

Asia Pacific State of the Community



OHDSI APAC Chapters Introduction







OHDSI Korea



Chapter Overview



- The first APAC Chapter
- Goal: Patients and clinicians and other decision-makers around the world use OHDSI tools and evidence everyday
- Over 100+ participants from academic, government, and industry
- Governing board with frequent meeting in different locations















History of Korean Chapter of OHDSI



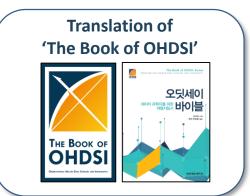


1st OHDSI Korea International Symposium

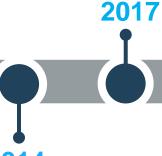


OHDSI Korea Datathon

2019



2019



2014

2018



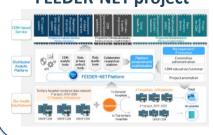
2019

Korea joins OHDSI



Prof Rae Woong Park
(Ajou University) showed
the first public Achilles
webpage at the first
OHDSI Face-to-Face
meeting (Columbia
university, October 2014)

Launch of FEEDER-NET project



OHDSI Korean Tutorial

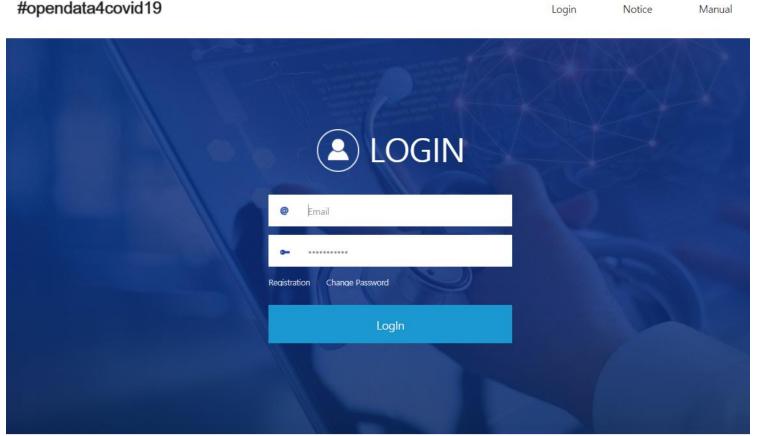
OHDSI K	orea OMOP Tutor	ial 2019 Agenda	OHDSI
구분	시간	프로그램 살세	양양
64	08:30 - 09:00	-	
즉사	09:00 - 09:30	CHDSI Korea 전사별	아무대학교 발명을 교수
		Part 1 : Use Case	
	09.30 ~ 10.00	How to Build an CHDSI Study	IQVA Mui van Zandt
	10:00 - 10:25	Use Case 1 (Large-Scale Evidence Generation and Evaluation in a Network of Outabases LEGENOS)	아무대학교 중승한
116	10:25 ~ 10:50	Use Case 2 (Comparison of First-Line Dual Combination Treatments in Hypertension / Net Clinical Benefit of Ticagnilor Compared to Clopidognil)	아주대학교 유송한
	10:50 - 11:10	Break Time	
	11:10 - 11:35	Use Case 3 (A Journey Toward Real World Evidence)	한양대학교병원 깊이서 교수
	11:35 ~ 12:00	Use Case 4 (발립전체와 명용 <u>약제간의</u> 약용-약을 이상 반응 연구)	순천향대학교 서울병원 양전문 교수
	12:00 - 12:25	Use Case S [ATLAS 기반 열상 데이티 분석 사례]	에서도봇 데이티사이언스템
		Lunch	
		Part 2 : ATLAS Tutorial	
	13:30 - 15:30	24.50	KWWSHE'S 88
214	15:30 ~ 15:50	Break Time	
	15:50 ~ 17:30	24.00	DAYAGHEA 58



OHDSI Korea International Symposium 2019



The first COVID-19 CDM dataset: Participation of COVID-19 Study-a-thon



- South Korea decided to share the world's first de-identified COVID-19 nationwide patient data with domestic and international researchers.
- In the regular briefing on March 27 (Fri), the Central Disaster and Safety Countermeasures Headquarters (CDSCHQ) announced the launch of the Global Research Collaboration Project on COVID-19
- Korea supported OHDSI COVID-19 study-a-thon by using nationwide COVID-19 dataset







Current Stage of OHDSI Korea Network



No.	병원 명	병원 구분	변환 환자 수
1	가천길병원	2차	1,566,877
2	가톨릭대학교성모병원	3차	3,223,259
3	강동경희대학교병원	2차	822,183
4	강동성심병원	2차	1,662,083
5	강원대학교병원	2차	510,000
6	건국대학교병원	3차	
7	경북대학교병원	3차	1,002,381
8	경희의료원	3차	2,101,456
9	고려대학교안암병원	3차	1,856,484
10	고려대학교안산병원	3차	1,465,833
11	고려대학교구로병원	3차	2,077,344
12	국민건강보험공단일산병원	2차	1,358,280
13	대구가톨릭대학교병원	3차	1,688,980
14	동국대학교일산병원	2차	779,474
15	메디플렉스세종인천병원	2차	946,000
16	부산대학교병원	3차	1,753,002
17	서울이산병원	3차	4,896,016
18	울산대학교병원	2차	400,609
19	충남대학교병원	3차	4,537,167
20	건양대학교병원	2차	555,,005

No.	병원 명	병원 구분	변환 환자 수
21	분당서울대학교병원	3차	1,734,565
22	분당차병원	2차	2,363,386
23	서울대학교병원	3차	3,068,874
24	세종부천병원	2차	946,000
25	순천향부천병원	3차	1,225,459
26	순천향천안병원	3차	902,988
27	순천향구미병원	2차	588,482
28	순천향서울병원	2차	992,222
29	아주대학교병원	3차	2,400,000
30	연세원주세브란스병원	2차	781,671
31	원광대학교병원	3차	1,001,797
32	이화여자대학교목동병원	2차	1,745,549
33	인하대학교병원	3차	1,977,256
34	전남대학교병원	3차	2,168,701
35	전북대학교병원	3차	1,433,023
36	칠곡경북대학교병원	3차	1,002,381
37	한양대학교병원	3차	1,783,111
38	화순전남대학교병원	3차	1,725,462
39	여의도성모병원	12차	2,232,643
40	국립암센터	12차	105,193

Summary of CDM DB in Korea

• Hospitals: 40

• Patients: 59,555,471



2021 Goals



- Conversion of nationwide databases into OMOP-CDM and integrating the data between hospitals and nationwide claim data based on OMOP-CDM
- Provide more educational course
- Better standardization across Korean healthcare data holders
- Conducing more OHDSI studies
- Updating and converting data for extension modules including oncology, radiology and genomics.





OHDSI China



Chapter Overview



- Goal: To promote healthcare observational studies in China through data science and informatics approaches. More specifically:
 - Extend and customize OHDSI data science approaches (e.g., standards, knowledge bases, and software) to Chinese clinical data
 - Enable big data-based Investigation of important global healthcare problems by building large observational data networks in China
 - Promote international collaboration and education in biomedical informatics
- 6 sub-groups (CDM/Vocabulary, Data Analysis, NLP, Software Tools, Privacy, Communications)
- Over 500+ participants from academic, government, and industry

























Past Activities



China Symposium

- Hangzhou
- 200 participants



China Symposium

- Guangzhou
- 180 participants



June



Bejing Hackathon

- Beijing
- 50 participants

Dec





China Symposium

• 200 participants

Shanghai

Tutorial

- Guanghzou
- 60 Participants















First Hackathon

- Shanghai
- 85 participants



Oct

Zhi Jiang University

- Hangzhou
- 30 participants



Hackathon

June

Xi'an

• 80 participants



Aug

Fudan Study-a-thon

- Shanghai
- 80 participants





2020 Activities



China Vocabulary

- Lead by IQVIA
- Fully released to Athena in October

July

 ICD10CN (34,491), NCCD (41,662), ICD9ProcCN (13,385), LOINC_CN



APAC Hypertension Study

- Lead by Dr. Yuan Lu and Dr. Lei Liu
- Poster presented at US Symposium
- On-going study

Oct



A Comprehensive Comparative Effectiveness and Safety Study of the Second

Antihypertensive Agent after Monotherapy at scale using the OHDSI AP Network

Guangzhou Tutorial

- Guangzhou
- 4 hour session
- 80 participants



Nov

May

Book of OHDSI

- Led by Dr. Mengchun Gong
- PDF version available
- Hard copy in progress



Aug

NMPA RWD Guidelines

- Reference EMA guidelines
- Referenced OMOP/OHDSI



Atlas Localization

Oct

- Lead by IQVIA
- Community reviewed
- To be released soon



CHIP conference Tutorial

- Virtual
- 2 hour session



2021 Goals



- At least 2 more data assets in OMOP and ready to collaborate in research
- Train the trainers
- Provide more in-depth OMOP trainings in Chinese
 - Create exercise book complimentary to the Book of OHDSI
- Contribute to more studies
- Lead at least 1 international study





OHDSI Japan



OHDSI Japan Established in Nov 2019!

Members:

Registered: 431

Active: Small portion

メンバー



https://www.ohdsi-japan.org/



ホーム

概要

ミーティングアーカイブ

お問い合わせ

詳細

OHDSI(オデッセイ)は、共通データ形式を使った医療ビッグデータ分析を推進するオープンサイエンスコミュ ニティ(研究会)で、国際的・ボランタリーベース・産学官病所属を問わないという特徴をもっています。より 良い医療を促進するエビデンスを共同して生みだすことを推進し、健康と病気の包括的な理解を観察研究から得 られる世界を目指しています。OHDSIは米国で2014年にスタートし今では世界中に参加者がいます。オープンと は言っても、医療データは各参加組織のところで守られ、個人情報が各参加組織の外にでることはありません。 この方法により開始わずか5年で、OHDSIの国際連携ネットワークには重複を除外して推定6億人以上のデータ が含まれるまで成長してきました。欧州、中国、韓国に引き続き、2019年秋に日本にも地域コミュニティができ 活動しています。

※OHDSIは古代ギリシャ叙事詩Odysseyにちなんでおり同じ発音をします。日本語読みは慣用的に「オデッセイ」、英語発音 は人/場面により異なりますが、オデシーからオゥデシー、オゥデッシーといったところです。

■2020年秋はOHDSIイベントが目白押しです。連合大会、APACシンポジウム受付中!







Past Activities



1st Meeting June 20th ,2019





2nd Meeting Sep 5th - 6th,2019

> Mini-meet #1 Oct 29, 2019

3rd Meeting Nov 19th ,2019

> Mini-meet #2 Dec 17, 2019





Main attendee affiliations:
University hospitals, Pharmaceutical companies,
IT vendors, Data vendors



2020 Activities



1

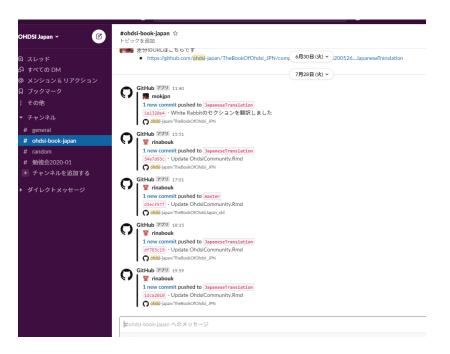
Monthly Meetings

Evening conferences once a month





Slack site for translation project



- Establish Japan Platform
- Collaborator recruitment
 - Data holders
 - OMOP supporters
- ETL platform
 - Administrative claims data
 - "Deep" data from EMR and department systems
- Vocabulary mapping
 - Japan standards to OMOP standards



2021 Goals



Initiate a network research

- OMOP domestic data
- Feasibility in terms of data existence
- Research Questions from Japanese Researchers
- Imagine OHDSI network researchable study design
- Participate in other network researches to gain experience
- Start a domestic preliminary research
- Expand it to the global research





OHDSI Australia



Chapter Overview



- Applied to be a Chapter in December 2019
- First Chapter meeting Monday 9th Dec 2019
- 84 members

OHDSI Board:



Teng Liaw Jitendra Jonnagaddala



Nicole Pratt Ty Stanford



Dougie Boyle Roger Ward

www.ohdsi-australia.org



2020 Activities





 "The long and winding path to data standardization in OMOP"

Mui Van Zandt OHDSI Asia Pacific

 "The Transformational Data Collaboration (TDC): Supporting the uplift of clinical data sets for research in Australia"

A/Prof Douglas Boyle and A/Prof Nicole Pratt

 "European Health Data & Evidence Network"

Nigel Hughes, Scientific Director

Digital Health CRC webinar
 Associate Professor Nicole Pratt

https://ohdsi-australia.org/events.html



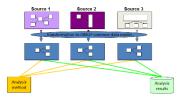
OMOP Mapping

- EMRs
 - UNSW ePBRN (18 GPs & Hospitals)
 - Victoria (120 practices, several million patients)
 - NPS MedicineWise MedicineInsight database (700+ GP systems)
 - Cerner-based hospital EMR warehouses
 - CERNER2OMOP
 - CaVa
- Claims
 - Phamaceutical Benefits Scheme 10% Sample dispensed medicines
 - Department of Veterans' Affairs Claims Data

Network Collaboration

- OHDSI COVID-19 study-a-thon
- OHDSI Symposium 2020
- OHDSI APAC research study on hypertension
- International Population Data Linkage Network Conference
- Multiple Research Grant proposals to support quality assurance, terminology mapping and OMOP conversion in Australia

www.ohdsi-australia.org





2021 Goals



- Focus on Data Quality/Interoperability
 - Keynote speakers @ OHDSI Australia Breakout
 - Clair Blacketer
 - Michael Khan
- 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
- Promote the conversion of datasets to the OMOP CDM to facilitate participation in network studies
- Activate community collaboration on phenotyping





OHDSI Singapore



Chapter Overview



Overview of OHDSI Singapore

- The chapter was setup in Jan 2020.
- As of Nov 2020, we have more than 30 members from major healthcare institutes across the nation
- Meeting every 2 months to discuss on diverse topics: ETL, Vocabulary mapping, project presentations and collaboration opportunities etc.















Adoption of OMOP CDM



National University Health System

- Mapped all EMR data of over 300K inpatients between 2015-2018
- Deployed the ALTAS platform to enable physicians to create and explore cohorts on the pilot data



Khoo Teck Puat Hospital, Health Science Authority and National University of Singapore

- Mapped EHR data from 2011 to 2018 of 290K patients to OMOP-CDM standard.
- The 1st SG integrated research dataset for chronic disease that comprise of patients' full follow up EMR data, survey data on social status and ~omics data



Recent Activities



OHDSI US Symposium

- 2 posters on treatment pathways and integration of EHR and survey data
- Selva, founding team member, instructor in OMOP CDM and Standardized Vocabulary Tutorial



 Participated in network researn with UNSW, Australia, and co-authored a poster on Phenotyping validation across AUS and SG

OHDSI APAC Symposium

- Participated in APAC Hypertension network study
- Member in APAC Symposium Core Planning team

AMIA

 Participated in network research with 5 other sites and co-authored a poster on Lab threshold setudy



Looking into the future



- National Data Sharing Platform
 - Ministry of Health is planning to build a data sharing platform using OMOP CDM to support national level research studies involving multiple institutes
 - Our SG Chapter is being engaged as the technical advisors for the initiatives
- Network research
 - Execute the collaboration projects in pipeline.





OHDSI Taiwan



Chapter Overview



- Goal: to link all units in Taiwan and integrate with OHDSI Global Headquarters and the other OHDSI regional chapters in the world.
- Research platform across universities and hospitals in Taiwan.



OHDSI Taiwan





Established in Taipei Medical University by Professor Jack (Yu-Chuan) Li, Professor Usman Iqbal and Professor Marc Hsu



Initial Organizers of OHDSI Taiwan

- Jack (Yu-Chuan) Li
- Usman Iqbal
- Marc Hsu
- Jason C. Hsu
- Alex PA. Nguyen
- Iris Lin
- Cherry Peng



OHDSI Taiwan Contact



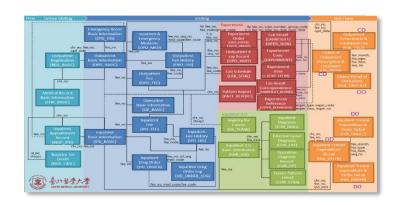
Jason C. Hsu, PhD **E-mail**: jasonhsu@tmu.edu.tw



2020 Activities



Taipei Medical University Clinical Research Database (TMUCRD)











OHDSI Technical Guidance TMU OMOP-CDM

OHDSI Taiwan also invited OHDSI headquarters to conduct a technical guidance

EMR Integration

Integration of 3 affiliated hospitals to form **TMUCRD** since 2015

Data Completion

The overall time interval of the data covered by TMUCRD is 1998-2020, and since 2008, the database also covers the complete data of the three hospitals

Data Linkage

The data content covered includes 10 categories, 60 data tables, and 2,355 fields. The various data tables were linked to each other

APAC Symposium

Marc Hsu and Jason C. Hsu have jointly drafted an introduction to the establishment and management of TMCRD, which will be shared in 2020 OHDSI APAC Symposium via poster presentation

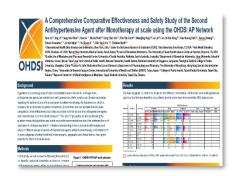
TMU Office of Data Science held the OHDSI-OMOP CDM kick-off meeting on September 2020, to start the data bridging platform between TMUCRD and OHDSI-CDM.



2020 Activities

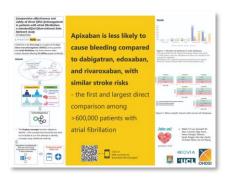


Participation in International Research Projects



OHDSI Asian-Pacific Network Research Project

The TMU research team has joined the Comparison of the Efficacy and Safety of Antihypertensive Agents project



DOAC Project

The TMU team is expected to join the OHDSI global collaborative research project on the benefits of anticoagulant drugs (DOAC Project).



Global Lecture

Ian Wong (Professor of School of Pharmacy, University College London, UK) gave a transnational online lecture on October 22, 2020



OHDSI APAC Steering Committee

OHDSI Taiwan has Participated in OHDSI APAC Steering Committee Meeting discussions every month



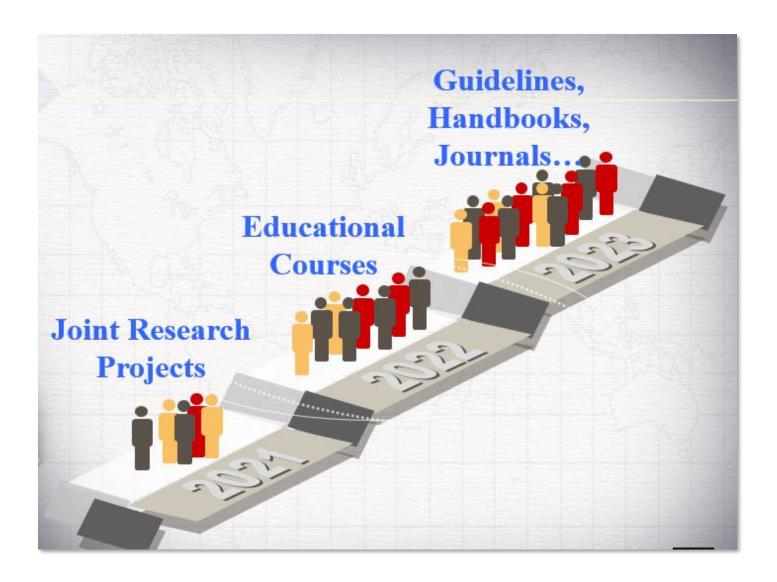
TMU OHDSI Poster

TMU has produced a poster for the 2020 OHDSI APAC Symposium, and has widely promoted it and invited friends to participate actively



2021 Goals







APAC Community 2021 Goals

- Enabling APAC community to better understand the OHDSI ecosystem in order to collaborate in more observational research
 - Education programs across regions
 - OMOP conversions
 - Collaborative publications



Join Regional Break Outs

OHDSI Chapter Breakout - China/Hong Kong	Presenters
China OHDSI Overview (Chinese Vocabulary; Book Translation)	Hua Xu, PhD
Applying the OMOP CDM to Hepatobiliary Clinical Research Database at Zhongshan Hospital, Fudan University	Lei Liu, PhD
Bipolar Study 1	Lei Feng, MD
China OHDSI Community Engagement in South China	Yi Zhou, PhD
Pediatrics	Hui Lu, PhD
COVID-19 and Cardiovascular	Mengchun Gong, MD

OHDSI Chapter Breakout - Australia	Presenters
Introduction to OHDSI Australia	Nicole Pratt, PhD
Introduction to panel on Data Quality Assessment	Teng Liaw, MBBS, PhD, FRACGP, FACHI, FACMI, FIAHSI, Grad Dip AICD
DQA principles and practice	Michael Kahn, MD, PhD
OHDSI DQ Dashboard and CDM-enabled DQA	Claire Blacketer , MPH, PMP
White Bandicoot and generic (non-CDM) DQA	Douglas Boyle, PhD
Partnership project on CDM versus non-CDM DQA	Jitendra Jonnagaddala, MIS, PhD, FACHI
Panel Q&A session on DQA in the above context	Teng Liaw, MBBS, PhD, FRACGP, FACHI, FACMI, FIAHSI, Grad Dip AICD
Networking/Poster session	
What's next for OHDSI Australia	Douglas Boyle, PhD

OHDSI Chapter Breakout - Korea OHDSI Korea 2020 Update What's going on in OHDSI Korea now? Expansion models of OMOP-CDM Challenges in OHDSI Korea

OHDSI Chapter Breakout - Singapore	
Member Introduction	
Singapore Chapter Update	
Demo from KTPH & NUS DC Study	
Demo from NUHS for NUHS ALTAS Case Studies	
Presentation by HSA on Exploratory drug safety analyses following	CDM conversion
Panel Discussion	

OHDSI Chapter Breakout - Japan	Presenters
Japan Chapter Introduction	Tatsuo Hiramatsu, MD, PhD
Teaching OHDSI within a University Course: Opportunities and Lessons Learned	Jon Duke, MD, MS
EHDEN using OMOP	Dani Prieto-Alhambra, MD, MSc(Oxf), PhD
COVID-19 Alpha Blocker Study	Akihiko (Aki) Nishimura, PhD
Pros and Cons of Real World Evidence - What we expect from OHDSI -	Eri Matsuki, MD, PhD, MPH
Data standard for collaboration to promote medical innovation	Kenichi Kohno, PhD
Towards the integration of Japanese Terminologies into OHDSI Standardized Vocabulary	Eizen Kimura, PhD, BM
General Discussion	Tatsuo Hiramatsu, MD, PhD