# Minutes of OHDSI workgroup in Population Level Estimation

February 21, 2018

Present: Chan You Seng, JHCho, Yuriy Khoma, Nicole Pratt, Angela, Martijn Schuemie

Chan asks about large scale incidence rate computation. Martijn will send e-mail to George, who is working on that topic.

Martijn presents on “Reinventing the study protocol”, suggesting the protocol should include full study diagnostics such as propensity score distribution, covariate balance, and negative control estimates. This basically means the full study needs to be implemented.

Nicole: writing a protocol is hard work. Most people will argue they need to look at the data first. Having tools to facilitate the process, as OHDSI is making available, will make life easier and should lead to better adoption of these practices.

Nicole: rationale for design decisions needs to be captured. Especially for how exposures are captured.

Chan: We are working on NLP of EHRs, which should provide information on the validity of exposure and outcome definitions.

Chan: We often have many small databases. How can we those in studies? Propensity model fitting might be an issue. Perhaps we should limit the number of covariates to consider. Martijn: maybe we could use a hierarchical approach to propensity model fitting? The overall model is fitted over all databases, but each database can deviate from the overall model based on their own data using a Bayesian approach. Also, one topic of research for this year for OHDSI is how to perform proper meta-analysis across databases when there are small numbers (e.g. when asymptotic assumptions don’t hold).

Chan: We have developed a ‘MySpace for research’ in Korea, where researchers can share their ideas for a protocol with selected colleagues. Chan will present some slides on this topic at the next meeting.