

2022 Poster Presentations

Odd-numbered posters will be presented during the first collaborator showcase hour - 2:00pm to 3:00pm
Even-numbered posters will be presented during the third collaborator showcase hour - 4:00pm to 5:00pm

OBSERVATIONAL DATA STANDARDS & MANAGEMENT

18	Assessing Measurement Data Quality in the All of Us Research Program	Jason Patterson, Xinzhou Jiang, Hongjue Wang, Nripendra Acharya, Chao Pang, Matthew Spotnitz, Karthik Natarajan
19	Data Quality Monitoring, Transparency and Governance: Enterprise process for data quality stewardship and governance for real-world data	Parsa Mirhaji, Selvin Soby, Erin Henninger, Chandra Nelapatla, Manuel Wahle, Boudewijn Aasman, Eran Bellin
20	Assessing and Benchmarking Data Quality and Diversity in the All of Us	Lina Sulieman, Karthik Natarajan, Kayla Marginean, Robert Carroll, Paul Harris
21	ICD10–SNOMED mapping pitfalls: Post-coordinated expressions and concept sets	Sigfried Gold, Tanner Zhang, Richard L. Zhu, Stephanie Hong, Harold P. Lehmann, Davera Gabriel, Tricia Francis, Lisa Eskenazi, Christopher G. Chute
22	An Evaluation of the Impact of Vocabulary Evolution on Established Phenotypes	Frank DeFalco, Anthony Molinaro, Clair Blacketer
23	Constructing vaccine vocabulary hierarchy using formal concept analysis	Adam Black, Yupeng Li, Denys Kaduk, Licong Cui, Rashmie Abeysinghe, Lixia Yao
24	Extending the OMOP Standard Vocabulary to Include Botanical Natural Products	Sanya B. Taneja, Mary F. Paine, Sandra L. Kane-Gill, Richard D. Boyce
25	Mapping variants of known significance to the OMOP Genomic Vocabulary	Michael Gurley, Asieh Golozar
26	Development of the Medical Imaging Extension for OMOP-CDM	Briana Malik, Kyulee Jeon, Tarik Alkasab, Pedro Mallol, Seng Chan You, Paul Nagy
27	Cohort Diagnostics using Oncology Data Items for Multi-national Cancer Cohort	Seo Jeong Shin, Peter Prinsen, Chiara Attanasio, Gijs Geleijnse, Lingjie Shen, Anna J. van Gestel, Seng Chan You, Han Sang Kim, Sang Joon Shin
28	Protocol for finding supplemental oxygen data in electronic health record (EHR) flowsheets for inclusion in the OMOP ETL	Tanner Zhang, Steven Miller, Michael Cook, Alan Coltri, Zachary Wang, Paul Nagy, Justin Rucci, Galina Lozinski, Matthew Robinson
29	Leveraging Location Data in OMOP to Incorporate Area Deprivation Index	Xinzhuo Jiang, Maura Beaton, Jake Gillberg, Andrew Williams, Karthik Natarajan
30	The manifold presentations of PROMS and questionnaires: patient-reported outcomes in OMOP use cases	Sebastian van Sandijk, Peter Prinsen, Mieke van Hemelrijck, Michael Kallfelz, Dalia Dawoud

OBSERVATIONAL DATA STANDARDS & MANAGEMENT

31	A scalable framework for transforming multiple data sources to the OHDSI Common Data Model	Janos Hajagos
32	Accurate Oncology Regimen Annotation and analysis of real-world oncology treatment patterns across five academic institutions	Travis Zack, Asieh Golozar, Christian Reich, Atul Butte, Eric Collisson, Jeremy Warner, Julian Hong
33	FeederNet (Federated E-Health Big Data for Evidence Renovation Network) platform in Korea	Seongwon Lee, Chungsoo Kim, Junhyuk Chang, Rae Woong Park
34	OMOP's evolution in the data reuse strategy of Hospital Universitario 12 de Octubre	Noelia Garcia, Miguel Pedrera, Blanca Baselga, Paula Rubio, Alberto Tato, Cristina Diaz, Tomas Gonzalez, Bruno Diez, Víctor Quiros, Teresa Garcia, Juan Luis Cruz, Jose Luis Bernal, Pablo Serrano
35	PHAROS, Platform for Harmonizing and Accessing Data in Real-time on Infectious Disease Surveillance Based on OMOP-CDM in Korea	Chungsoo Kim, Jimyung Park, Byungjin Choi, Seongwon Lee, Rae Woong Park
36	Real World Challenges to Using Real World Data: Creating a Multi-Institutional Database in OMOP	Michael N. Cantor, Deepika Sharma
37	Syntactic and Semantic Harmonization of the French National Healthcare Database (SNDS)	Lorien Benda, Regis Lassalle, Cecile Roseau, Stephanie Combes, Cecile Droz-Perroteau, Nicolas Thurin
38	A simplified ETL approach to transforming the MIMIC database into the OMOP Common Data Model in SQLite	Luis Alberto Robles Hernandez, Juan M. Banda
39	OMOP and FHIR Data Comparison	Spencer SooHoo, Andrey Soares, Rohith Mohan, Renier Estiandan, Ryan Hoffman, Shao Chi Huang, Brian Tep, David Kreda, Dan Gottlieb, Aaron Boussina, Paul Kingsbury, Lisa Schilling

OPEN-SOURCE ANALYTICS DEVELOPMENT

40	Lowering the OMOP ETL Barrier for Clinical Registries	Smith Heavner, Trayson Llano, Zachary Wang, Marco Schito, Heather Stone, Pam Dasher, Tresha Russel, Vishakha Kumar, Ben Saeks, Michael Cooke, Rahul Kashyap, Matthew Robinson, Paul Nagy
41	Jackalope: A software tool for meaningful post-coordination for ETL purposes	Eduard Korchmar, Polina Talapova, Maria Kolesnyk, Denys Kaduk
42	Deployment of an OMOP CDM-compatible NLP system for Rapid Development and Dissemination of a Long-COVID Extraction NLP task	Andrew Wen, Liwei Wang, Huan He, Sunyang Fu, Sijia Liu, Hongfang Liu
43	Knowledge Graph to aid Cohort Diagnostics in concept sets developing	Thi Ngoc Mai Nguyen, Christina Raabe, Stephanie von Klot
44	Cohort Definition Validation in Atlas	Charity Hilton, Saul Crumpton, Jon Duke

OPEN-SOURCE ANALYTICS DEVELOPMENT		
45	Transitioning ANANKE to OMOP2OBO for more robust NLP extraction and knowledge graph data representation leveraging the OHDSI vocabulary	Juan M. Banda, Tiffany J. Callahan
46	Development of cancer-related information extraction model from pathology reports using transfer learning	Jimyung Park, Roh Jin, Jianfu Li, Hua Xu, Rae Woong Park
47	Moving OMOP to the cloud with DBT and Snowflake	Roger Carlson, Matthew Phad, Samuel Martin
48	NACHC's open-source implementation of FHIR to OMOP tool suite	John Gresh
49	Serverless CDM in OHDSIonAWS	Ashwini Davison, Animesh Jha Steve Fu, James Wiggins
50	Odysseus ARACHNE Data Network - Federated Study Execution	Gregory Klebanov, Alexey Manoylenko, Sebastiaan van Sandijk
51	DPM360: New Additions to Advanced Disease Progression Modeling	Akira Koseki, Italo Buleje, Prithwish Chakraborty, Elif Eyigoz, Mohamed Ghalwash, Takashi Itoh, Toshiya Iwamori, Michharu Kudo, Pablo Meyer, Kenney Ng, Parthasarathy Suryanarayanan, Hiroki Yanagisawa, Jianying Hu
52	A survey of OMOP CDM-compatible visualization tools & what the community may do to support tool development and adoption	Natthawut Adulyanukosol, David Gotz
53	Developing objective metrics to diagnose PatientLevelPrediction model designs	Jenna M. Reps and Yauheniya Cherkas
54	Introduction of a standardized framework to develop deep-learning models using the OMOP-CDM	Chungsoo Kim, Jenna Reps, Henrik John, Seng Chan You, Egill Fridgeirsson
55	HERMES: A Health Resources Econometric Analysis Tool	Kyungseon Choi, Sang Jun Park, Sola Han, Siin Kim, Hae Sun Suh
56	PDA-OTA: Privacy-preserving Distributed Algorithms Over the Air, an OHDSI journey	Yong Chen, Jiayi Tong, Chongliang Luo, Lu Li, Yiwen Lu, Hai-Shuo Shu
METHODOLOGICAL RESEARCH		
57	Representing and Utilizing Clinical Textual Data for Real World Studies: An OHDSI Approach	Vipina Keloth, Juan Banda, Michael Gurley, Paul Heider, Georgina Kennedy, Hongfang Liu, Feifan Liu, Timothy Miller, Karthik Natarajan, Olga Patterson, Yifan Peng, Ruth M. Reeves, Masoud Rouhizadeh, Jianlin Shi, Xiaoyan Wang, Yanshan Wang, Wei-Qi Wei, Andrew Williams, Rui Zhang, Rimma Belenkaya, Christian Reich, Clair Blacketer, Patrick Ryan, George Hripcsak, Noemie Elhadad, Hua Xu
58	Topic Modeling of Clinical Notes for Patients with Infectious Disease using Latent Dirichlet Allocation after Deidentification of Protected Health Information	Junhyuk Chang, Jimyung Park, Chungsoo Kim, Rae Woong Park

METHODOLOGICAL RESEARCH		
59	The Seasonality Score: A Quantitative Complement to Qualitative Seasonality Assessment	Anthony Molinaro, Frank DeFalco
60	Towards Similarity Search in Phenotype Libraries	Ramya Tekumalla, Raj Manickam, Yen Low
61	Examining Differences in Baseline Characteristics of Broad and Narrow Phenotype Algorithms	Jill Hardin, Pranav Bhimani, Raechel Davis, Joel Swerdel
62	Comparison of Biopsy and Diagnosis Code Based Breast Cancer Phenotypes	Matthew Spotnitz, Thomas Falconer, Maura Beaton, Karthik Natarajan
63	Comparing the impact of clean windows across cohorts and databases	Rupa Makadia, Kevin Haynes, Patrick Ryan
64	Adaptation and Validation of the Charlson Comorbidity Index in Administrative Claims Data Using the SNOMED CT Standardized Vocabulary	Stephen Fortin, Jenna Reps, Patrick Ryan
65	Using data augmentation for NER-RE joint learning tasks for clinical history information extraction	Xiaodong Zhu, Miao Chen, Daniel Slaughter, Elizabeth Lyon, Pallavi Misra, Michael Biorn
66	Comparing broad and narrow phenotype algorithms: differences in performance characteristics and immortal time incurred	Joel N. Swerdel, Mitchell M. Conover
67	Examining differential measurement error in phenotype algorithms due to age, sex, and disease prevalence differences using PheValuator	Joel N. Swerdel, Jenna M. Reps
68	Development of an automated comparator ranking algorithm for the REWARD initiative	Justin Bohn, James P. Gilbert, Christopher Knoll, David M. Kern
69	Evaluating causal inference methods for survival data in large-scale observational studies	Shiyao Xu, Akihiko Nishimura, Elizabeth Ogburn
70	ODAP-B: A One-shot Distributed Algorithm for Modified Poisson Regression for Prospective Studies with Binary Data	Lu Li, Jiayi Tong, Suchitra Rao, Mackenzie Edmondson, Vitaly Lorman, Hanieh Razzaghi, Haitao Chu, Christopher B. Forrest, Yong Chen
71	Scalable Bayesian sparse regression for OHDSI studies: Prior-preconditioned conjugate gradient sampler and `bayesbridge(r)` package	Akihiko Nishimura, Marc A. Suchard
72	dGEM: Decentralized algorithm for Generalized mixed Effect Models with the Application in Hospital Profiling	Jiayi Tong, Chongliang Luo, Jiang Bian, Milou Brand, Zhaoyi Chen, Scott DuVall, Thomas Falconer, Mengchun Gong, Kevin He, Chung-Soo Kim, Miguel Angel Mayer, Bhavnisha Patel, Di Wang, Hua Xu, Guanjin Yin, Yujia Zhou, David A. Asch, Yong Chen
73	Adjusting for Healthcare Utilization Improves the Performance of Self-Controlled Case Series Studies using Electronic Health Records	Undina Gisladdottir, Nicholas Tatonetti
74	Explaining patient-level prediction models using permutation feature importance and SHAP	Aniek F. Markus, Egill A. Fridgeirsson, Jan A. Kors, Katia M.C. Verhamme, Peter R. Rijnbeek
75	Federated Patient-Level Prediction	Byungjin Choi, Dong Yun Lee, Chungsoo Kim, Jimyung Park, Rae Woong Park

METHODOLOGICAL RESEARCH		
76	Impact of random oversampling and random undersampling on the performance of predictions models developed using observational health data	Cynthia Yang, Egill A. Fridgeirsson, Jan A. Kors, Jenna M. Repts, Peter R. Rijnbeek
77	PULSNAR: Positive Unlabeled Learning Selected Not At Random -- towards imputing undocumented conditions in EHRs and estimating their incidence	Praveen Kumar, Sharon E. Davis, Michael E. Matheny, Gerardo Villarreal, Yiliang Zhu, Mauricio Tohen, Douglas J. Perkins, Christophe G. Lambert
CLINICAL APPLICATIONS		
78	How Health Systems Can Create Value by Adopting the OMOP CDM	John Methot, Melanie Philofsky, Brian Bush, Edward Burns, Daniel Smith, Paul Nagy
79	Building organizational capacity for observational research within a health system	Mary Grace Bowring, Michael Cook, Star Lui, Khyzer Aziz, Aki Nishimura, Paul Nagy
80	A Pilot Characterization Study Assessing Health Equity in Mental Healthcare Delivery within the State of Georgia	Jacob Zelko, Malina Hy, Varshini Chinta, Emily Liau, Morgan Knowlton, Jon Duke
81	Federated learning for quantifying racial disparities in kidney graft failure rates using US registry data from 29,468 patients across 149 transplant centers	Jiayi Tong, Yishan Shen, Alice Xu, Chongliang Luo, Mackenzie Edmondson, Ruowang Li, Di Wang, Kevin He, David A. Asch, Yong Chen
82	Cancer Phenotyping Pitfalls in EHR: The case of Non-Small Cell Lung Cancer	Asieh Golozar, Martin Lavallee, Adam Black, Darya Kosareva, Michael Gurley, Christian Reich
83	Development of Phenotype Algorithms and Characterizations of Primary Open-Angle Glaucoma Using Real-World Data	Nathan Hall, Rupa Makadia
84	It Takes a Village: Community-Driven Phenotyping to Address a Public Health Crisis	Kristin Kostka, Evan Minty, Antonella Delmestri, Barrack Omondi, Marti Catala, Elena Roel, Edward Burn, Daniel Prieto-Alhambra, Annika M.Jödicke
85	Phenotyping of a Large Primary Spinal Cord Tumor Cohort Identified through an Observational Healthcare Database	Hart P. Fogel, Matthew Spotnitz, Gillian O'Connell, Claire A. Donnelley, Dominique Higgins, Peter C. Noback, Paul McCormick, Patrick Reid
86	Identification of patients with drug resistant epilepsy in electronic medical record data using the Observational Medical Outcomes Partnership Common Data Model	Matthew Spotnitz, Victor G. Castano, Genna J. Waldman, Evan F. Joiner, Hyunmi Choi, Anna Ostropolets, Karthik Natarajan, Guy M. McKhann, Ruth Ottman, Al I. Neugut, George Hripcsak, Brett E. Youngerman
87	Characterization of first-line treatment for Breast Cancer and Multiple Myeloma using Electronic Health Record and Claims Databases	Maura Beaton, Matthew Spotnitz, Thomas Falconer, Melissa Accordino, Divaya Bhutani, Alison Callahan, Nigam Shah, Jake Gillberg, Andrew Williams, Karthik Natarajan

CLINICAL APPLICATIONS

88	Developing a frailty concept in the OMOP CDM among sexual minority older adults (age 50+) in the All of Us database	Brianne Olivieri-Mui, Chelsea Wong, Michael Wilczek, Jordon Bosse
89	Analyzing the Use of Beers Criteria Guidelines through ATLAS Operationalization	Richard Boyce, Steven Albert, Jacob Lombardi, Krishi Akenapalli, Rohit Marwah
90	COVID-19 Vaccine Administration Pathways in US Administrative Claims	Kevin Haynes, Christopher Knoll, Rupa Makadia, Patrick Ryan
91	Describing treatment with antidiabetics in patients with T2D and moderate to severe CKD across a network of OMOP databases	Martin Lavallee, David Vizcaya, Ron Herrera, Niki Oberprieler, Glen James, Darya Kosareva, and Asieh Golozar
92	Real world prescribing patterns of dupilumab for atopic dermatitis	Torunn Sivesind, Grace Bosma, Camille Hochheimer, Lisa Schilling, Robert Dellavalle
93	Incidence analysis and prediction of potentially harmful drugs among asthma patients	Victor Pera, Peter Rijnbeek, Katia Verhamme
94	Development of a Framework for Cancer Profiling and Visualization	Soobeen Seol, Jimyung Park, Chungsoo Kim, Rae Woong Park
95	Characterization of Health by OHDSI Asia-Pacific chapter to identify Temporal Effect of the Pandemic for Cardiovascular Diseases (CHAPTER-CVDs)	Seng Chan You, Subin Kim, Yongjae Lee, Jing Li, Can Yin, Mui Van Zandt
96	Building Korean NER models for a manually annotated corpus from clinical notes using cross-lingual transfer learning	Jianfu Li, Jimyung Park, Xinyue Hu, Jingqi Wang, Rae Woong Park, Hua Xu
97	A Machine Learning based Enrollment Rate Forecasting System	Yiqiao Yin
98	Analysis of Influencing Factors of Mortality in COVID-19 Patients: A Retrospective Cohort Study	Do Duy Khang, Phung-Anh Nguyen, Chang-I Chen, Chung-Chien Huang, Carlos Shu-Kei Lam, Noi Yar, Christine Y. Lu, Chi-Tsun Cheng, Jason C. Hsu
99	Development of Lung Cancer Survival Prediction Models Based on Real-world Data and Machine Learning	Jason C. Hsu, Phung-Anh Nguyen, Phan Thanh Phuc, Tsai-Chih Lo, Min-Huei Hsu, Chi-Tsun Cheng, Tzu-Hao Chang, Cheng-Yu Chen
100	Development of Machine Learning models for Cancer Survival among Lung cancer patients with Tyrosine Kinase Inhibitors (TKIs) treatment	Alex PA. Nguyen, Phuc T. Nguyen, Min-Huei Hsu, Jason C. Hsu
101	Machine Learning to Predict the Ischemic Stroke among Type 2 Diabetes Mellitus Patients using Taipei Medical University Clinical Research Database	Phan Thanh Phuc, Phung Anh Nguyen, Jason C. Hsu
102	Mortality prediction after PCI/CABG using ECG and comorbidities	Stijn Dupulthys, Pieter-Jan Lammertyn, David McAuliffe, Louise Berteloot, Nathalie Mertens, Kim Denturck, Peter De Jaeger, Karl Dujardin
103	One-year Post-Stroke Prediction on Cognitive Impairment: A Machine Learning Approach	Muhammad Solihuddin Muhtar, Faizul Hasan, Alex P.A. Nguyen, Jason C. Hsu, Hsiao-Yean Chiu

CLINICAL APPLICATIONS

104	Prediction of insulin resistance in depression is associated with long-term clinical outcomes	Dong Yun Lee, Chungsoo Kim, Jimyung Park, Rae Woong Park
105	Delirium prediction in patients with trauma and comparison of predictors across trauma center and non-trauma center	Su Jin Gan, Dong Yun Lee, Jimyung Park, Rae Woong Park
106	Clinical Sequelae of COVID-19 & Associated Healthcare Utilization: A Study Protocol	Ivan Chun Hang Lam, Yi Chai, Celine Sze Ling Chui, Eric Yuk Fai Wan, Xue Li, Carlos King Ho Wong, Hao Luo, Kenneth Keng Cheung Man, Xiaoyu Lin, Can Yin, Jing Li, Mui Van Zandt, Christian Reich, Katherine Duszynski, Nicole Pratt, Ian Chi Kei Wong
107	Effects of the COVID-19 pandemic on mental health: A multinational network study	Yi Chai, Kenneth K.C. Man, Hao Luo, Carmen Olga Torre, Xiaoyu Lin, Can Yin, Ivan C.H. Lam, Stephen Fortin, David M. Kern, Dong Yun Lee, Rae Woong Park, Jae-Won Jang, Jing Li, Christian Reich, Wallis C.Y. Lau, Ian C.K. Wong
108	Healthcare utilization following SARS-CoV-2 infection in children and adolescents with chronic conditions: An EHR-based Cohort Study from the RECOVER Program	Nathan M Pajor, Vitaly Lorman, Hanieh Razzaghi, Abigail Case, Priya Prahalad, Seuli Bose Brill, Qiong Wu, Yong Chen, Jason Block, Payal B Patel, Suchitra Rao, Asuncion Mejias, Deepika Thacker, Ravi Jhaveri, Grace M. Lee
109	Preliminary Analysis of Self-Reported COVID-19 Vaccination Side Effects on Twitter	Nishanth Pavinkurve, Maura Beaton, Tilly Seesillapachi, Xinzhuo Jiang, Hua Xu, Karthik Natarajan
111	Framework for Assessing the Reproducibility of Observational Comparative Effectiveness Research: DOACs and Ischemic or Hemorrhagic Events Case Study	Asieh Golozar, Anna Ostropelets, Martin LaVallee, Adam Black, Ines Neves, Christian Reich