

MRC Grant (MR/W014432/1)

Tackling multimorbidity at scale: Understanding disease clusters, determinants & biological pathways

MuM-PreDiCT 23rd Project Management Meeting

26th January, Thursday, 2023

Action points

1. MM to support with external validation of the CVD prediction model and can lead another prediction model(Cancer)
2. Scotland to provide support to NI with code list etc as the similar data set
3. GS to liaise and with KP,AS for codes to estimate epidemiology in BiB.
4. Discuss extensions in Data in all data sets, CM to initiate.
5. KN to chase contract office regarding data transfer agreement with EUROmedICAT
6. AS and SIL to liaise and agree upon the definition of the outcomes
7. Next meeting define the outcome and how it is identified in which dataset
8. NM to bring forward discussions in the South African PPI/midwives global meet regarding Global MuM-PreDiCT.SB and NM to liaise further.
9. Team to provide more information about outcomes in 2022 to be reported in Researchfish
10. KN to provide the draft of diabetes and menopause to be further formulated for women with multimorbidity
11. Further support from NI is required to recruit more staff for WP2 qualitative studies.SB and DOR to share a few contacts for the qualitative study to fill out gaps
12. Doodle poll to be sent out for the June in-person team meeting

Data Management meeting (11 am-11:30 am)

Attendees-CM, KN,GS, JK, CY, KP, MM, NM, SB, MU, CG, DOR, MS

- Updates on the availability of databases
 - CPRD-Data ready, CPRD Aurum data might be added soon
 - Scotland-user accounts to be initiated soon. Some additional funding for preterm birth. The Lancet Child & Adolescent rejected the paper, and transferred to The American Journal of Obstetrics and Gynaecology)
 - SAIL/Wales-Governance approval is processed under MuM-PreDict name and the end date is grant end plus 2 years
 - Northern Ireland-LK to rejoin soon and Scotland to provide support with code list etc as a similar data set
 - BIB- to check the epidemiology.GS to liaise with AS and KP to share codes
 - EUROmedICAT-awaiting data transfer agreement with the University of Birmingham, KN to chase contract office.

- Update on phenotype definitions-SIL is updating on complications. Next meeting to identify which outcome could be reported in which dataset. CM to initiate work on this and then circulate it.
- MuM-PreDiCT 2.0- more on implementation. Each work package to define a question that could be taken forward to MuMPREDICT 2.0.

Senior management meeting(11:30 am-12 pm)

Attendees-KN, CY, RP, NM, DOR, SB, MB, CM, RR, MS

- Researchfish-Team to provide information like further funding, fellowships, travel awards, workshops, and attending conferences as keynote speakers to be added as outcomes in the Research fish portal.
- MuM-PreDiCT global-Re-apply in May, to involve midwives and more community involvement to be added as additional work packages. Collaboration centre of women's health to be involved. Proceed as a partnership grant, insight to be taken from HDRUK. Sri Lanka to be considered as has the best community midwives. NM to bring this forward in the South African PPI meet and her charity get more information and connect offline to take this forward.
- Systems engineering grant is being put forward and pregnancy is a part of it
 - MuM-PreDiCt cohort to be followed up till menopause could be added up as the possible outcome that can be taken up. Can be presented as a separate grant or in Mumpredict 2.0.KN to provide the draft for diabetes and menopause association and formulate it towards women with multimorbidity
- Adding a Collaborators statement to the publications -to be taken up later and discussed, to share an example with the team.

All team (12 pm-1 pm)

Attendees-KN, CM, KS, SH, KP, NM, RP, RR, ML, AAL, MB, HH, SB, MM, DOR, CY, CDM, AS, JK, FC, SW, HH, MS

- **Update on the PPIE work and way forward-RP-PPIE group** Preparing to attend work package meetings, One-to-ones with RP to discuss PPI development. Group meetings planned for w/c February 6th. February agenda: WP updates; refresher on PPI strategy; Doing Deep Dives; input to Maternal Medicine Networks; MuM-PreDiCT 2.0. Further meetings to be pencilled in for May, September, December, and 2024. Informed about service user voice event Leeds- Attended by parent representatives working in maternity services improvement – MVPs, LMNS, MMNs, Ran a session on MuM-PreDiCT – findings so far, ideas for dissemination among lay audiences. Suggestions – an adaptation of 15 Steps challenge; developing a pregnancy journey checklist for use by MVPs; working with Whose Shoes?; supplying questions for use by MVPs in regular surveys. Recruited a new member for MuMPredICT PPI who is

also a rep on West Midlands Maternal Medicine Network. Deep dives- 4M Mentor Mothers, supporting women with HIV, rescheduled to March 3, Birmingham MVP (date to be confirmed). Planning ahead- What do you need from PPIE for the next 2 years? How can we get our findings out to a lay audience? Eg The Conversation, The Atlantic, Bylines Network and Byline Times; working with peer support projects and MVPs. Evaluating the impact of the 3-tier model.

- **Work package updates**

- WP1- Update- Polypharmacy paper published and systematic review accepted in BMC. Write up on the clinical significance of clusters and the mental health protocol is at draft stage
- WP2-Update- SH-Interviews and data analysis in progress. 45 women and 42 staff interviews are done. Further support from NI is required to recruit more staff to fill gaps. SB and DOR to share a few contacts.
- WP3-MB-After the comments by reviewers and to reduce the number of core outcomes another consensus meeting is planned in the month of February which will be co-chaired by MB and CG. The duration decided would be 5-4 hours and the decision to be based on voting in the breakout rooms rather than through consensus.
- WP4-AS -The signal detection protocol is being drafted and few outcomes were discussed which need to be added or not, Perinatal mental health to be included, while brain injury on imaging to be discarded. Maternal infection is to be decided after further discussion.
- WP5 Updates- SW Umbrella review-CVD-aim to synthesise evidence from systematic reviews and meta-analysis on association between pregnancy-related complications and future risk of postpartum hypertension and type 2 diabetes. 10 reviews selected. Writeup stage. Prediction model CVD. Objectives To develop a 10-year risk prediction model for CVD in women with a history of pregnancy age 15-49 years. Apply QRISK-3 algorithm to the study population (external validation of QRISK-3). Add candidate predictors to the algorithm. Internally validate prediction model (CPRD GOLD). Externally validate the prediction model in the SAIL database. Shared the overall findings Risk is different by ethnicity and region shared. Next steps-Linkage of data to HES and Townsend scores. Update some of the predictors. Handling missing data. Validate QRISK3 Compare prevalence and HRs of predictors in our dataset with the estimates reported in the literature. Development and internal validation of the model. Shared few initial results.

- Dissemination events in June and September-June event to be in-person MuM-PreDiCT team events. Doodle poll is to be sent out for the same. A larger dissemination event to be scheduled in September online.
- Upcoming conferences-RCOG conference deadline for abstract submission on 6th Feb <https://www.rcog.org.uk/careers-and-training/training/courses-and-events/rcog-workld-congress/rcog-congress-2023/abstracts/>

- Meeting timings WPs-Team members to share if unable to attend any WP and wants to reconsider the timings. Work package 5 meeting to be extended to 60 minutes as earlier.