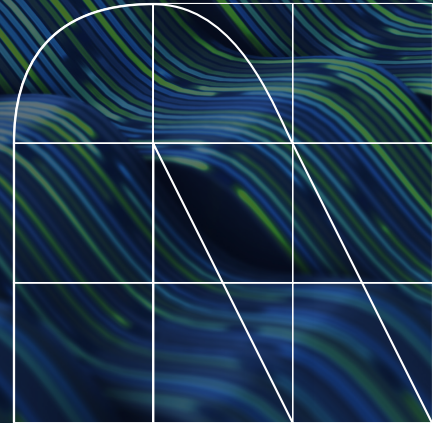


# Harness the power of real-world evidence to optimize outcomes

## Evidence Platform for Life Sciences



### Benefits:

- Develop product value positioning and understand existing pricing models
- Identify potential market issues and potential acquisitions
- Understand time-to-event comparisons, survival extrapolations and healthcare resources usage
- Develop more targeted marketing collateral and strategize new product launches
- Improve payer financial savings
- Achieve better cost-utility and cost-benefit ratios
- Generate scientific publications

In response to the shifting landscape within the healthcare and life sciences industries, where the focus is increasingly centered on outcomes, the utilization of real-world evidence (RWE) has emerged as a critical necessity. A convergence of factors, including heightened competition, mounting cost pressures, evolving expectations from consumers and industry partners, and the growing emphasis on real-world data by regulatory bodies, is driving this transformation. Consequently, life sciences companies are incorporating RWE into their data and analytics initiatives.

RWE in life sciences involves the meticulous analysis of real-world data (RWD) — patient clinical data obtained from sources such as healthcare organizations' extensive databases. In today's world, an abundance of data is generated both by patients themselves and for the benefit of patients. Harnessing the potential of RWD and analytics has the power to expedite drug development and provide invaluable insights throughout the entire pharmaceutical value chain.

### Unlock valuable life sciences data to maximize investment and outcomes

The best way to maximize the value of RWE is to successfully integrate disparate data types. Managing these massive volumes of data and making them accessible for use is a big challenge. That's why we created the NTT DATA Evidence Platform for Life Sciences. The advanced data capabilities of the platform — powered by leading cloud provider Snowflake — make it easier to integrate and access data from multiple sources. The platform offers quick access to all types of data, including laboratory results, electronic health records (EHR), clinic trials and claims, so you can process data for RWE.

Advanced RWE analytics uses predictive and probabilistic causal models, unsupervised algorithms and machine learning to extract deeper insights from these data sets. By combining the power of cloud and advanced RWE analytics, we can help pharmaceutical companies drive technological innovations that can transform the industry and benefit patients.

## How RWE helps life sciences companies gain the competitive edge

Real-world experience data, such as safety and effectiveness data from a patient's daily life, complements clinical trials data by providing insights that trials alone can't. This perspective can reveal unexpected findings that might not be apparent within the confines of rigid clinical trial eligibility criteria.

Given the explosion of patient data from sources including electronic health records, disease and product registries, claims and billing data, RWD from "wearables" and other health monitoring devices, and commercial and marketing data, life sciences companies have a significant appetite to invest further in data acquisition.

As this investment in data continues to grow, it's imperative for organizations to develop reusable models and agile frameworks for effective data management. Concurrently, substantial investments are flowing into advanced analytics, which promises to fortify the integration of data and the extraction of insightful findings.

Even with all the emphasis and investment in RWD data and analytics, however, life sciences companies still struggle and need assistance with:

- Selecting the appropriate RWD data set for their therapeutic area and analytical needs
- Developing the appropriate plan to generate meaningful insights
- Understanding the necessary sample sizes for outcome significance
- Identifying studies for asking meaningful scientific questions about unmet clinical needs that are practical and possibly answerable based on the RWD on hand

## Harness the power of RWE with NTT DATA

The NTT DATA Evidence Platform for Life Sciences harnesses the power of RWE to deliver outcomes that keep our clients a step ahead in a digitally dynamic world. By concurrently exploring the dimensions of people, process and technology, we help organizations thrive in an extremely competitive industry.



### Health Data Bank

#### Data types

Patient, medical claim, pharmacy claim, health check, lab, coverage/policy, provider, third-party data sources (for example, hospital compare, transparency data — hospital pricing)

#### Community contextual data

500 cities — BMI status, physical activity, chronic health conditions, alcohol consumption, tobacco use, routine checkup within last year, dental visits, health screening (for example, cholesterol, colorectal cancer and mammography), Behavioral Risk Factor Surveillance System, health outcome estimates, risk factor estimates



### Snowflake Health Cloud Data Bank

#### Information access

Variety of methods to provide access in any zone

#### Self-serve and service-based data and analytics cloud

Search, find, provision, prepare data without IT involvement; leverage cloud-based technology to provide data services

#### Secure data sharing

Consumption, exchange of data with internal and external systems and partners

#### AI-ML models and BI systems

Predictive models, reporting and analytics to derive value



### Analytical Model

#### Querying the data

Define filtering criteria, cohort builder, can help narrow down most appropriate database and patient sub-group for a given protocol

#### Data visualization

Basket of graph types to visualize covariates; treatment pathways, Sankey diagram, node metrics analyzer

#### Data analysis modules

Methodologically rigorous outcome analysis/ comparative effectiveness; outcomes analyses customized by data type, including propensity score matching



The Evidence Platform allows you to effectively utilize RWD to generate evidence and insights into the economic and clinical outcomes of their products through:

- Cost-effectiveness models
- RWD mapping and assessment
- RWD analyses on safety, cost of illness and effectiveness
- Health economics and outcomes research (HEOR) analysis and modelling

By harnessing our advanced platform and solutions, you can generate and execute strategies using robust evidence-based insights throughout the commercialization journey. We've successfully leveraged real-world data and performed advanced data analytics on this data to help create and communicate this value.

The platform provides the foundation for a data-driven future with the flexibility needed to adapt to the globally changing demands of healthcare.

It helps drug manufacturers and life sciences companies realize such primary business objectives as speed to market, market share, revenue maximization, cost savings, market access, and generation of evidence on safety and efficacy to support label expansion — so they can sharpen their focus, upgrade their RWE capabilities and improve market access for drug coverage.

For pharmaceutical reps, leveraging claims and commercial data (with advanced analytics overlaid on top), is a key factor. But we also understand that technology is only part of the equation in providing better experiences for health and wellbeing. Ultimately, it's the people that make the difference.

In the new paradigm of adapting selling to customers, it's more important to focus on their individual needs and preferences first.

For example, physicians are often very mindful of what insurance their patients may have, including any prescription coverage, before prescribing a medication. Simple use cases like this can help many businesses effectively incorporate their customers into their sales strategy. Think of it as identifying unique solutions for individual patients.

By using the Evidence Platform for Life Sciences, you can transform the overall data analytics experience and accelerate your digital capabilities. You can optimize end-to-end workflows and leverage technologies to inspire innovative customer interactions while promoting enhanced collaboration, access and utilization of data. The ultimate result: improved clinician and patient experiences with better outcomes at a lower cost.

Contact us to learn how we can help you harness your RWE data to maximize outcomes and lower costs.

[Visit us.nttdata.com](https://www.nttdata.com) to learn more.

NTT DATA is a \$30 billion trusted global innovator of IT and business services. We help clients transform through business and technology consulting, industry and digital solutions, applications development and management, managed edge-to-cloud infrastructure services, BPO, systems integration and global data centers. We are committed to our clients' long-term success and combine global reach with local client service in over 80 countries.

