.
- parquet files proposed to FDA for option submission? Webinar : https://www.youtube.com/watch?v=nqJsLSLd39A&t=5s see 14:28
- 3. Kanjie
- LOCF function in admiral being updated. Need to add one more parameter in ADADS.

- ADSL codelist solution suggested by Kaz. Sample code will be written in another branch and will request ADSL authors to review and merge to their dev branch if approved by them.
- 4. Steven
- Worked with Nicole on ADLBC updates.
- Raised awareness on .txt submission package. Will set a time at next meeting to discuss proposal.
- 5. Ben S.
- Project board set-up: https://github.com/orgs/RConsortium/projects/7

ACTION: ALL REVIEW meeting recording below to see Ben's demo on project board (10:22)

- ADBLC in PR, but still has issues.
- ADAE still in progress.
- For new issues, please add them to the backlog (11:55). This will help to see if issues need to be re-assigned.
- Package down site, still in progress.

ACTION: Ben work with Steven to help set-up github pages.

- 6. Declan
- Thomas created new area to document discrepancies between datasets we generated and original datasets.

ACTION: All add any new corrections needed from original datasets

<https://github.com/RConsortium/submissions-pilot3-adam/wiki/QC-Findings>

- 7. AOB
- last 2 datasets ADLBC and ADTTE
- ADAS and ADSL already main
- ADAE now reading in the Pilot 3 generated ADSL
- Once all datasets are in main, then we need to complete the Table/Graph scripts.
- Then complete eSUB package.

Meeting recording: https://drive.google.com/file/d/1ZuGjY4vZBuBg3_-qKwnCAeLhBhXuKy_Y/view

13Jan2023

- 1. Declan
- ADSL QC, SAS and R differences. Issue seems to be with original ADSL not Pilot 3 ADSL. What is approach to fix?
 - Thomas suggests differences like this we need to document to note the updates we had to make to follow the documented define.
 - Joel mentions that there is this tab which we can use to document differences and update the specs with the corrected approach. $\frac{d}{dt} = \frac{d}{dt} = \frac{d}{d$
 - LB.VISIT incorrectly set as derivation not in ADLBC.

ACTION to Declan - Create a seperate document to note differences.

ACTION to Joel: remove datasets in define that we will not be submitting in Pilot 3.

ACTION to Steven: double check if there were issues in codelists.

ACTION to Nicole: also found issues in specs in ADLBC, work with Stephen to update ADLBC specs appropriately.

- 2. Ben
- Packagedown update, needs admin access
- Project board/Kanban generation
- 3. Nicole
- ADLBC compare to original dataset. Looks good, but missing >=50 records vs original dataset.

ACTION: Steven, Nicole and Dadong to review spec derivations to see if these are where discrepancies are.

- 4. Steven
- Reviewing Pilot 3 proposal to the FDA and proposed an alternate approach to submission. Issue #37. https://github.com/RConsortium/submissions-pilot3-adam/issues/37#issuecomment-1347960472

ACTION: Steven to share proposal in a seperate meeting or we prolong our standup to an hour to continue further discussion on this.

- 5. Kanjie
- Rerun primary table as used with ADADAS, made updates to table script only due to updated R
 version and package versions, nothing else. Upon generation, due to discrepancies found in ADADAS
 with the original dataset, the results show minor differences.

ACTION :Kaz to document these differences in a doc. Same doc where ADSL differences are captured.

- ADSL codelist can use metatool functions rather than writing separate code for formatting per specs. Kaz created an issue #45
- ADAE TRTEMFL discrepancy solution #38

ACTION: Phani and Joel to update ADAE FLP with Kaz's suggestions.

ACTION: PR ADAE and ADLBC to main as draft so that others can see the scripts for these.

- 6. Bingjun
- ADTTE specs seem to be missing in define.
 - Updating specs to include ADTTE specs
- 7. Yutong
- Catching up with the team.

ACTION: looking through new issues to assign herself.

- 8. AOB
- CDISC working group proposing on using DATASETS. JSON for FDA submission instead of .XPT

ACTION: bring this question to R Consortium group meeting.

Meeting adjourned.

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06 Jan 2023

Happy New Year and Welcome back!

- 1. Joel L.
- FLP ADAE majority completed by Phani (Great work, Phani!).
- Going through Pilot 3 proposal review, new comments have come in which are being addressed.
 - Question from Ben how will the R package work when submitted to the FDA via eCTD?
 - Answer The package will essentially be an R package of the project, including all of the R package utility functions we used in pilot 3 (as listed in the renv.lock file) and all of the project work scripts that generate the ADaMs and Tables/Graph. Alternatively, instead of a package a simple .txt file for all of the packages used and another .txt file for all ADaM and Tables/Graph script can simply be delivered as well with instruction for either approach written appropriately in the ADRG. Goal of this pilot is for FDA to be able to receive R submissions in Clinical Trial work that is understandable to unpackage, readable and/or executable.

2. Ben S.

- Github actions
 - check everyone's codes in that the code runs on Windows, Mac, Linux
 - PR done and needs to get merged. Joel to merge.
 - Package down new issue #42 to update all Pilot 1 info to Pilot 3. Create website.
- 3. Declan
- ADSL updated and merged to main, but need to double check if been compared to original ADSL. He'll follow-up.
- 4. Lei
- Check that we're using the correct define. Issue #10.
 - needs github access
 - work on ADRG
- 5. Kanjie
- ADADS merged to main, but when compared to original ADADS discrepancies came up.
 - Admiral recent released derive_locf_records(), limited to only AVAL variable as last observed record carried over, but does not include other variables needed. Kaz made updates to function herself to fix issue on her end. Working with admiral to update in next release. At this time has saved function in function folder in pilot 3 repo. See #50
 - Second issue noted in #39 with original ADADS.

6. Phani

- updating labels in ADAE. Derivation of all variables are complete.
- issue with TRTEMFL derivation issue #38
- will work with Joel to get scripts pushed to git

7. AOB

- Need to follow up on ADLBC.
- Tables working group meetings vs submission working group meetings
- Review that our work in Pilot 3 is creating ADaMs originally used in Pilot 1 to generate Tables/Graphs, then take the Pilot 1 Table/Graph scripts and source our ADaMs to generate the Tables/Graphs.

Meeting adjourned.

Meeting Recording: https://drive.google.com/file/d/1b4MG98ljC4Yf4CFzpT40qEeSi6nQKbLL/view

23 Dec 2022

Meeting cancelled, because it's time to take a break and hang out with our Families and Friends. Have a well-deserved and relaxing break everyone. We'll pick it up again next year! ~Thomas and Joel



19 Dec 2022

1. Ben S. - brought up package down sites for Pilot 3. Easy to do from Posit.

ACTION to Ben S. - work on Pilot 3 package down site. Update to show our progress on Pilot 3 ADaM. https://pkgdown.r-lib.org/

https://github.com/RConsortium/submissions-pilot3-adam/issues/11

2. Kanjie - ADAS almost done. Working on one more parameter discrepancy. Working using new functionality in admiral{} 0.9.0 per updated renv.lock.

ACTION to Kanjie - work on table : https://github.com/RConsortium/submissions-pilot3-adam/issues/30 compare against Pilot 1.

googlespreadsheet define working well so far. Updating the descriptions correctly so that the metacore{} package can import well. Able to import excel directly. At some point we'll need to update the Value Level metadata.

- 3. Joel still working on ADAE. Phani has worked on half of ADAE and still needs to derive 13 more variables. I took time to meet with Phani set up his Posit Cloud and github connection, so he was able to push his script up to git, where then I can pull his work to continue updates. Delivered Pilot 3 proposal to R Consortium for review: https://github.com/RConsortium/submissions-pilot3-adam/issues/37
- 4. Some notes for everyone on Pilot 3. As we are all trying to work in the same environment on Posit or on your local computer, before making any pushes or PRs, please make sure you're not changing any of our environment files (e.g. renv.lock) in your branch, then pushing up and accidentally merging to main (though we do have the main branch protected, we're only human and something could get through). As users pull from main and merge to their dev branches to get the udpates, any change in the environment when doing a restore could show errors in their program due to different package versions. Pay attention to detail and mindful of the changes being made in your PRs. Thanks everyone for your cooperation!

SEE YOU ALL NEXT YEAR.

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ACTION to Joel - Create deadlines on main Read.me file so that everyone has transparency on work that needs to be done at a certain time. Maybe create a Kanban board on the issues.

09 Dec 2022

- 1. Joel
- getting updated define.xml and converting to google spreadsheet, editable by everyone. Notes on the versioning, since Pilot 3 is based off of Pilot 1 it makes sense to use the define from Pilot 1 to continue using in Pilot 3. The CDISCPILOT define seems to have had a lot of issues in P21, but the Pilot 1 define only had 8 issues per P21 v5.2.
 - a. Current define spreadsheet here for team members to edit as needed: https://github.com/RConsortium/submissions-pilot3-adam/issues/10#issuecomment-1342005671
- New issues created for Tables and Graphs. Please assign yourself to work on these and test the Pilot 3 ADaMs as source data in these output programs to see if they match the Pilot 1 outputs.
- 2. Kanjie
- metacore{} issue, not able to read in define.xml if there is a metadata label empty in the specs, but the metacore{} author/developers have worked on a fix for this to allow empty labels. With this update, there could be a new version of metacore{}.
- Continuing updates to ADAS specs in the new spreadsheet as needed.

ACTION to Kanjie: update renv.lock in main branch to the metacore{} version we need to have aformentioned udpate. Then all Pilot 3 users can run these steps https://pharmaverse.slack.com/archives/C04968ES7T4/p1671196678615089 to update their branches, including renv::restore() to get the udpated metacore package.

- 3. Dadong
- working on ADLB with Nicole. Current environment is on his working computer, but will plan to transition to Posit Cloud so that he will be using the same environment as the rest of the team.

ACTION to Thomas: Current Posit Cloud is now using R 4.2.2, where there is a check in startup that notes we should be using 4.2.1. But this should not be the case. Thomas will create an issue to remove the R version check so that we all just use the most current version in Posit Cloud. Current issue:

R version change $[4.2.1 \rightarrow 4.2.2]$ detected when restoring session; search path not restored Connected to your session in progress, last started 2022-Dec-23 20:09:44 UTC (14 minutes ago)

- 4. Thomas
- Final comments on ADSL pull request. Declan will be taking on these updates and will be the first progam and dataset to be merged to main branch.
- ADAS may soon be merged before the holiday by Kanjie.
- 5. Ben S.
- released a new version of Admiral 0.9.0 and should update renv.lock file.
 - -Thomas mentioned we already proposed a CRAN snapshot from the 1st of November, but with the udpate needed for both metacore{} and admiral{}, we need to be clear in our final documents what CRAN snapshot we will be using.

ACTION/Request to Ben S.: Can we get renv.lock updated to also read in new Admiral version?

- 6. Declan
- working on ADSL PR. Working with Steven and Thomas, ADSL should be in merged to main soon.
- 7. Robert
- working on ADTTE. Has derived ADTTE with the ADAE dependency from the CDISCPilot/Pilot 1 ADaM datasets, not purely deriving from SDTM. May have a draft of this ADTTE in a week or so. Once ADAE is ready in Pilot 3, then ADTTE should source the Pilot 3 ADAE in the final run.
- Note about testing. Working in 'Windows' vs 'Posit Cloud'. Once FDA receives Pilot 3 package, they may be running in Windows and not using Posit Cloud, like us.
- Confirms that he uses .R suffix vs .r
- has also removed the ad_ prefix in program filename as readable code would normally not have this
 prefix.
- Found a Merck document that describes the udpates to the define. Could be helpful for traceability.

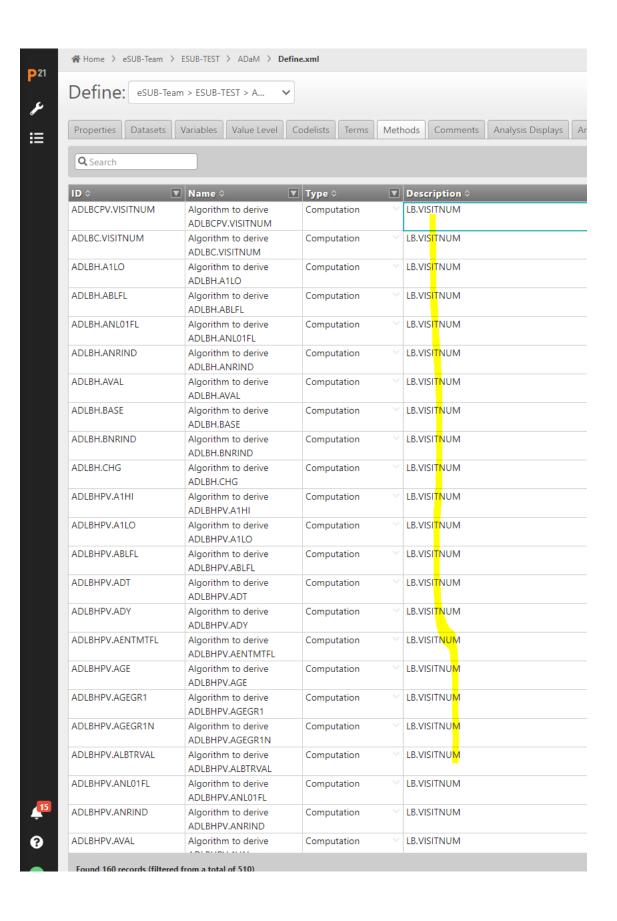
ACTION/Request to Robert: Can you share the Merck document describing the updates to the define and post it here: https://github.com/RConsortium/submissions-pilot3-adam/issues/10? Maybe even get the define.xml for to push to our Pilot 3 repo.

ACTION/Request to Ben S.: At the end of our pilot 3, we need to test that our package runs fine on a regular Windows environment, not Posit. As most likely our stakeholders will just be running on their local computers.

- 8. Phani
- Progress on ADAE, date variables updated, still working on 13 more variables. Still working on his local machine and will need help with setting up Posit and Git.
- 9. Lei
- Will help with issue #10.
- 10. Bingjun (Ben)
- Working on ADTTE, using admiral{}, not dplyr{}.

11. AOB:

- FOLLOW-UP question from Steven H.: The derivation of all highlighted variables can not be ADLB.XXX = LB.VISITNUM, especially not variables that are taken from demographics
 - Joel Response: It seems the erroneoulsy documented derivations for these variables are not the datasets we are working with in Pilot 3. For now, we can ignore these if they do not impact the datasets we are working on. I tried to create an issue in the TDF repo, but 'issues' weren't accessible to me. Feel free to add an issue if you have access: https://github.com/phuse-org/TestDataFactory



HAPPY HOLIDAYS TO ALL TAKING EARLY BREAK FOR THE EOY! WILL SEE YOU NEXT YEAR.

 $\label{eq:video} VIDEO\ RECORDING: https://drive.google.com/file/d/1-IVypxR7Mnco7mUV6Qmh-r37f2KK3JYM/view$

$02 \mathrm{Dec} 2022$

Just as a quick update to today's catch-up meeting (apologies, I forgot to record this meeting as well).

- 1. Our current focus (the meat of the project) is just to continue working on ADaM programming. The organization and final areas where all of our documents, programs, directory packages will go can be decided at a later time. To help set priorities, my suggestion would be:
 - a. Posit Cloud and github setup. Make sure we're all working in the same environment.
 - b. First line programming of ADaMs (e.g. define updates, checks against the CDISC pilot ADaMs using {diffdf})
 - c. Once we {diffdf} checks pass, then run these source datasets into Pilot 1 programs.
 - i. Please study and reference this doc: https://github.com/RConsortium/submissions-pilot1-to-fda/blob/main/m1/us/report-tlf.pdf
 - ii. Since we forked the Pilot 1 repo, we should be able to get Pilot 1 programs from here : https://github.com/RConsortium/submissions-pilot3-adam/tree/main/vignettes
 - iii. Update Pilot 1 programs to make sure they work in our current environment (e.g. R v4.2.1, any package updates needed due to different R version we are using), per https://github.com/RConsortium/submissions-pilot3-adam/issues/6
- 2. Will need to work with @Phani Tata github set-up off-line to save versions of his development. Thanks, Phani for continuing with the ADAE program development.
- 3. We need define udpates per @Kangjie Zhang request. A proposal has been made here if anyone can help with this: https://github.com/RConsortium/submissions-pilot3-adam/issues/10#issuecomment-1335565702
- 4. @Bingjun Wang working on ADRG. You may use content in this proposal for ADRG. See: https://github.com/RConsortium/submissions-pilot3-adam/issues/28#issuecomment-1335528257
- 5. @Nicole Jones has updated Pilot 3 main repo info. Thank you! Now continuing on with ADLBC with @Dadong Zhang .
- 6. ADSL updates are underway as I see communication here : https://github.com/RConsortium/submiss ions-pilot3-adam/pull/27
- 7. ADTTE also upon finalization: https://github.com/RConsortium/submissions-pilot3-adam/pull/21.

For all working on the datasets, recall the approach is to use the Pharmaverse packages, i.e., {admiral} package.

Announcement: Proposal for Pilot 3 FDA execution will be delivered to the rest of the R Consortium team soon. If you'd like to take a read updated proposal is here, for now, and will soon be in the RConsortium submissionswg repo.

Let @Thomas Neitmann or I know if you have any further questions.

28Nov2022

Unfortunately we didn't record last week's stand up. But given the holidays in the US it was a very short meeting anyways with only 4 attendees. I think the most important decision we made was to write all ADaM scripts as plain .R files and not .Rmd files. Please use admiral/pharmaverse function if available and only rely on dplyr/tidyverse as a fallback option. Also, please open a pull request as soon as you have a draft program available. That way the progress on your programs is transparent for all team members. Just follow what @Kangjie Zhang did.

14Nov2022

Thanks, @channel for those able to join today's Pilot 3 weekly catch-up meeting. Just to bullet:

- 1. Welcome @Declan Hodges to the team! Great to have more participation in this pilot. Currently, Declan is working to get his environment set-up on his end to begin work. Any current issues open in the repo, please feel free to assign yourself, Declan.
- 2. Overall, it seems all others have been able to set up an instance of the working environment on R Studio Cloud just fine and all ADaMs seem to be in good progress.
- 3. An issue came up regarding the define.xml , which doesn't seem to correspond very well with the define.pdf for. We've scoured the CDISC Pilot repo to see if there were any newer updates of the .xml file, but have not found one. Action to @Lei Zhao :
 - a. We could reach out to someone from the CDISC pilot team (maybe add an issue in their repo) to find out if we can get an updated define.xml.
 - b. Alternatively, if there is an .xls out there matching the define.pdf, we could use that .xls to read into to P21, then re-export a define.xml that way. -@Dadong Zhang @Kangjie Zhang, please feel free to chime in further on this topic to elaborate on the issues that you are seeing. -Re: https://github.com/RConsortium/submissions-pilot3-adam/issues/10
- 4. Discussion about workflow. For those new to github, it may help to have a small video tutorial on how to collaborate through git. Two approaches discussed:
 - a. For each dataset a branch has been created. If there are 2+ contributors to a branch, they can continue working in the same branch, but just requires clear communication on when updated are pushed and when other contributors can pull to get those updates to continue working further until completion until final script is ready to merge back to main.
 - b. For each dataset a branch has been created. Additionally, for each contributor, they should also make their own branch for their own development/updates to the script, then PR to dataset branch to get the updates, resolve conflicts, and merge to completion, until final script is ready to merge back to main.

02Nov2022: R Submission Pilot 3 - ADaM Kick-off

- $\bullet \ \ Team\ Roster:\ https://docs.google.com/spreadsheets/d/1BW9Jojo4bAgxbfM96nXooh2QAlU6CKwk19pInxmI2VA/edit?usp=sharing$
- GitHub repo: https://github.com/RConsortium/submissions-pilot3-adam
- We added SDTM from from CDISC Pilot Project to the Pilot 3 repo so that our R ADaM programs can source these domains.
- We also added ADaMs from the CDISC Pilot Project for ADaM developers can {diffdf} on.
- {admiral} set-up demos : https://www.youtube.com/channel/UCxQFEv8HNqM01DXzdQLCy 6Q/videos https://pharmaverse.slack.com/files/U028SDSVAR0/F0461A8E4CC/hello__admiral _____2022-10-07_14_04_gmt_2_.mp4
- Work environment is here: https://login.rstudio.cloud/invite?code=nwG-pLCv8EP2fR7j2p9ZuEJ17P 0mOBgmqhOyANhL&space_name=R+Submission+Pilot+3+-+ADaM
- If you already created a branch for a dataset to work on then you can get current updates by running the following commands in the RStudio terminal:

```
git checkout main
git pull
git checkout <your_branch>
git merge --no-edit main
```

- SAP : https://pharmaverse.slack.com/files/U028SDSVAR0/F04A5FFSGA3/cdiscpilot01.pdf Define : https://github.com/RConsortium/submissions-pilot3-adam/issues/19