APAC Community Call

June 20, 2024
Agenda

• OHDSI News
• Regional Chapter Mid-Year Updates
  – Taiwan by Jason C. Hsu
  – Korea by Seng Chan You
  – Japan by Keiko Asao
  – Australia by Nicole Pratt
  – China by Lei Liu
  – Singapore by Mengling ‘Mornin’ Feng
OHDSI News

• OHDSI Evidence Network
  – OHDSI is initiating a network study on the OHDSI Evidence Network
  – Learn more about the study at https://forums.ohdsi.org/t/join-the-ohdsi-evidence-network/21808
  – Sign up for the study at https://forms.gle/KQCp8CwVHJT29qsk6
  – Study protocol will be shared upon sign-up

5 Rationale and Background

The Observational Health Data Sciences and Informatics (OHDSI) federated network is a collaborative effort aimed at leveraging healthcare data from multiple institutions for large-scale federated observational research. In its current state, there are over 500 data sources from over 49 countries mapped to the OMOP Common Data Model, the standard that enables such ambitious evidence generation. One major challenge of federated network studies is the assessment of network data quality, study feasibility and data fitness-for-use across these data sources in such a way that does not strain the time and resources of data holders while still supporting rigorous evidence generation that engenders trust and buy-in from the larger research community.

To facilitate collaborative research efforts and ensure the quality and integrity of the data across the OHDSI network, it is imperative to understand the characteristics and variability of the databases within the network. This study aims to collect summary statistics from participating sites to describe the databases and learn about the network as a whole. The output of the study will inform and enhance the research capabilities of the OHDSI community by enabling rapid data quality and fitness-for-use assessments.

5.1 Research Questions

The main research question of this study is:

*What are the population-level characteristics of the databases within the OHDSI federated network?*

The specific aims of this study are as follows:

- To create an open public resource comprised of summary statistics of the databases within the OHDSI network (that the data owners are able to provide in compliance with IRB, GDPR, HIPAA) to support research.
- To collect population-level summary statistics of databases within the OHDSI federated network to inform study feasibility for network research.
- To generate network-based benchmarks based on the collected statistics to support observational research and analysis. These will be used to describe the network and inform data owners about the quality of their data by learning what a “typical” OMOP CDM standardized databases looks like. This will be done by characterizing the heterogeneity, granularity, timeliness, and domain coverage of the participating databases.
• 2024 Global Symposium
  – Date/Venue: October 22-24 at Hyatt Regency Hotel in New Brunswick, NJ, USA
  – Abstract submissions open at https://docs.google.com/forms/d/e/1FAIpQLSd5ZHplj3w45EWyqo_oWRhE6PJ757vK88QWtYQb-032D-uITw/viewform and due Friday, June 21 8:00 p.m. ET
  – More information available at https://ohdsi.org/ohdsi2024/

• April events in Japan and Thailand
  – Post-event page for Thailand: https://www.ohdsi.org/thailand-tutorial-2024/
  – Japan: Coming soon!
Regional Update

Jason C. Hsu
Taipei Medical University, Taiwan
June 20, 2024
Members in OHDSI Taiwan Society Office
Special Speech from OHDSI Global (1)

Speaker: Mui Van Zandt (Vice President, Global Head of Data Strategy, IQVIA)

Organizers: Taipei Medical University, OHDSI Taiwan Society

Time: Friday, April 12, 2024
Venue: Shuang-Ho Campus, TMU

Participants: Online: 67, In-person: 28, Total: 95
May 23, 2024

Special Speech from OHDSI Global (2)

Speaker:
Martijn Schuemie
(Research Fellow, Epidemiology Analytics
Janssen Research and Development)

Organizers:
Taipei Medical University, OHDSI Taiwan Society

Time: Thursday, May 23, 2024
Venue: Shuang-Ho Campus, TMU

Participants: Online: 82
Taipei Medical University Clinical Research Database: a collaborative hospital EHR database aligned with international common data standards

Phung-Anh Nguyen 1,2,3, Min-Huei Hsu 4,5, Tzu-Hao Chang 3,6,7, Hsuan-Chia Yang 3,6,7,8, Chih-Wei Huang 4,7, Chia-Te Liao 9,10,11, Christine Y. Lu 1,2,12,14, Jason C. Hsu 1,2,3,15

ABSTRACT
Objective: The objective of this paper is to provide a comprehensive overview of the development and features of the Taipei Medical University Clinical Research Database (TMUCRD), a repository of real-world data (RWD) derived from electronic health records (EHRs) and other sources.

Methods: TMUCRD was developed by integrating EHRs from three affiliated hospitals, including Taipei Medical University Hospital, Wan-Fang Hospital, and Shuang-Ho Hospital. The data cover over 15 years and include diverse patient care information. The database was converted to the Observational Medical Outcomes Partnership Common Data Model (OMOP CDM) for standardization.

WHAT IS ALREADY KNOWN ON THIS TOPIC
- Existing knowledge encompasses the increasing use of digital solutions in healthcare, the importance of real-world data (RWD) for generating real-world evidence, and the limitations of traditional clinical trials with limited participant diversity.

WHAT THIS STUDY ADDS
- This study presents the development and features of the Taipei Medical University Clinical Research Database (TMUCRD), highlighting its extensive collection of RWD spanning multiple hospitals over a 15-year period.
June 1-3, 2024

Join OHDSI EU Symposium (Netherlands)
OHDSI Taiwan Society Activity

OHDSI OMOP CDM Study Workshop at Hsin Kuo Min Hospital

July, 2024
Support OHDSI Vietnam Chapter

Quang Ninh General Hospital
Quang Ninh province, Vietnam

Bai Chay Hospital
Quang Ninh province, Vietnam
Oct 6, 2024

OHDSI Taiwan Society Activity

2024 Health Data Science Symposium Agenda

Rae Woong Park
(Korea)

Mengling Feng
(Singapore)
Welcome to visit our OHDSI Taiwan Website

www.OHDSI-Taiwan.com
Thanks for your listening!
OHDSI Korea Chapter
Mid-year Update 2024

www.ohdsi-korea.org
Vocabulary Updates in Korea

- **EDI** (Electronic Data Interchange) is a code system for the claim data in Korea
- EDI is developed and maintained by **HIRA** (Health Insurance Review & Assessment Service), updated on the 1st of every month
- We are incorporating 620,642 EDI vocabularies from Nov 2000 to May 2024, mapping them with standard concepts

<table>
<thead>
<tr>
<th></th>
<th>EDI code 2019</th>
<th>EDI code 2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug</td>
<td>23,231</td>
<td>65,981</td>
</tr>
<tr>
<td>Device</td>
<td>19,813</td>
<td>45,131</td>
</tr>
<tr>
<td>Procedure</td>
<td>249,785</td>
<td>444,021</td>
</tr>
<tr>
<td>Measurement</td>
<td>20,602</td>
<td>65,508</td>
</tr>
<tr>
<td>Total</td>
<td>313,431</td>
<td>620,642</td>
</tr>
</tbody>
</table>
Vocabulary Updates in Korea

- To handle large-scale, longitudinal EDI data, we developed the package called **SYNC**
- SYNC is a semi-automated process to support the transformed EDI into Standard concept id
Vocabulary Updates in Korea

- The EDI list aggregated via SYNC is mapped to Standard concept IDs and undergoes the Community Contribution Process, which includes data quality checks.
- The mapped list is uploaded to ATHENA by the vocabulary team.

1. **SYNC**
   - Scrap
   - Drug
   - Device
   - Medical Service
   - Convert

2. **Mapping to Standard Concepts**
   - EDI Code
     - G8303303
     - VIVA QUAD XT
     - G8303603
     - CLARIA MRI CRT-D
     - G8103103
     - INSYNC III 8042
   - SNOMED Code
     - 704707009
     - Cardiac resynchronization therapy implantable defibrillator
     - 704708004
     - Cardiac resynchronization therapy implantable pacemaker

3. **Community Contribution Process**
   - DevV5_DDL
   - Load_stage
   - QA / QC part I
   - Generic Update
   - QA / QC part II

4. **Add codes to OMOP and publish in ATHENA**
   - Cooperate with Vocabulary team
Medical Device CDM

• We are participating in a R&D project building a medical device surveillance system
  ▪ We will convert EDI-based DEVICE_EXPOSURE table from 17 hospitals in South Korea
  ▪ We specifically focus on the feasibility assessment of medical device adverse event detection using UDI

• We are exploring strategies through OHDSI Medical Device Working Group to convert medical device usage data into OMOP CDM
### Medical Device CDM

- Unique Device Identifier (UDI) is a system of labeling and identifying medical devices within the supply chain from manufacturing

#### Unique Device Identification code

\[ UDI = DI + PI \]

**Machine Readable**

**Human Readable**

(01)08801234512343 (10)110500 (17)120501 (21)9G837GH234J

#### DEVICE_EXPOSURE table

<table>
<thead>
<tr>
<th>CDM Field</th>
<th>User Guide</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>device_exposure_id</td>
<td>Unique ID (PK)</td>
<td>1</td>
</tr>
<tr>
<td>device_concept_id</td>
<td>OMOP Standard Vocabulary Concept ID</td>
<td>45767329</td>
</tr>
<tr>
<td>unique_device_id</td>
<td>Device Identifier of UDI (UDI-DI)</td>
<td>(01)08801234512343</td>
</tr>
<tr>
<td>production_id</td>
<td>Production Identifier of UDI (UDI-PI)</td>
<td>(10)110500(17)120501 (21)9G837GH234J</td>
</tr>
<tr>
<td>device_source_value</td>
<td>EDI code</td>
<td>G8103225</td>
</tr>
<tr>
<td>device_source_concept_id</td>
<td>EDI OMOP concept ID</td>
<td>42103125</td>
</tr>
</tbody>
</table>
Granularity Comparison: SNOMED, EDI, UDI

Example) Aortic valve device

<table>
<thead>
<tr>
<th>SNOMED-CT (1)</th>
<th>Korean EDI (2)</th>
<th>UDI (12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>Name</td>
<td>Code</td>
</tr>
<tr>
<td>860577005</td>
<td>Aortic valve bioprosthesis</td>
<td>G2201002</td>
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<td></td>
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<td></td>
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<td>G2201003</td>
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</tbody>
</table>

4 UDI codes in 1 EDI
8 UDI codes in 1 EDI
Mapping Status of UDI codes in Korea

- We integrated UDI codes into Severance Hospital OMOP CDM, Korea
- We aim to utilize information that can only be distinguished with UDI, such as catheter sheath size
- Through this, we seek to detect adverse events in specific target devices such as aortic valves and vascular closure devices

<table>
<thead>
<tr>
<th>EDI Group name</th>
<th>Mapping Status</th>
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<tbody>
<tr>
<td></td>
<td>EDI count</td>
</tr>
<tr>
<td>Sutures</td>
<td>2,748</td>
</tr>
<tr>
<td>Fracture and Dislocation Fixation</td>
<td>3,010</td>
</tr>
<tr>
<td>Arthroscopic Surgical</td>
<td>268</td>
</tr>
<tr>
<td>Artificial Joints</td>
<td>1,062</td>
</tr>
<tr>
<td>Spinal Implants</td>
<td>981</td>
</tr>
<tr>
<td>Thoracic Surgical</td>
<td>677</td>
</tr>
<tr>
<td>Neurosurgical</td>
<td>448</td>
</tr>
<tr>
<td>Otorhinolaryngological</td>
<td>339</td>
</tr>
<tr>
<td>Interventional Procedure</td>
<td>2,290</td>
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<tr>
<td>General Materials I</td>
<td>4,190</td>
</tr>
<tr>
<td>General Materials II</td>
<td>1,526</td>
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<tr>
<td>General Materials III</td>
<td>2,890</td>
</tr>
<tr>
<td>Tendon</td>
<td>164</td>
</tr>
<tr>
<td>Vascular</td>
<td>11</td>
</tr>
<tr>
<td>Human Tissue Materials</td>
<td>2,127</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>22,731</strong></td>
</tr>
</tbody>
</table>
Medical Imaging CDM (MI-CDM)

- The OHDSI Medical Image Workgroup proposed two new tables to the OMOP CDM, the medical imaging extension model
Imaging Goals with OHDSI

• Perform **cohort definitions** in OHDSI for medical imaging studies
  – Find the Chest CT Scans with a slice thickness of <2.5 mm for patients ultimately diagnosed with lung cancer

• **Bring features** derived from medical images into data model while **maintaining provenance**
  – Track lung nodule morphology before and after therapy
Imaging Goals with OHDSI

- Enable **Federated Learning** of imaging models via **OHDSI network** studies

(A) Raw Source

(B) Standardized CDM DB

- **Extract**
- **Transform**
- **Load**

De-identification and Standardization

- EHR Source A
- PACS
- EHR Source B
- PACS
- EHR Source C
- PACS

Phase 1
- Raw Data ETL

Phase 2
- Cohort Generation, DICOM Retrieval

Phase 3
- Local AI Validation

Phase 4
- Network Study
MI-CMD Implementation Progress in Korea

• The OHDSI Medical Image WG is developing a controlled vocabulary for the DICOM data dictionary

• In Korea, investigating nation-level variability in DICOM metadata tag usage and value entry across Korea to establish terminology standards for MI-CDM

• Institutions such as Severance Hospital, Seoul National University Health System, and Boramae Medical Center collaborate with Johns Hopkins to implement MI-CDM
www.ohdsi-korea.org
OHDSI Japan: 2024-1H Update

June 20, 2024
Activities & Achievements (1)

• Visit to OHDSI Korea, Dec. 2023
  – Hosts: IQVIA Korea; Ajou University (Prof. Park) & EvidNet (FEEDERNET)
  – Visitors: 4 members from Rinchu-net
Activities & Achievements (2)

- OMOP One-Day Event in Tokyo, April 17, 2024
  - Special Lecture: Prof. Daniel Prieto-Alhambra (Oxford Univ.), 31 participants
  - Hands-on Session: Prof. Seng Chan You (Yonsei Univ.), 4 hours, 15 trainees
Activities & Achievements (3)

• OMOP ETL in progress
  – To be completed (hopefully) by fall 2024 in a few university hospitals
  – Vocabulary mapping in parallel

• JAMI Spring Conference 2024, June 2024
  – OMOP part in the Symposium “The Future of the National Medical Database, Japan” by Prof. Hiramatsu
  – Oral presentation: “Transformation and analysis from EMR to OMOP CDM” by Prof. Aoyagi

• Monthly evening conference
  – 50th conference (01/30/2024)
  – General agenda: Quick review on OHDSI-related publications; Sharing OHDSI global/APAC topics and discussions; Vocabulary exploration; Discussion on a study-a-thon plan

• FedAna Association (FedAna.jp)
  – Est. March 2023, to promote the use of medical data and contribute to society, especially through federated data from multiple sites and OMOP CDM standardization
Future Activities

• The 44th Joint Conference on Medical Informatics, fall 2024
  – Symposium on “Promotion and Challenges in Federated Analysis and Federated Learning” in November 2024 organized by Prof. Hiramatsu (submitted)

• The 16th Asian Conference on Pharmacoepidemiology, Oct. 12-14, 2024, Tokyo
  – Anyone coming to Tokyo?
OHDSI Australia Chapter
Mid-year Update 2024

www.ohdssi-australia.org
Phuc Phan Thanh, Taipei Medical University visits Quality Use of Medicines and Pharmacy Research Centre, University of South Australia!
Activities

Seamless EMR data access: Integrated governance, digital health, and the OMOP-CDM

Christine Mary Hallinan, Roger Ward, Gwenevere K Hart, Clare Sullivan, Nicole Pratt, Ashley P Hewitt, Daniel Caprino, Anton Van Der Vegt, Stow-Tong Liu, Oliver Dalrymple, Bianca Gallegos Lazo, David Buirin, Douglas Boyle

ABSTRACT

Objective To expand and improve our understanding of how EMRs are used to support healthcare delivery and clinical research, we are developing a methodology to make EMR data available in a standardized format. This involves creating standards for data extraction, transformation, and publication that can be used across different healthcare organizations.

Methods We have developed a set of standards for extracting EMR data that can be used to create a standardized data model. This model is based on the Open Health Outcomes Data Initiative (OHDSI) framework, which provides a common language for describing EMR data.

Results The OHDSI framework allows for the creation of standardized data models that can be used to extract and transform EMR data. This enables researchers to conduct analyses across multiple EMR systems, which results in improved accuracy and consistency of data.

Conclusion The OHDSI framework provides a powerful tool for expanding the community of practice in translation of EMR data to OMOP. The success of this initiative will rely on the willingness of healthcare organizations to adopt and use the standards, as well as the engagement of researchers and data stewards.

PLOS ONE

The OMOP common data model in Australian primary care data: Building a quality research ready harmonised dataset

Roger Ward, Christine Mary Hallinan, David O’Connor-Schmidt, Orihade Chidiagha, Douglas Boyle

Health and Human Services Research and Informational Health (HHSRI), Department of General Practice and Primary Care, Faculty of Medicine, Dentistry, and Health Sciences, The University of Melbourne, Parkville, Victoria, Australia

Abstract

The use of links of quality clinical data from primary care for secondary research is increasingly recognized as a method to enhance primary care research, improve patient outcomes, and reduce costs. This initiative is an important step in developing a harmonized and standardized data model that can be used to conduct high-quality research across different healthcare organizations. The success of this initiative will rely on the willingness of healthcare organizations to adopt and use the standards, as well as the engagement of researchers and data stewards.

To expand community of practice in translation of data to OMOP

Up-coming Workshop

Community of Practice in translation of Electronic Medical Records into OMOP
The Medicines Intelligence Data Platform: A population-based data resource from New South Wales, Australia

Elija Ziegler, Michael O’Ferrall, Malcolm Gillies, Melsa Litchfield, Simon Carruthers, Claudia Brown, Bronwyn Daniels, Natasha Donnelly, Alen Hind and Andrea L. Schaffer, Georgina Chambers, Louisa Degaris, Timothy Dobbin, Natasha Grix, Rebecca Hors, Louisa Jones, Beti Loa, Claire McNicoll, Yale University

doi: https://doi.org/10.1101/2024.04.29.24306520v1

Abstract

The Medicines Intelligence (MedIntelligence) Data Platform is an anonymised linked data resource designed to generate real-world evidence on prescribed medicine use, safety, costs and cost-effectiveness in Australia. The platform comprises Medicare-eligible people who are ≥18 years and residing in New South Wales (NSW), Australia, any time during 2015-2020, with linked data on dispensed prescription medicines (Pharmaceutical Benefits Scheme), health service use (Medicare Benefits Schedule), emergency department visits (NSW Emergency Department Data Collection), hospitalisations (NSW Admitted Patient Data Collection), cancer notifications (NSW Cancer Registry), and cause and death (National Death Index). Data are currently available to 2022, with approval to update the cohort and data collections annually.

https://www.medrxiv.org/content/10.1101/2024.04.29.24306520v1
This collaborative project aims to accelerate the development of a validated Quality Use of Medicines (QUM) analytics dashboard using electronic medical records (EMR).

Focused on real-time mental health medicines management in acute care, it addresses critical gaps in Australia and Indonesia, where validated mental health QUM analytics dashboards are currently unavailable.

The project will offer insights into barriers and drivers of real-time EMR-based analytic dashboard development, shaping local and national practices and policies in both countries. Additionally, it aims to raise public awareness of initiatives enhancing mental health care medicines management, fostering mental health education campaigns, and reducing stigma.
Generating the evidence!

• Floroquinolones and Aortic Dissection Aneurysm

• New studies:
  – Treatment pathways in Epilepsy
  – Implementation of the Prevalent New User Design in Pharmacoepidemiology

To increase the use of Australian datasets in OHDSI studies
www.ohdsi-australia.org

Cheers!
2024 Mid-year Report

Lei Liu, Hui Lv, Yi Zhou, Hua Xu

June 20, 2024
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<th>Host</th>
<th>Guests</th>
<th>Topic</th>
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<td>Sizhe Long</td>
<td>基于CDM的疾病队列数据治理与应用共享平台建设</td>
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</tr>
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<td>Xiaoyan Wang</td>
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<td>BNT162b2疫苗对儿童和青少年感染及重症的现实世界有效性 - 在治疗状态误分类下的因果推断 / 陈勇 博士 / 宾夕法尼亚大学</td>
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<td>Nanchang University</td>
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OHDSI Tutorial (June 1, 2024, Shanghai)

• One Day Tutorial (8 hours)

• Event hold by OHDSI CHINA (Fudan University & Shanghai Jiao Tong University)

• 50 student, most of them are from colleges

• Tutorial include:
  • OHDSI Intro
  • OMOP CDM
  • ATLAS
  • ETL process
  • Data Analysis method

• Provide translated OHDSI Book as textbook.
OHDSI Tutor for Hebei Medical University

- Hebei Medical University is building the same clinical data networks like Fudan.
- Bring one physician and one graduate student for shadowing over 50 days.
- Practice with OHDSI Virtual machine build inside Medical Science Data Center.
- Join Zhongshan Hospital ETL project.
- Help to make OHDSI standard terminology Chinese translation in their sub major section (Cardiology).
Building Clinical Data Cooperate Platform in Shanghai Medical College, Fudan University

Intelligent Medicine Institute, Fudan University
Medical Science Data Center
Integrated Platform for Medical Research Data Analysis Services

**FUDAN CLOUD**

**Clinical Data Cooperate Platform**

- **Info Cloud**: Comprehensive Coverage of All Information Technology Resources (Systems, Networks, Security, Data, etc.)
- **Engineering High-Performance Information Center**: Compute for new engineering related research
- **Big Data Factory**: Build by School of Data Science, for Interdisciplinarity Infrastructure development
- **Cloud for Subjects**: Providing Platforms for Emerging Technologies (Artificial Intelligence, Data Analysis, High-Performance Computing, etc.)
- **National Lab**: Interdisciplinary Institute
- **Teaching**: Research
- **Medical Science Data Center**: 17 Hospitals
- **Education Data**
  - Research Data
  - Lab Test Data
  - Omics Data
  - Clinical Data
  - Medical image data
Building Clinical Data Cooperate Platform between Different Facilities

17 Hospitals Network

Zhongshan Hospital Privacy Computing Platform

Huashan Hospital Privacy Computing Platform

Shanghai Cancer Center Privacy Computing Platform

Medical College Privacy Computing Platform

... More

- 中山医院
- 华山医院
- 肿瘤医院
- 妇产科医院
- 儿科医院
- 眼耳鼻喉科医院
- 金山医院
- 第五人民医院
- 公共卫生临床中心
- 华东医院
- 浦东医院
- 静安区中心医院
- 闵行医院
- 青浦区中心医院(筹)
- 精神卫生中心(筹)
- 口腔医院(筹)
- 徐汇医院(筹)
Building Platform base on Specialized Disease Databases

Cooperate by specialized disease

Melanoma  Zhongshan +  SHCA

Brain glioma  Huashan +  SHCA

Conducting specialized disease research on the platform

Clinical Data Type

SHMC Standard Dataset

Mapping  Fusion

Zhongshan Standard Dataset

Fusion

Huashan Standard Dataset

Mapping

SHCA Standard Dataset

Reflecting the diverse types of clinical data:

- **Electronic Health Records:**
  - Patient基本信息
  - Medical history and diagnosis
  - Diagnosis
  - Symptoms
  - Physical examination results
  - Medical personnel data
  - ... 

- **Imaging Data:**
  - CT
  - MRI
  - Ultrasound
  - ... 

- **Molecular Data:**
  - Cytogenetics
  - Genetics
  - ... 

The platform includes standard datasets from Zhongshan Hospital and Huashan Hospital, facilitating specialized disease research.
First ETL Project: Melanoma Data Set

• Under the project: Clinical Data Cooperate Platform
• Work with Zhongshan Hospital physicians and tech person.
• Biweekly online meeting by using shared document to finish scrum.
• Total 400+ patients transformed.
• Still in testing, first series released in May.
• ETL for Huashan Hospital and Shanghai Cancer Center data sets
Clinical Data Cooperate Platform: System Design

User Login with a unified Fudan University Account

Privacy Computing Platform (PCP)

CDCP (Clinical Data Collaborate Platform)
1. CDMP Data presentation
2. Data exploration
3. Tools integration

PCP- Exploration Library
1. Computing power
2. Distributed query capability
3. Catalogue

PCP-Scenario authorization
1. Complete the scene authorization.

Data Authorization
1. Notify the data node
2. Evoke Data mounting APP

PCP Data Authorization

Save to PCP

OHDSI-Atlas tools (Sandbox)
1. Concept set query
2. Queue discovery definition
3. Disease research
4. Use of user permission

Data generation
PG
PCP Data loading
Develop conversion tools
Synchronize Technical terminology
Dataset

PG
PCP Data loading
Develop conversion tools
Synchronize Technical terminology
Dataset

WebProtége

Add-Ons
Custom/Extra Terminology
Concept
Ontology library

SHMC Node

Exploration library collaboration

Hospital node

PCP platform
Zhongshan Hospital
Dataset OMOP
PCP platform Cancer Hospital
Dataset OMOP
PCP platform
Huashan Hospital
Dataset OMOP
Building Data Portal for Distributed Databases

Data Big Picture (What is it)  Data Exploration (How many)  Data Analysis (How to use)

Without get the real data from different databases, use Data Portal to generate the outlines of different disease.
Privacy Computing Solution: Sandbox

**Calculate Isolation**
- Bind to scene authorization and create a separate sandbox for each computing task.
- Strong isolation between different computing tasks, hosts, and computing instances.
- Effective protection against escape and attack from the container technology.

**Data Security**
- Data is encrypted at rest and during transmission, ensuring data security during its entire lifecycle.
- Strict application review and data authorization mechanism to ensure that user data is usable but invisible.

**General Efficiency**
- Lightweight cloud native sandbox technology, without virtualization technology performance issues.
- Support all types of applications without additional adaptation.
- All computing operate within a secure sandbox environment.
欢迎使用ATLAS。
ATLAS作为OHDSI的开发的开源应用程序，旨在为患者水平的数据和分析提供集成界面。

参考文档
可在此处找到《ATLAS用户指南》。

由此开始
- 定义新队列
- 通过定义要研究的人群来开始研究
- 词汇检索
- 搜索世界各地用于描述患者水平数据的各种本体

部署说明

ATLAS Version 2.11.0 DEV Release Notes
WebAPI Version 2.11.0 DEV Release Notes

最新版本包括17项增强功能和故障排除：
- Unavailable to create characterization after adding more then one subgroups analysis
- The 'Messages' tab is doubled for a Concept Set
- Versioning capability
- Versioning capability
- AWS RedShift IAM connection type support
- Tagging capability
- Tagging capability
- Specimen event missed in censoring events
- Incorrect domain “provider specialty” in the attributes of the Cohort
- ...
Thank you!
OHDSI APAC Symposium 2024

Singapore Chapter Co-Chairs:
Dr. Mengling ‘Mornin’ Feng
Senior Assistant Director, NUHS

Dr. Ngiam Kee Yuan
Group Chief Technology Officer
NUHS
APAC Symposium 2024

6-9 Dec 2024

Theme

When OHDSI meets with AI
APAC Symposium 2024

6-9 Dec 2024

Call for Abstract

To be release by end of the month
APAC Symposium 2024
Day 0: Ohdsi Tutorial/Hands-on Workshop
APAC Symposium 2024

Day 1 & 2: Official Symposium
APAC Symposium 2024
Day 1: International Leaders

George Hripcsak
Columbia University

Patrick Ryan
Johnson & Johnson

Martijn Schuemie
Johnson & Johnson

Marc Suchard
UCLA

Anna Ostropolets
Odysseus US

Peter Rijnbeek
OHDSI Europe

Mui Van Zandt
OHDSI APEC

Xu Hua
OHDSI China

Park Rae Woong
OHDSI South Korea

Seng Chan You
OHDSI South Korea

Nicole Pratt
OHDSI Australia

Jason Hsu
OHDSI Taiwan
APAC Symposium 2024
Day 2-3: Data-thon
Singapore Peri-Operative Dataset

The SingHealth Perioperative and Anesthesia Subject Area Registry (PASAR), a large-scale perioperative data mart and registry

Hairil Rizal Abdullah 1, 2, Daniel Yan Zheng Lim 2, 3, Yuhe Ke 3, Nur Nasyitah Mohamed Salim 4, Xiang Lan 5, Yizhi Dong 5, Mengling Feng 5

Affiliations + expand
PMID: 37935575  PMCID: PMC10834714  DOI: 10.4097/kja.23580

Abstract

Background: To enhance perioperative outcomes, a perioperative registry that integrates high-quality real-world data throughout the perioperative period is essential. Singapore General Hospital established the Perioperative and Anesthesia Subject Area Registry (PASAR) to unify data from the preoperative, intraoperative, and postoperative stages. This study presents the methodology employed to create this database.

Methods: Since 2016, data from surgical patients have been collected from the hospital electronic medical record systems, de-identified, and stored securely in compliance with privacy and data protection laws. As a representative sample, data from initiation in 2016 to December 2022 were collected.

Results: As of December 2022, PASAR data comprise 26 tables, encompassing 153,312 patient admissions and 168,977 operation sessions. For this period, the median age of the patients was 60.0 years, sex distribution was balanced, and the majority were Chinese. Hypertension and cardiovascular comorbidities were also prevalent. Information including operation type and time, intensive care unit (ICU) length of stay, and 30-day and 1-year mortality rates were collected. Emergency surgeries resulted in longer ICU stays, but shorter operation times than elective surgeries.
INSPIRE, a publicly available research dataset for perioperative medicine

Leerang Lim, Hyung-Chul Lee

Published: Dec. 28, 2023. Version: 1.2

When using this resource, please cite: (show more options)

Please include the standard citation for PhysioNet: (show more options)

Abstract

We present the INSPIRE dataset, a publicly available research dataset in perioperative medicine, which includes approximately 130,000 cases (50% of all surgical cases) who underwent anesthesia for surgery at an academic institution in South Korea between 2011 and 2020. This comprehensive dataset includes patient characteristics such as age, sex, American Society of Anesthesiologists physical status classification, diagnosis, surgical procedure code, department, and type of anesthesia. It also includes vital signs in the operating theatre, general wards, and intensive care units (ICUs), laboratory results from six months before admission to six months after discharge, and medication during hospitalization. Complications include total hospital and ICU length of stay and in-hospital death. We hope this dataset will inspire collaborative research and development in perioperative medicine and serve as a reproducible external validation dataset to improve surgical outcomes.
APAC Symposium 2024

6-9 Dec 2024
Thank you!