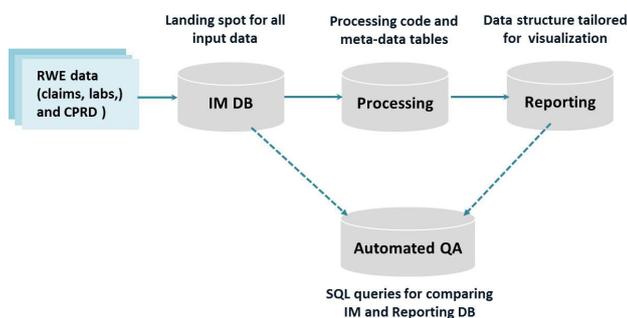


# Case Study: Quality Assurance for Patient-Centric RWE Analytics Solution

## Client Requirements

Client is a leading provider of SaaS-based data management and analytics solutions and services to life sciences organizations, helping them to deliver personalized medicine. Client's solutions are targeted towards various functional groups including speciality, rare disease and real world evidence (RWE).

Client needed to support its implementation team for quality assurance of its existing reports/ data for its various products. Given its strong expertise in healthcare QA and testing, CitiusTech was selected to verify the data quality and ensure expected results derived from RWE-based studies.



## CitiusTech Solution

### Requirement Analysis

CitiusTech put together a cross-functional team of QA and testing, BI, data analytics and subject matter experts to do a detailed analysis of client's data management and analytics platform and QA process. Based on the assessment, CitiusTech developed a test plan and a QA strategy for the platform that included manual as well as automated execution of test scripts.

## Solution Design

- Development of SQL Queries
  - Developed complex and robust SQL queries for testing various patient-centric KPIs, metrics, tables or charts that are used to generate reports and insights aligned for a specific business use
- Automation of Database Testing
  - Fed SQL queries as a dataset to automation framework
  - Executed queries on database refresh for comparison of intermediate and reporting tables
- ETL Testing
  - Verified data transformation from OMOP CDM4 to ETL tables
  - Verified data transformation from ETL tables to intermediate tables
- Documentation of test defects and resolution
- Preparation of final test summary results

## Development and Deployment

CitiusTech led the end-to-end QA setup that comprised database testing as well as ETL testing for the analytics platform.

The team developed SQL queries/ stored procedures which could be reused while implementing an automated testing solution.

CitiusTech provided a solution for ETL testing by verifying the data transformation that was carried out in various phases.

## Value Delivered

By partnering with CitiusTech, the client was able to:

- Leverage CitiusTech's expertise in healthcare quality assurance to deliver high quality product to its key stakeholders
- Automate database QA testing for data analytics platform
- Reduce time-to-market for its solutions

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## About CitiusTech

CitiusTech is a specialist provider of healthcare technology services and solutions to medical technology companies, providers, payers and life sciences organizations, with over 2,700 professionals worldwide. CitiusTech's services and solutions include healthcare software development, healthcare interoperability, regulatory compliance, BI/analytics, consumer engagement, care coordination and population health management. CitiusTech helps customers accelerate innovation in healthcare through a number of solutions and accelerators for clinical quality reporting, healthcare big data, cloud computing, mobile health and predictive analytics. With cutting-edge technology expertise, world-class service quality and a global resource base, CitiusTech consistently delivers best-in-class solutions and an unmatched cost advantage to healthcare clients worldwide.

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