Meetings Notes and Summaries

May 2, 2022

* Initial meeting and start shared GitHub
* Discuss Timeline
* Week1 and 2
  + Reference reading on package review
    1. (core package review reference) [https://journals.sagepub.com/doi/full/10.3102/1076998616631744?casa\_token=5F-SjWF6u\_cAAAAA%3AuW7Wlo5fg5SRnpsGPudRjFx50tCqP8g686FqtfFfzoJMbte77SMeKnMkqTs2JwfQa9t88wIsmz0E0A](https://can01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fjournals.sagepub.com%2Fdoi%2Ffull%2F10.3102%2F1076998616631744%3Fcasa_token%3D5F-SjWF6u_cAAAAA%253AuW7Wlo5fg5SRnpsGPudRjFx50tCqP8g686FqtfFfzoJMbte77SMeKnMkqTs2JwfQa9t88wIsmz0E0A&data=05%7C01%7Clorraine.lu%40mail.utoronto.ca%7C7785bf63d7d24189859c08da29faaa8b%7C78aac2262f034b4d9037b46d56c55210%7C0%7C0%7C637868453823775334%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=XSZounEcdWjTRGk%2F8MOrn1su214l152hheYy%2FdrUwZQ%3D&reserved=0)
    2. [https://journals.sagepub.com/doi/full/10.3102/1076998616670371?casa\_token=lxphSEq5tOkAAAAA%3AMZmscvX7FAqfnnsKym4vifPOmcyTYQkadL\_w7n2u2qaWN9ZkiDg46b7ULKC38pNoVTEuhsESNG5RrA](https://can01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fjournals.sagepub.com%2Fdoi%2Ffull%2F10.3102%2F1076998616670371%3Fcasa_token%3DlxphSEq5tOkAAAAA%253AMZmscvX7FAqfnnsKym4vifPOmcyTYQkadL_w7n2u2qaWN9ZkiDg46b7ULKC38pNoVTEuhsESNG5RrA&data=05%7C01%7Clorraine.lu%40mail.utoronto.ca%7C7785bf63d7d24189859c08da29faaa8b%7C78aac2262f034b4d9037b46d56c55210%7C0%7C0%7C637868453823775334%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=bCiTjQlX%2F5yuoq5m%2BrYkRsdqqb9NX8QQND4sEEptbCM%3D&reserved=0)
    3. (Network Meta-analysis, good package comparison summary table) [https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0115065](https://can01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fjournals.plos.org%2Fplosone%2Farticle%3Fid%3D10.1371%2Fjournal.pone.0115065&data=05%7C01%7Clorraine.lu%40mail.utoronto.ca%7C7785bf63d7d24189859c08da29faaa8b%7C78aac2262f034b4d9037b46d56c55210%7C0%7C0%7C637868453823775334%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=M2oHkMOpbtZdWsEUeazwzusquAwRwxGGd3zi2Hn3gpE%3D&reserved=0)
    4. (Structural equation modelling, primary written for applied statistician, focus more on statistical modelling) [https://www.tandfonline.com/doi/full/10.1080/00031305.2012.708641?casa\_token=170RpFcAiXoAAAAA%3Aiv952gMoC2r3KIhD1Pv0hvLAMyoNELNc1NjHIGjRXL-aKjeoYEWA4vmPLFKQeTjg4YmRNrQprQmFWw](https://can01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.tandfonline.com%2Fdoi%2Ffull%2F10.1080%2F00031305.2012.708641%3Fcasa_token%3D170RpFcAiXoAAAAA%253Aiv952gMoC2r3KIhD1Pv0hvLAMyoNELNc1NjHIGjRXL-aKjeoYEWA4vmPLFKQeTjg4YmRNrQprQmFWw&data=05%7C01%7Clorraine.lu%40mail.utoronto.ca%7C7785bf63d7d24189859c08da29faaa8b%7C78aac2262f034b4d9037b46d56c55210%7C0%7C0%7C637868453823775334%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=6IkPPVZnJedGPBn6QirXX8aU1WkwIoLj1uZ19GwJ8e4%3D&reserved=0)
    5. (Animal movement model, less relevant, but this paper has great recommendation section)[https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/1365-2656.13116?casa\_token=Jl7AzRdTol0AAAAA%3Aapxriih888YF87fRrK2JV3PDOuA8N4gHddE3E9M-7joghZhjOBC8m5-DJQsqhe9Sa\_uiaNI\_FgRkHWw](https://can01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fbesjournals.onlinelibrary.wiley.com%2Fdoi%2Ffull%2F10.1111%2F1365-2656.13116%3Fcasa_token%3DJl7AzRdTol0AAAAA%253Aapxriih888YF87fRrK2JV3PDOuA8N4gHddE3E9M-7joghZhjOBC8m5-DJQsqhe9Sa_uiaNI_FgRkHWw&data=05%7C01%7Clorraine.lu%40mail.utoronto.ca%7C7785bf63d7d24189859c08da29faaa8b%7C78aac2262f034b4d9037b46d56c55210%7C0%7C0%7C637868453823775334%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=Te9VxOLsBWFdkzLYYLCz180j5tMZZqCIkY9d59vJ5J4%3D&reserved=0)
    6. (Meta-analysis, good package review with analysis demo) [https://journals.sagepub.com/doi/full/10.3102/1076998616674315?casa\_token=eKFdmczlVsAAAAAA%3AsJmLBimV6KMHt5T0i-qDv1eik5v42nZpFhgh9NIuEWPF\_VAFCZoW\_IMsn0fsSLlZbuC6zpPREr6qsw](https://can01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fjournals.sagepub.com%2Fdoi%2Ffull%2F10.3102%2F1076998616674315%3Fcasa_token%3DeKFdmczlVsAAAAAA%253AsJmLBimV6KMHt5T0i-qDv1eik5v42nZpFhgh9NIuEWPF_VAFCZoW_IMsn0fsSLlZbuC6zpPREr6qsw&data=05%7C01%7Clorraine.lu%40mail.utoronto.ca%7C7785bf63d7d24189859c08da29faaa8b%7C78aac2262f034b4d9037b46d56c55210%7C0%7C0%7C637868453823775334%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=Jk8lli%2FALW7AscQ5ilm9UHWfwMWO2AEOj4YKg8ojVmc%3D&reserved=0)
  + Reference reading on package documentation to see if the developed package can run multiple treatment/exposure and ordinal outcomes
    1. (ipw) [https://cran.r-project.org/web/packages/ipw/index.html](https://can01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fcran.r-project.org%2Fweb%2Fpackages%2Fipw%2Findex.html&data=05%7C01%7Clorraine.lu%40mail.utoronto.ca%7C7785bf63d7d24189859c08da29faaa8b%7C78aac2262f034b4d9037b46d56c55210%7C0%7C0%7C637868453823775334%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=lBXws7sz3bqZo1XS4IEGk4INmVfF%2BFnhmXqVybSbsWc%3D&reserved=0)
    2. (gfoRmula) [https://cran.r-project.org/web/packages/gfoRmula/index.html](https://can01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fcran.r-project.org%2Fweb%2Fpackages%2FgfoRmula%2Findex.html&data=05%7C01%7Clorraine.lu%40mail.utoronto.ca%7C7785bf63d7d24189859c08da29faaa8b%7C78aac2262f034b4d9037b46d56c55210%7C0%7C0%7C637868453823775334%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=6HD5sV74E241KE2NG60Bn8tqzcARXmlLId7LZMBCYJs%3D&reserved=0)
    3. (ltmle) [https://cran.r-project.org/web/packages/ltmle/](https://can01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fcran.r-project.org%2Fweb%2Fpackages%2Fltmle%2F&data=05%7C01%7Clorraine.lu%40mail.utoronto.ca%7C7785bf63d7d24189859c08da29faaa8b%7C78aac2262f034b4d9037b46d56c55210%7C0%7C0%7C637868453823775334%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=QdTSN2LhVV2Y321ufQk0mwL%2B4wd65%2BvcCDPw%2BuJ6uJM%3D&reserved=0)
    4. (CBPS, extended MSM methods to achieve optimal propensity score balancing) [https://cran.r-project.org/web/packages/CBPS/index.html](https://can01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fcran.r-project.org%2Fweb%2Fpackages%2FCBPS%2Findex.html&data=05%7C01%7Clorraine.lu%40mail.utoronto.ca%7C7785bf63d7d24189859c08da29faaa8b%7C78aac2262f034b4d9037b46d56c55210%7C0%7C0%7C637868453823775334%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=jP0z6ukDPPtdKkcPEhPnHjL9pvI64AV5FYQE97YV%2FQg%3D&reserved=0)
    5. Key questions will be, what types of exposure (binary, categorical, continuous) and what types of outcome (binary, continuous, survival/time-to-evet)
  + Statistical methods,
* (key statistical method reference – point-treatment, read this first)
  + 1. [https://onlinelibrary.wiley.com/doi/full/10.1002/sim.9234](https://can01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fonlinelibrary.wiley.com%2Fdoi%2Ffull%2F10.1002%2Fsim.9234&data=05%7C01%7Clorraine.lu%40mail.utoronto.ca%7C7785bf63d7d24189859c08da29faaa8b%7C78aac2262f034b4d9037b46d56c55210%7C0%7C0%7C637868453823775334%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=evkB4qlowQ6ypAUNeRi7gkeA83gbSFmzVRN7zxd5lrQ%3D&reserved=0)
    2. <https://onlinelibrary-wiley-com.myaccess.library.utoronto.ca/doi/full/10.1002/sim.5686#>
  + Simulation
    1. Outcome: binary, continuous
    2. Treatment: binary
    3. Covariate: mixture of binary and continuous
    4. <https://kgoldfeld.github.io/simstudy/articles/longitudinal.html>
    5. k= 3 visits and an end-of-study outcome after visit 3
    6. Kuan to share her old simulation code