

2019 Poster Session

Even-numbered posters will be presented during the morning collaborator showcase - 11:30am to 12:30pm

Odd-numbered posters will be presented during the afternoon collaborator showcase - 2:00pm to 3:00pm

OBSERVATIONAL DATA STANDARDS & MANAGEMENT

1	Extending OHDSI's Standard Terminologies with Pre-clinical Terminologies	Erik M. van Mulligen, Marcel de Wilde, Solène Grosdidier, Jan A. Kors, Johan van der Lei
2	Difference of Emergency Department Frequent Users' Clinical Characteristics between Two Tertiary Teaching Hospitals in South Korea	Doyeop Kim, Jaeyong Yu, Seng Chan You, Won Chul Cha, Rae Woong Park
3	Modeling self-harm behaviors using psychiatric CDM	Eunyoung Lee, Sang Joon Son, Heirim Lee, Bumhee Park
4	Study on Pathology Common Data Model Using Natural Language Processing Toward Implementation of Integrated Platform for Clinical and Omics Data	Hyunyoung Baek, Eunsil Yoon, Seok Kim, Sejoon Lee, Rong-Min Baek, Sooyoung Yoo
5	Fully connecting the Observational Health Data Science and Informatics (OHDSI) initiative with the world of linked open data	Juan Banda
6	The process, standardization and patterns in OMOP CDM ETL	Dave Barman, Mikhail Archakov, Natalia Karataeva, Gregory Klebanov
7	Lessons from an ETL to OMOP Journey in Cleveland	Mark Beno, Paola Saroufim
8	HL7 version 2 message conversion to OMOP using OMOP on FHIR	Myung Choi, Michael Riley, Jon Duke, Marla Gorges
9	Simulacra and Simulation: How simulated data can enable OHDSI application development, methods research, and user adoption	Frank Defalco, Clair Blacketer, Anthony Molinaro, James Wiggins
10	Behind the curtain: Development and evaluation of a systematic process to transform a network of observational data into the OMOP Common Data Model to enable end-to-end reproducible research	Frank Defalco, Clair Blacketer, Ajit Londhe Anthony Molinaro, Anton Ivanov
11	HemOnc: A New Standard Vocabulary for Oncology Drug Regimen Representation in the OMOP Common Data Model	Dmitry Dymshyts, Christian Reich, Michael J. Gurley, Harry Hochheiser, Zachary H. Moldwin, Rimma Belenkaya, Andrew E. Williams, Peter C. Yang, Jeremy L. Warner
12	Conversion of Diagnosis and Chemotherapy Data in Electronic Health Records to Episode-based Oncology Extension of OMOP-CDM	Hokyun Jeon, Seng Chan You Jimyung Park, Rae Woong Park
13	Evaluation of a semi-automated code mapping and management system	Soondong Kim, Aelan Park, Soo-Yeon Cho, Sukyoung Lee, Hye Jin Kam
14	Increasing the Representativeness of OHDSI Network Studies through Globalization of the OHDSI Community	Kristin Kostka, Mui Van Zandt, Mike Denis, Peter Rijnbeek, Jose Posada, Martin Campodonico, Guilherme Silva Julian, Christian Reich

OBSERVATIONAL DATA STANDARDS & MANAGEMENT

15	Reimagining Quality Reporting using the OMOP CDM NOTE_NLP Table: A Pilot	Kristin Kostka, Simon Bealuah, Elizabeth Marshall, Ben Hamlin
16	FEEDER-NET (Federated E-health Big Data for Evidence Renovation Network) in Korea	Seongwon Lee, Seng Chan You
17	OMOP-CDM Conversion and Anonymization of National Health Insurance Service-National Sample Cohort	Seongwon Lee, Seng Chan You
18	Development of a Deep Learning-Based Automated Mapping Tool in the Conversion Process of OMOP-CDM	Yourim Lee, Ba Rom Kang, Soondong Kim, Soo-Yeon Cho, Aelan Park, Ha Young Kim, Byungkon Kang, Hye Jin Kam
19	Concept Heterogeneity in the OHDSI Network	Anna Ostropolets, Anthony Molinaro, Frank Defalco, Jitendra Jonnagaddala, Siaw-Teng Liaw, Hokyun Jeon, Rae Woong Park, Matthew E. Spotnitz, Karthik Natarajan, Chunhua Weng, Patrick Ryan, George Argyriou, Kristin Kostka, Christian Reich
20	Combining the ATC Drug Classification System with the RxNorm Drug Nomenclature into a comprehensive Drug Ontology: Challenges and Achievements	Anna Ostropolets, Hamed Abedtash, Peter Rijnbeek, Marcel de Wilde, Alexander Davydov, Olha Marushchak, Christian Reich
21	Conversion of Electronic Medical Records in the Emergency Room for the Outcomes Partnership Common Data Model in South Korea	Hojun Park
22	Themis Part 2 - The ETL Data Quality Conversion Initiative	Melanie Philofsky, Meghan Pettine, Karthik Natarajan
23	Conversion of Nationwide Health Insurance Claims Data into the Common Data Model in Korea: Data Validation with 7.6 Million Cancer Patients' Healthcare Utilization Data for the Past 11 Years	Yeunsook Rho, Jiwoo Kim, Jimyung Park, Jaehyeong Cho, Youjin Park, Seng Chan You, Yejin Son, Rae Woong Park, Yun Jung Heo
24	Standardization, automation and monitoring system for ETL process to improve CDM data quality	Dahye Shin, Seol Paik, Sehee Chang, Hye Jin Kam
25	Exploring OHDSI in Asia	Mui Van Zandt, Hua Xu, Hui Lu, Rae Woong Park, Seng Chan You, Hee Hwang, Sooyoung Yoo, Won Chul Cha, Dong Kyung Chang, Tatsuo Hiramatsu, Mengling Feng, Lei Liu, Haoyan Cai
26	Efforts to vitalize the multi-institutional research network: dedicated support cases through forums and Tutorial	HyeYeon Cho, Seol Paik, HyeJin Kam
27	OMOP CDM Oncology Module at Work	Rimma Belenkaya, Michael Gurley, Christian Reich, Dmitry Dymshyts, Jeremy Warner, Robert Miller, Andrew Williams, RuiJun Chen
28	A Study on Transformation and Utilization of Common Data Model for Data Analysis of CDA-Based External Referral Document	Sooyoung Yoo, Hyerim Ji, Seok Kim, Soyoung Yi

METHODOLOGICAL RESEARCH

29	Using OHDSI Data Network for Capturing Real-World Evidence: Our Experience with a Multi-Country Study on an Obese and Overweight Cohort	Hamed Abedtash
30	The Counterfactual χ -GAN: An Adversarial Method To Support Covariate Balance	Amelia Averitt, Adler Perotte
31	Approaching Data Model Interoperability between OMOP and PCORnet	Shweta Chavan, Hanieh Razzaghi, Charles Bailey, Ritu Khare
32	Text Classification for Identifying Eligibility Criteria in Clinical Trial Protocols using Pre-trained Deep Learning Models	Miao Chen, Victor Lobanov, Aaron Mackey
33	How much data do we need for patient-level prediction?	Henrik John, Luis H. John, Peter R. Rijnbeek
34	Selecting comparators for drugs with multiple indications and complex treatment patterns: Example with daratumumab in multiple myeloma	Patrick Ryan, Laura Hester, Dina Gifkins
35	ODAC: learning from local to global - an efficient algorithm for integrating time to event healthcare system data	Chongliang Luo, Rui Duan, Martijn J. Schuemie, Yong Chen
36	Using the OMOP CDM to identify gender discordant administrative codes	Kristine Lynch, Benjamin Viernes, Jodie Katon, Chad A Dorn, Scott L DuVall, Michael E Matheny
37	Bayesian sparse survival analysis for detecting subgroup effects with application to comparing first-line hypertension treatments	Akihiko Nishimura, Marc Suchard, Martijn Schuemie, Seng Chan You
38	A Weight-based Integrated Predictive Modelling for Multi-Institutional Data Under Privacy-Preserving	Ji Ae Park, Hae Reong Kim, Kyu Yong Lee, MinDong Sung, Jeong Hoon Lee, Dae-Il Yang, Se Hee Oh, Yu Rang Park
39	Assessing Heterogeneity of Hypertension Treatment Effects: A Risk-Modeling Approach	Alexandros Rekkas, David van Klaveren, Peter R. Rijnbeek
40	High-Performing Machine Learning Models for Phenotype Development	Victor A. Rodriguez, Tony Y. Sun, Phyllis M. Thangaraj
41	Comparing the Performance Characteristics of General and Specific Diagnosis Codes in Phenotype Algorithms	Joel Swerdel, Patrick Ryan
42	National-Level Estimates from RWE: Producing Fast Projected Outcomes of Drug Exposure Based on Pharmacy and Medical Claims using OMOP CDM	Carmen Olga, Anastasios Siapos
43	Assessing Negative Control Exposure-Outcome Pair Selection Strategies on a Replication Study	Erica Voss, Martijn J. Schuemie, Johan van der Lei, Peter R. Rijnbeek
44	Case Definitions Beware: RX and Labs return minor improvements in HIV prevalence capture for Medicare Parts D and B for 2012 to 2016	Nick Williams, Vojtech Huser, Craig Mayer, Sigfried Gold, Kin Wah Fung
45	FAIR Phenotyping with APHRODITE	Juan Banda, Andrew Williams, Mehr Kashyap, Martin Seneviratne, Aaron Potvien, Jon Duke, Nigam Shah
46	Best practices for creating the standardized content of an entry in the OHDSI phenotype library	James Weaver, Aaron Potvien, Joel Swerdel, Erica A Voss, Laura Hester, Azza Shoaibi, Patrick B. Ryan, Jon Duke

OPEN-SOURCE ANALYTICS DEVELOPMENT

47	Query Combinators for OHDSI	Clark Evans, Kyrlo Simonov
48	A Docker based workflow for building machine learning model datasets utilizing the OHDSI common data model	Janos Hajagos
49	Set of derived metadata elements for comparing cohorts from human clinical trials datasets and HER	Vojtech Huser, Craig Mayer, Nick Williams, Sigfried Gold, Kin Wah Fung
50	Feature Engineering to Power Machine Learning Phenotype Development	Xinzhuo Jiang, Krishna S. Kalluri, Chao Pang, Kai Chen, Junghwan Lee, Cong Liu, Ruijun Chen, Patrick Ryan, Karthik Natarajan
51	Local Control: A Microaggregation methodology for performing bias-corrected reproducible observational studies across data silos while protecting patient privacy	Nick Lauve, S. Nelson, R. Obenchain, S. Young, C. Lambert
52	Generate the concept representation using OMOP ontology graph	Junghwan Lee, Xinzhuo Jiang, Krishna Sai Dheeraj Kalluri, Cong Liu, Chao Pang, Patrick Ryan, Karthik Natarajan, Chunhua Weng, Ning Shang, Kai Chen
53	A Collaborative Approach to Phenotype Development: Framing Concept Set Discovery as a Machine Learning Problem	Karthik Natarajan, Xinzhuo Jiang, Krishna Kalluri, Chao Pang, Junghwan Lee, Cong Liu, Ruijun Chen, Patrick Ryan
54	GPU Parallelization of Cyclic Coordinate Descent for Large Scale Cross Validated Logistic Regression	Yuxi Tian, Marc Suchard, Trevor Shaddox
55	Use of Event Combined Table to Simplify ETL into OMOP CDM	Don Torok
56	Using Event Lookup for Fact Tables	Michael Wichers, Mui Van Zandt, Anthony Reckard, Frank DiMartini
57	OHDSI on AWS Reference Architecture	James Wiggins
58	Beyond Deploying Prediction Model: Structuring Clinical Decision Support Log	Junsang Yoo, Sujeong Hur, Won-Chul Cha

CLINICAL APPLICATIONS

59	A community-driven accelerator from Precision Medicine research to bedside applications	Iannis Drakos, Nicolas Derian, Tina Fransgård, Rasmus P. Vogelsang, Rune P. Hasselager, Rune M. Trangbæk, Anna Ostropolets, Eldar Allakhverdiiev, Pavel Grafkin, Gregory Klebanov, Peter Rijnbeek, Patrick Ryan, Ismail Gögenür
60	Development of Patient-Level Prediction Models for Preterm Birth	Jill Hardin, Patrick Ryan, Jenna Reps
61	Development of Unplanned Extubation Prediction Model in Intensive Care Unit	Sujeong Hur, Jiyoung Min, Junsang Yoo, Won Chul Cha
62	Development of a machine-learning model to predict mortality and its cause using the national health insurance service national sample cohort	Chungsoo Kim, Seng Chan You, Rae Woong Park
63	Visit level machine learning imputation of uncoded self-harm in major mental illness and characterization of incidence of self-harm	Praveen Kumar, Anastasiya Nestsiarovich, Stuart Nelson, Berit Kerner, Douglas Perkins, Christophe Lambert

CLINICAL APPLICATIONS

64	An Application of Empirical Calibration using Three Pharmacoepidemiological Designs to Detect the Risk of Cancer in Users of Oral Bisphosphonates: Introducing OHDSI analytics at VCU in the LTS OHDSI cloud and testing a synthetic EHR Generator	Martin Lavallee, Roy T. Sabo, Lee Evans
65	Clustering of chief complaint	Jeonghoon Lee, Won Chul Cha
66	Validation of Real-World Data: Case study in hepatitis C	Craig Mayer, Vojtech Huser, K. Fung, Nick Williams, Sigfried Gold
67	Homogeneity Within and Between the Study Cohort and the Potentially Eligible: A Case Study for a Liver Transplant Clinical Trial	James Rogers, Chunhua Weng
68	Risk of bacterial pneumonia in patients with proton pump inhibitors versus histamine-2 receptor antagonist: A Korean single center- based long-term cohort study using OMOP-CDM Common Data Model	Seung In Seo, Seng Chan You, You Sang Ko, Ye Rim Kim, Jong Jin Yoo, Woon Geon Shin
69	An algorithm for classification of ovarian cancer histopathology images and prediction of genetic variants	Seo Jeong Shin, Jin Roh, Seng Chan You, Ho Kyun Jeon, Kwang Soo Jeong, Suk-Joon Chang, Hee-Sug Ryu, Jang-Hee Kim, Rae Woong Park
70	The Association Between Preoperative 3D Rendering Prior to an Elective Total Knee, Shoulder or Hip Arthroplasty and Postoperative Outcomes: Real World Evidence from the OHDSI Network	Matt Spotnitz, Jeffrey Geller, Edward Burn, Thomas W. Hamilton, Kristin Kostka, Karthik Natarajan
71	The Comparative Effectiveness of Copper Intrauterine Devices and Levonorgestrel Intrauterine Devices in Preventing Cervical Neoplasms: Real World Evidence from Columbia University Medical Center	Matt Spotnitz, Karthik Natarajan, Carolyn L. Westhoff
72	Feasibility of Studying the Comparative Effectiveness Between Image Guided Endoscopic Sinus Surgery and Endoscopic Sinus Surgery in Reducing Postoperative Revision Incidence: Real World Evidence from Columbia University Medical Center	Matt Spotnitz, Karthik Natarajan, Jonathan B. Overdeest
73	Comparing Performance Characteristics of Phenotype Algorithms for Dermatological and Renal Diseases	Joel Swerdel, Patrick Ryan
74	Treatment pathways of oral anticoagulants for stroke prevention in atrial fibrillation patients - Patterns from multiple countries	Pareen Vora, Henry Morgan Stewart, Beth Russell, Alex Asiiimwe, Gunnar Brobert
75	Net Clinical Benefit of Ticagrelor Compared to Clopidogrel in patients with Acute Coronary Syndrome	Seng Chan You
76	Validation of Machine Learning-based Models for Estimating Low-Density Lipoprotein Cholesterol using OHDSI network	Sora Youn, Suk Jung, Taehoon Ko, Gyuchul Oh, Kwangsoo Kim, Saewon Choi, Yeseul Bae, Haeyoung Lee, Hyungjin Yoon, Kyunghwan Kim
77	Comparing 102 psychotropic drug regimens for diabetes mellitus risk	Anastasiya Nestsiarovich, Berit Kerner, Aurélien J. Mazurie, Daniel C. Cannon, Yiliang Zhu, Stuart J. Nelson, Tudor I. Oprea, Annette S. Crisanti, Mauricio Tohen, Douglas J. Perkins, Christophe G. Lambert

CLINICAL APPLICATIONS

78	Predicting Suicide: Application of the Patient Level Prediction package to identify those most at risk for suicide	Maura Beaton, Thomas Falconer, Xinzhuo (Zoey) Jiang
79	Delivering on-demand evidence via an informatics consult service	Alison Callahan
80	Development and validation of patient-level prediction models for adverse outcomes following total knee arthroplasty	Ross Williams, Jenna Reps, Peter Rijnbeek, Daniel Prieto-Alhambra, Patrick Ryan
81	OHDSI-enabled distributed network analysis for clinical trial feasibility: A collaborative case study to inform a pediatrics randomized trial	Rupa Makadia, Hanieh Razzaghi, Patrick Ryan, Charles Bailey