CHAPTER
Characterization of Health by OHDSI AP chapter to identify Temporal Effect of the Pandemic

Brief update on 2022 April 21th

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Benchmark research: Acute effect of COVID-19

- Data source: UK CPRD (13% of UK population)
- Method: Interrupted time-series analysis
- Target: Condition
  - Diabetic emergency
  - Mental health conditions
  - Acute respiratory events
  - Acute cardiovascular events
  - Acute alcohol-related event

Mafi et al., JAMA, 2022
Analytic Plan

• The number of incidence, prevalence, and the counts will be aggregated for digital phenotypes (aka. Cohort) monthly before and after COVID-19

• Later, the temporal pattern can be analyzed by using statistical methods such as interrupted times series regression
Update on April 21th

• Deploy the ATLAS instance for the study
  – http://34.148.35.102/#/home

• Review the recent OHDSI benchmark study
  – Phenotype Phebruary

• Review how to calculate incidence/prevalence
  – Thanks to Jing, Patrick

• Discussion about the temporal causal inference
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Plans

• Create the skeleton package for CHAPTER study
  – Based on CohortIncidence Package
    • https://github.com/OHDSI/CohortIncidence
  – Need to modify the package to calculate monthly incidence

• Pilot study
  – PhenotypePhebruary + CohortIncidence
Thank You
for your time