

OMOP Community Demonstrations – 2013 Symposium

1. Patrick Hosokawa, Biostatistician, University of Colorado – Denver
Reusable OMOP- SAFTINet Interface Transformation Adaptor (ROSITA) System
The demo will run through a sample setup and test run of ROSITA. We will cover the configuration files (Profile and Publishing rules, Vocabulary), the data sources (Data Files, Schemas, and ETL rules) and the steps necessary to transform any arbitrary schema into OMOP standard. A small set of data will be used to demonstrate the run in 6-7 minutes.
2. Stephanie Reisinger, Senior Director, Database Analytics Automation UBC: An Express Scripts Company
A Parameter Driven Utility to Automate the Creation of Patient Level SAS Analytic Files, Utilizing Observational Data in the OMOP CDM format
This live demo will illustrate a utility for the automated generation of a patient level SAS analytic file, from data in the OMOP CDM format. The utility collects parameters from the user related to both the selection of patients, as well as the event level variables for each patient that will be included in the output analytic file. A variable is the combination of a specific event (drug exposure, diagnosis, procedure, visit, etc.) plus how that event will be measured. Examples of measures include: occurrence of event (y/n), number of events, and date of event among others. The output includes a delimited text file of patient level data, and a SAS definition file enabling seamless import into SAS for further analysis.
3. Mohammad Al-Ansari, PhD, Group Manager, Software Development, Oracle
Empirica Healthcare and OMOP Data
This live demo will start with a walk through the process of cohort selection using a quick data browsing utility. Then we will demonstrate how descriptive statistics like drug utilization, prevalence of conditions and incidence rates can be computed for selected cohorts. Finally, we will demonstrate the result of a cohort study comparing exposure to two different treatments. Interactive graphical visualization tools that give insight into findings will also be demonstrated throughout the demo.
4. Ed Acker, Life Sciences Industry Consultant, Teradata Corporation
Rapid Discovery Analytics Using OMOP, Spotfire, FuzzyLogix and Teradata
Spotfire is used to select health outcomes interests/treatment cohorts from the OMOP common data model stored on Teradata. In this demo, selected cohort data is submitted to Fuzzylogix executing in the Teradata database to perform logistic regression, regression scoring, matchit and poisson regression.
5. Mark Weiner, MD, Senior Director, R&D Informatics, AstraZeneca PLC
Online Query Interface
This live demo will show the functioning of a home-grown, rudimentary web-based interface for specifying cohorts based on user-specified diagnostic criteria and then analyzing therapeutic and laboratory data associated with these populations. The underlying query templates implemented by the interface will run against any data set formatted to the OMOP common data model. The value of the mapping process to the OMOP standard will be demonstrated through real-time, simultaneous comparisons of user-specified cohorts drawn from OMOP versions of MarketScan databases - Medicare Supplemental, Multi-State Medicaid, and Commercial Claims and Encounters.
6. Frank J DeFalco, Associate Director, Epidemiology Analytics, Janssen Research & Development;
Navigating the OMOP CDM Vocabulary with Concept Explorer
The OMOP CDM Vocabulary is a valuable resource when trying to translate concepts across multiple ontologies however leveraging it requires knowledge of databases and query languages. This demo shows Concept Explorer which provides a simple, web based interface to searching and navigating the CDM Vocabulary.