APAC Community Call
Regional Updates
April 22nd 2021
Korea Chapter Update

• Nationwide Korean administrative claim data (HIRA) has been mapped to OMOP-CDM ranging 2010 to 2019 for entire Korean population

• More Korean hospitals including three hospitals in Yonsei University Health System (Severance; Gangnam Severance; Yongin Severance hospital) joined OHDSI with available OMOP-CDM v5.3.1 databases
China Chapter Update

• Organization change
  – Three new co-Chairs:
    • Dr. Yi Zhou, Zhongshan University
    • Dr. Lei Liu, Fudan University
    • Dr. Hui Lv, Jiaotong University
  – Three directions
    • Training and engagement
    • Methods and tools
    • Clinical studies
Chinese Vocabulary Work

- Five volunteers for Chinese Vocabulary Development
- Task 1: Local concepts to ICD-10-CN and SNOMED
- Task 2: ICD-10-CN 6-digit to SNOMED

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Japan Chapter Update

• A person who wants to work on drug mapping has come along and created a plan.
• Going to start a mapping project for drug.
Taiwan Chapter Update

• Goal 1: OHDSI Taiwan website currently under development

• Goal 3: Build TMU OHDSI OMOP-CDM
  • OHDSI-OMOP CDM kick-off meeting on September 21, 2020, to start the data bridging platform between TMUCRD and OHDSI-CDM.
  • OHDSI global members provided technical guidance online meeting on September 23, 2020.
Goal 2: Interaction between Universities in Taiwan

March 16, 2021
OMOP mapping in Australia

**PRIMARY CARE EMR**
- UNSW ePBRN
  - 18 general practices and hospitals in an integrated health neighbourhood in South Western Sydney
- Victoria
  - 3 GP systems (120 practices, several million patients)
    - Medical Director, Best Practice and Zedmed
  - Outcome Health (1,000 GP surgeries)
- NPS MedicineWise MedicineInsight database
  - 700+ general practice information systems from all over Australia

**SECONDARY CARE EMR**
- Hospital EMR warehouses
  - CERNER2OMOP: Maps CERNER EMR data into OMOP (customized to SLHD and SESLHD. Contact Blanca Gallego Luxan)
  - CaVa: Maps oncology data into OMOP oncology extension (MOSAIQ and ARIA) (customized to SWSLHD) Contact Timothy Churches
  - Victorian Comprehensive Cancer Centre Data Hub (Extensive Victorian hospital and GP coverage)
  - Proposed CERNER based EMR
    - Queensland Health – all public hospitals
    - Austin Health
    - Western Health
    - Provisional: Peter MacCallum Cancer Centre

**ADMINISTRATIVE CLAIMS**
- Pharmaceutical Benefits Scheme
  - 10% Sample dispensed medicines
- Department of Veterans’ Affairs Claims Data
  - National Department of Veterans’ Affairs administrative health claims
OHDSI translation at UniSA

• Successfully converted PBS10 to the OHDSI/OMOP CDM
  – Version 5.3.1
  – Clinical OMOP CDM tables:
    • Person, Obs_Period, Drug_Exposure, Drug_Era, Death
  – Atlas set up in the locked down computing environment

• Stats:
  – Data period: March 2005 – July 2020 inclusive
  – ~ 3 million people (~10% of Aus population)
  – ~ 300 million records
  – 95%++ conversion of drug records to standardised drug concepts
OHDSI Network Collaboration

• Ongoing work from OHDSI COVID-19 study-a-thon
• UNSW contributed flu data 2012-2019 for two COVID-19 studies related to predictive modelling.

• One study is published https://medinform.jmir.org/2021/4/e21547 and other under review with BMC Research Methodology.

• OHDSI APAC research study on hypertension
  – A Comprehensive Comparative Effectiveness and Safety Study of the Second Antihypertensive Agent after Monotherapy at scale using the OHDSI AP Network

• EUMAEUS
  – large-scale evaluations of methods for vaccine safety to help us understand how these methods will perform when applied to COVID-19 vaccines

• Others?
Data Quality

• Extend OHDSI CDM-based data quality assessments
  – “White bandicoot” tool

• Mapping Australia’s metadata and ontologies for national health & welfare metadata standards
  – Sustainable conformance to data quality and interoperability standards
Please join us for the start of the 2021 ODHSI Australia Webinar Series

•Presented by Dr Tim Churches, Georgie Kennedy and Nasreen Kadaan:
  –“CaVa: Populating the OMOP oncology extension directly from clinical data”
  –A description of the implementation of the OMOP CDM from a cancer clinical information system.
  –Thursday 29th April at 2pm AEST
Collaboration with AI Singapore on Federated Learning

Four Key Pillars

**AI Research**
Invest in deep capabilities to catch the next wave of scientific innovations and breakthroughs.

**AI Technology**
Address major challenges that affect our economy and society thereby promoting bold ideas and the application of innovative AI technologies.

**AI Innovation**
Broaden the use and adoption of AI in Singapore and groom local AI talents to support industry growth.

**AI Makerspace**
Provide a platform and suite of AI tools, APIs and pre-built solutions (BRICKS), training, consulting and engineering services for Startups and SMEs to jumpstart their AI journey.
Collaboration with AI Singapore on Federated Learning

Dr Jianshu Weng
Project Lead, AI SG
SG Healthcare AI Datathon and EXPO
10-18 July 2021
www.nus-datathon.com

- Attracted 1000+ physicians and data science around the world

- Singapore 19
- Mainland China 16
- Australia 5
- Taiwan 3
- Japan 2
- South Korea 1
- Thailand 1
- United States 1
- Russia 1
- UAE 1