Data Characterization

Frank J DeFalco

Senior Director, Observational Health Data Analytics

Johnson & Johnson

Data Standardization

The OMOP CDM is a system of tables, vocabularies, and conventions that allow observational health data to be standardized. It is this standard approach that facilitates rapid innovation in the areas of open-source development, methods research, and evidence generation.

https://ohdsi.github.io/CommonDataModel

Data Characterization

- Automated Characterization of Health Information at Largescale Longitudinal Evidence Systems (ACHILLES)
- An open-source R package from the Observational Health Data Sciences & Informatics (OHDSI) community.
- ACHILLES executes over 250 descriptive analyses on an OMOP CDM database including typical analyses to summarize drugs, conditions, and demographics

https://github.com/ohdsi/achilles

ACHILLES

- Latest Release
 - v1.7.2 / May 2023
 - Met standards of HADES guidelines
 - Published to CRAN
- Ongoing Work
 - Addressing performance issues across platforms
 - Adding new characterizations as CDM evolves
 - Planning for a 2.0 release with refactored performance logging and incremental modes

ARES

ARES

A Research Exploration System that facilitates exploration of patient level, observational data research accompanied by source data characterization and quality assessment ensuring that results are presented with proper context.

SEXPLORE DATA SOURCES

ARES Architecture

- AresIndexer
 - R Package to summarize and index results from ACHILLES to be presented in the ARES interface
- ARES
 - Web based interface to review ACHILLES characterization and Data Quality Dashboard results

ARES Demo

ARES

- Ongoing development
 - UI Refactor
 - DuckDb Support
 - Additional reporting
 - WebAPI Integration

Join the Journey

https://github.com/ohdsi/ares

https://github.com/ohdsi/achilles