

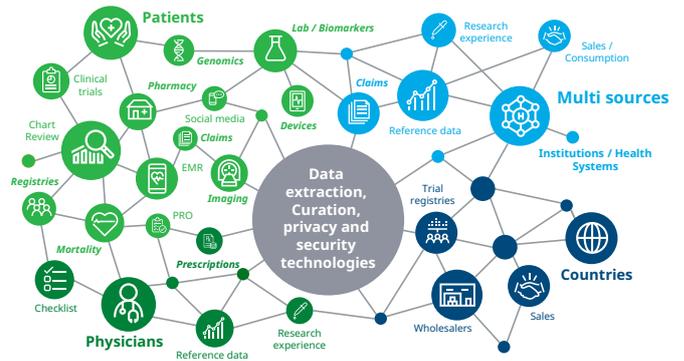
IQVIA Productized Analytics Services

The real-world solution to faster, more reliable multi-database studies

The real-world data ecosystem

Real-world data is used to help demonstrate how and when patients can be treated. However, the global healthcare data ecosystem is vast and complex.

The disparate nature of database types and how the data is collected, makes virtually all patient data assets unique and one-offs. Additionally, privacy and security concerns regarding data access often create another layer of complexity to performing research on a global scale.



IS IT POSSIBLE TO CONDUCT GLOBAL RESEARCH? HOW DO I ACCESS DATA?

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

- I don't have access to any data
- Can I access data sources I do not own?
- What data sources are out there?
- How do I access data that is commercially unavailable?
- How can I conduct research across multiple data assets and multiple data types?
- Is there a faster and more-cost effective way to generate evidence at scale?

YOUR SOLUTION TO GLOBAL RESEARCH AND DATA ACCESS

IQVIA's Productized Analytics Services delivers globally scalable studies using our federated research network model with data partners of varying data types (e.g., EHR, claims, etc.) from around the world. This service provides you with the design and execution of feasibility studies, cohort characterizations, treatment patterns and outcomes-based research **faster and more cost-effective** than traditional RWE methods.

Examples of productized analytics packages and average times for generating analytics

Feasibility	Patient-Level characteristics	Advanced patient-level analysis	Comparative effectiveness & Risk modelling
Total number of patients who had at least one condition occurrence	Cohort characterization of anti-obesity medications among obese patients	Treatment pathways for stroke prevention in Atrial Fibrillation	Patient level prediction of patients with multiple chronic conditions
1 day	2 week	4-6 weeks	8-10 weeks

HOW DOES IQVIA SPEED UP THE GENERATION OF RELIABLE EVIDENCE COMPARED TO TRADITIONAL METHODS?

Within IQVIA's federated research network, databases are transformed into the OMOP¹ common data model (CDM) format including mappings to common terminologies, vocabularies, and coding schemes.

This standardization allows for analytics packages of queries and studies that will be executed across multiple databases to only be developed once, since it can then be deployed in any database formatted in the OMOP CDM. Analyses become **reproducible, saving on time and resources** to generate **reliable evidence at scale**.

The OMOP federated research network model also helps to reduce many administrative barriers to multi-database research by allowing analytics packages to be executed inside each data partner's institution:

- Eliminating the need to access patient-level data
- Removing concerns around data governance, privacy laws and firewalls



Example of IQVIA productized analytics cohort characterization study

A multi-country, retrospective cohort study of the use of anti-obesity medications or bariatric surgery among obese patients



Study detail

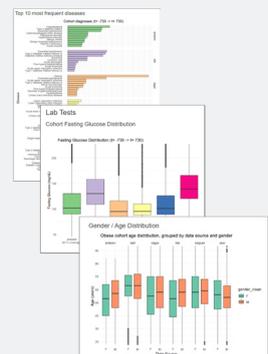
- Explore novel ways of RWE generation to overcome common impediments of accessing multiple data assets
- The analysis was executed across six (6) data sets mapped to the OMOP common data model format across six (6) different countries

Results*

- **Reproducible analysis** shared with external OMOP partners to widen the global reach, allowing a multi-country approach

Solution

- **Persistence and adherence** analysis of **obesity** medications
- Cohorts included a number of analytical outputs, including:
 - >> Demographic distribution e.g., age, gender
 - >> Most frequent ingredient exposures
 - >> Exposures to obesity medications
 - >> Clinical characterizations e.g.,
 - BMI
 - Smoking status
 - Blood pressure
 - Height/weight
 - Waist circumference
 - >> Comorbidities
 - >> Lab tests
 - >> Procedures



* IQVIA Productized Analytics Services: Average turnaround time for C-I: Cohort Characterizations is 1-3 months

¹ OMOP (Observational Medical Outcomes Partnership) was a public partnership between FDA and industry, developing the OMOP CDM and Standardized Vocabularies; now maintained by OHDSI, a public initiative independent of IQVIA