MRC Grant (MR/W014432/1)

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

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MuM-PreDiCT 18th Project Management Meeting

26th May, 2022,Thursday
10am-12pm, online via Zoom

10am-10:30am Data Management Team
10:30pm-11am-Senior Management Meeting
11am-12pm- All

Action points-

1-Data scientist to meet and discuss- data access across datasets
2-To report Mother baby linkage in all datasets
3-RCOG conference create slack channel to ensure similarity among the posters
4-Meeting to be scheduled for data dictionary phenome definitions
5-Further planning for in person meeting to be undertaken and details to be shared.
6-Share suggestions for MRC impact prize and MRC millennium medal
7-Few suggestions shared on way forward for Delphi Survey
8-Team to provide feedback for MuM-PreDiCT logo.

Data Management Team(10am-10:30am)

Attendees-CM,JK,KN,NC,SB,DOR,NM,KP,LK,MM,MS,KG

Updates

Northern Ireland-Have the data, de duplicated the maternity data and started pulling out ICD 10 codes and building the variables. Adapted to specifications of work packages so far. Require help with way forward what data required in each WP-JK, UA and NC to provide support. Will address with specific questions after work completed on data dictionary Sharing access to data- not an issue

CPRD-Data ready, mother baby linkage in HES awaited, only 60 percent CPRD gold linked to HES, CPRD Aurum coming out at the end the year

Wales-Have provided access to all working on the data set and will be able to add UA substitute too for access to data, code lists-older can be used and could run the new list when they are ready.

Scotland-UA replacement lined up-waiting for response for application for national data access

BiB-Check the prevalence using ctv3 code lists and done comparison from CPRD data and prevalence are similar and will do few more checks and next step would be creating drug

code list. BiB data more ethnically rich and diverse and might bring out higher prevalence but inclusion of more younger age group would balance out.
EUROmediCAT-Data present and ready, simple one line data, all ready, protocol is almost approved-initial description of data. Not deliverable but just descriptive paper.
Data dictionary-first round complete, meeting scheduled for MH variable
Add middle layer and unifying across teams-how useful as data extraction started.
Dexter has middle layer and will shape for CPRD and would share to be used in other data sets Definitions-need to unify the definition now or we could do on paper basis.
Next meeting discusses the data dictionary in detail. Phenomes etc, Identify the variables-discuss in separate meeting

Another team Bristol group, study about covid and pregnancy- getting maternity data using NHS digital etc trying to put up data dictionary- SB to liaise with them
Report on Mother baby linkage-Across all datasets in the next meetings
RCOG CONFERENCE -create slack group so all posters look similar in structure
Next meeting discuss HDR UK and Git Hub-UA

Senior Management Team (10:30am-11am)

Attendees-KN,DOR,SB,CM,CY,CM,MB,BT,CNP,MS

Planning-in person meeting- Planning for MuM-PreDiCT 2.0 and MuM-PreDiCT Global- 2 separate applications
Key plan-Sit in 5 work packages and think of implementation from these work packages way forward.

MuM-PreDiCT 2.0- lead MB- more about implementation of services after what comes out of WP2.Suggested to add Obesity, Nutrition and drugs in pregnancy as other components

MuM-PreDiCT Global-SB to lead, more focus on low- and middle-income countries to consult International scientific advisory board members and look at the opportunity in already linked nations

Suggested Invitation-for in person meeting-From MRC and NIHR, involving the funders early on- suggested LC

To encourage smaller grants with specific conditions-KAE interested in pre pregnancy care

MRC impact prize and MRC millennium medal-few names to be suggested by the team or something to consider in the next year

Meeting All (11am-12pm)

Attendees-KN,CNP,MB,NM,SM,AA,JK,BT,MM,DOR,SB,CM,LK,NC,AF,RR,FC,SW,BS,KP,AS,JH,MS

PPI- update -NM-updated ,2 deep dives planned 1- 20th June-LR -LGBTQ= and ethnic minority.2ND planned KA -women with serious mental illness. Few Blogs posted on website-women representative-SD and early career researcher reflection on PP1 engagement-SIL. Submitted nomination for light of understanding award.

WPs-updates and findings

WP1-Cluster analysis update-**1-**Cluster analysis method developed and tailored to the needs of the project demonstrated by CY- MmVAE-variational auto encoding for a high dimensional binary input. Clustering means is to identify similar individuals in term of conditions, 80 conditions over million individuals. Highly prevalent conditions will be identified as a latent factor, rarer conditions will be assigned to distant latent factors, clusters are combinations of highly prevalent conditions with rare ones**.** Followed by clinical interpretation of these clusters and if they can be adapted across 4 nations and use same methodology**.** RR to take the discussion offline on the transportability of the cluster analysis

WP2-update-9 WOMEN participants so far, starting with HCP too. The numbers not as expected and one partner included too. DB providing support with partner recruitment

WP3-Delphi survey results-KN

Delphi survey launched-28th April and deadline 31st may(to be extended), expected 100 participants -50 women and 50 clinicians. Channels-charities, royal colleges, societies, trainee networks, personal contacts .and academic departments, publication author list and journal. Various issues discussed and suggestions were made

WP4-update-2 protocols - EUROmediCAT descriptive study-signal generation draft ready by next week.
WP5-update-Protocols ready for both prediction model and umbrella reviews and reviews progressing well. No systematic reviews identified looking at association of pregnancy complications and AI conditions-Systematic review might be undertaken instead.

Mum Predict Logo-circulated few initial ideas presented by designer for feedback.
In-person meeting -Provided brief idea about agenda- MuM-PreDiCT 2 .0and MuM-PreDiCT global-leadership to be rotational If focus on one health conditions the platform open to create own projects and ECR specially. First half-presentations on work done. Second half -further discussion