

Cohort Characterization with Fully-Managed Service

Fully-Managed Service delivering multi-database characterization

Population identification and insight generation

IQVIA offers standardized and comprehensive analysis for real-world observational studies via a federated data network model. That allows analyses to be planned and programmed centrally and then executed remotely without patient-level data leaving the data partner, providing time and cost savings on programming and analysis. Real-world observational studies can fill the evidence gaps between randomized controlled trials.

What is cohort characterization?

Cohort characterization describes the characteristics of a population of interest (cohort). Cohort characterization is an excellent great approach to understanding variations in populations based on their characteristics. This approach uses descriptive statistics and helps generate hypotheses about health and disease.

Characterization features

Cohort characterization offers a user-friendly and rapid solution by characterizing demographics, drugs, conditions, measurements, visit types, or procedures for a specific cohort. IQVIA utilizes the ATLAS tool to leverage pre-built characterization features and the functionality to build custom characterizations. The tool offers the possibility to directly compare two or more cohorts and includes metrics, such as standardized mean difference (SMD), to statistically compare cohorts. The characterization design can be exported and shared with partners, enabling it to be run on commercially unavailable global data.

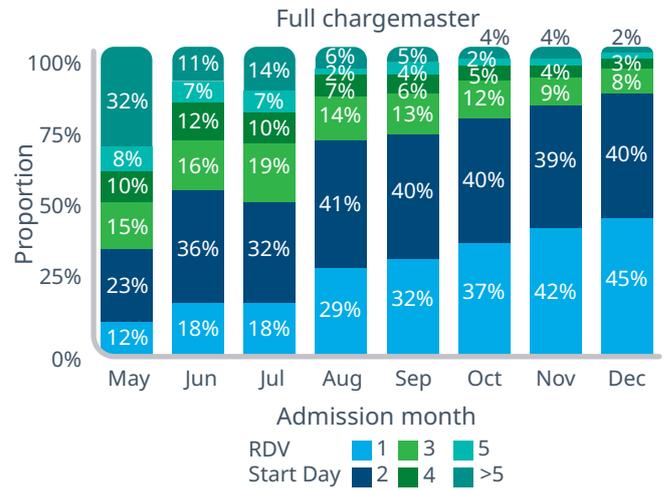
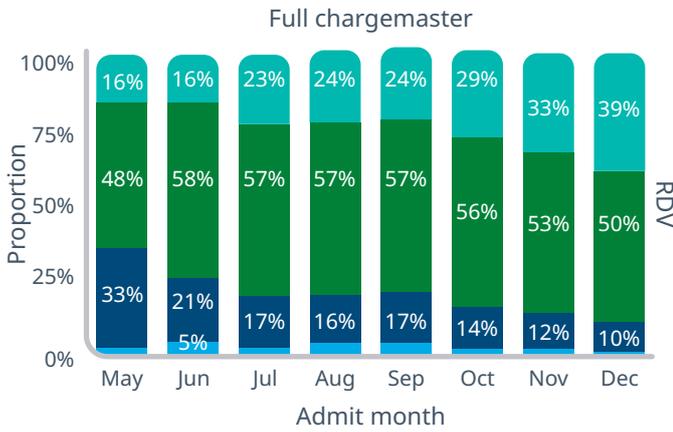
Generating real-world evidence (RWE) at scale can present many challenges:

- “How can I explore, model, and consume insights across RWD?”
- “How can I learn about possible health outcomes for specific patient populations across multiple countries?”
- “How can I run rapid, sophisticated patient cohort building to generate global insights for further analysis?”
- “Is there a faster and more-cost effective way to describe a population of interest?”

IQVIA solves these problems by:

- One design sufficient for execution across multiple databases
- Rapid access to data
- One cohort characterization can include multiple characteristics and cohorts
- Standardized methods with the use of pre-built features

The OMOP Common Data Model (CDM) harmonizes disparate data formats and content from different countries, healthcare settings and data capture



IQVIA's Fully-Managed Service

With IQVIA's Fully-Managed Service, OMOP standardization reduces the cost and time needed to customize individual analytics packages for each database in a multi-database study. Moreover, one analytical package is developed per multi-database

study and is then deployed in as many OMOP-formatted databases as needed for the study. This allows for greater reproducibility, efficiency, and reliability to answering real-world questions across a global network of standardized data.

Characterization, treatment and prediction of heavy menstrual bleeding (HMB)

R&D

Discovery Clinical Safety Reg.

France LPD Germany DA OMOP network OMOP network

Problem statement
Heavy menstrual bleeding (HMB) has a considerable impact on women's health and quality of life. **Levonorgestrel-based Intrauterine Devices (LNG-IUDs)** are an **effective therapeutic option for HMB** and recommended by guidelines. However, contemporary **real-world evidence** on the treatment pathways, including LNG-IUDs, **is missing**.

Solution — patient level characterization
 An observational, retrospective cohort study was run across a federated network of **IQVIA data sources LPD France and DA Germany** as well as **three of client's OMOP data sources**.

Outcome

- Incidence and proportion of HMB were low across all data sources suggesting **HMB is frequently not diagnosed or treated timely**.
- First line of treatment** in the US is hysterectomy whereas in Europe first line is noninvasive.
- Future network studies will provide more insights** on the use of IUD and Mirena as a treatment for HMB.

