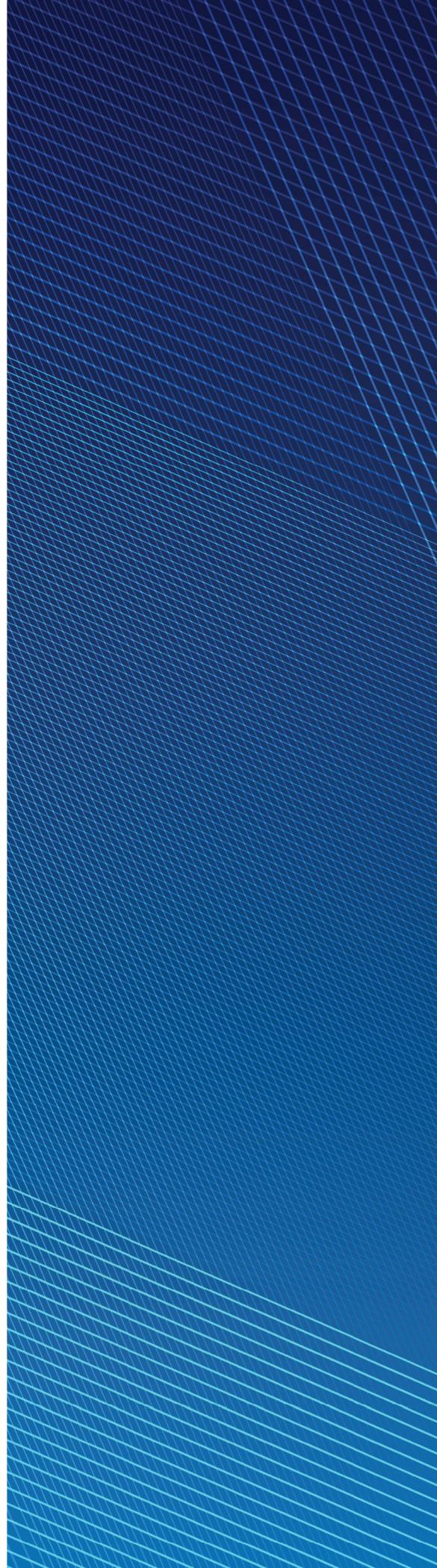


OPTUM INC. RECEIVES THE 2023 COMPANY OF THE YEAR AWARD

*Identified as best in class in the North American
real-world evidence information technology solutions
for healthcare industry*



Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each award category before determining the final award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. Optum, Inc. excels in many of the criteria in the real-world evidence information technology solutions for healthcare space.

AWARD CRITERIA	
<i>Visionary Innovation & Performance</i>	<i>Customer Impact</i>
Addressing Unmet Needs	Price/Performance Value
Visionary Scenarios Through Mega Trends	Customer Purchase Experience
Implementation of Best Practices	Customer Ownership Experience
Leadership Focus	Customer Service Experience
Financial Performance	Brand Equity

Real-world Evidence Information Technology Solutions for Healthcare Market Overview

With the healthcare industry shifting towards patient-centricity and value-based outcomes, the importance of real-world data (RWD) is growing significantly. RWD incorporates various information technology (IT) solutions such as cloud technology, artificial intelligence, blockchain, digital products, next-generation sequencing (NGS), and precision medicine. It is crucial to prioritize platform scalability and simplified technology architecture to improve business process efficiency. With the life sciences industry moving towards digitalization, Frost & Sullivan expects the real-world evidence (RWE) IT solutions market to reach maturity by 2030.¹

Moreover, market and regulatory trends shifting from individual client solutions to value-based experiences necessitate RWE investments and IT partnerships. Pharmaceutical companies (pharma) and contract research organizations (CROs) require high-quality longitudinal data, with cross-industry conglomerates exploring cross-portfolio opportunities. Frost & Sullivan believes that digital transformation and Industry 4.0 will drive RWE IT solutions to play an imperative role in drug research and development and commercialization.²

¹ *Shifting Spotlight from Product- to Value-based Outcomes Intensifies Growth in the US Real-world Evidence IT Solutions Market*, (Frost & Sullivan, February 2021).

² Ibid.

Genomic and digital data advancements are revolutionizing the research and clinical landscape, focusing on precision medicine, personalized genomics, and digital therapeutics. Thus, innovation and product strategies need to pivot to address smaller patient cohorts.

Established technology and IT solution providers have an opportunity to create integrated platforms that improve stakeholder visibility and extract value from RWD to increase efficiency and reduce costs. Major providers aim for 10-time faster patient recruitment and engagement, a more than 30% reduction in trial costs by 2030 and a 50% reduction by 2040 (relative to 2020), and 50 times more longitudinal trials and digital patient data by 2030.³

Frost & Sullivan believes Optum, Inc. (Optum) uniquely leverages its expertise to capitalize on these growth opportunities and addresses customer and market needs, cementing its position in the North America RWE IT solutions for the healthcare space.

Addressing Unmet Needs through Innovative Offerings

Founded in 2011 and headquartered in Minnesota, the United States (US), Optum, a subsidiary of the UnitedHealth Group, is a healthcare services provider. Optum operates in the life sciences industry and has access to 285 million lives worth of deidentified RWD. The organization has worked with real-world evidence for over 25 years and takes a long-term perspective to maintain sustainability, emphasizing providing information to regulators, providers, payers, and patients.

“Distinguishing itself from other market participants, the company offers research-ready RWD to fuel RWE. Optum links claims and electronic health record (EHR) data into a single asset known as Market Clarity. It incorporates the benefits of both datasets and provides visibility into utilization and clinical outcomes from a single dataset comprising more than 76 million lives.”

***- Ojaswi Rana,
Best Practices Research Analyst***

Optum’s vision centers on making healthcare more simple and effective, with the stated purpose of transforming evidence into action. It connects deep-seated domain and operational knowledge with advanced products to facilitate RWE IT solutions in healthcare. The company assists pharma businesses throughout a drug’s lifecycle by delivering use-case-specific capabilities and data. It prioritizes value and emphasizes smarter decisions to assist clients in developing higher-value medicines and quickly bringing them to the market.

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data into a single asset known as Market Clarity. It incorporates the benefits of both datasets and provides visibility into utilization and clinical outcomes from a single dataset comprising more than 76 million lives.

Furthermore, its Clinformatics® Data Mart comprises adjudicated medical and pharmaceutical claims for more than 77 million lives, and its EHRs provide clinical details from Integrated Delivery Networks for over 112 million lives.

³ *Shifting Spotlight from Product- to Value-based Outcomes Intensifies Growth in the US Real-world Evidence IT Solutions Market*, (Frost & Sullivan, February 2021).

To help clients generate real-world evidence and uncover insights at all stages of a product's development and commercialization, Optum's Life Sciences division offers consulting services that leverage these RWD assets. The company specializes in health economics and outcomes research (HEOR), epidemiology, and commercial analytics. It is uniquely situated to help manufacturers design, execute and adjudicate value-based contracts by assessing the fit, developing metrics, and tracking care outcomes over time.

Clinicogenomics

Optum incorporates genomic and other -omic data into its data stream to fill in informational gaps, particularly for uncommon diseases, gene therapy, and other areas where biomarkers and genetic data are vital. Its clinicogenomics program integrates genomic and other -omic data into clinical and claims data assets using replicable deep genomic data.

“Optum’s emphasis on RWE and diversity, the combination of claims and EHR data, and the incorporation of genomic insights make it the partner of choice for biopharmaceutical (biopharma) companies seeking to create higher-value treatments while improving their time-to-market.”

**- Ojaswi Rana,
Best Practices Research Analyst**

Currently, the offering includes whole genome sequencing (WGS) or ribonucleic acid sequencing (RNA-seq) data for hundreds of thousands of individuals, obtained using broad-panel NGS methods. These data are linked to longitudinal clinical and claims data, with those numbers growing daily. Optum clinicogenomics is pan-therapeutic, with all therapeutic areas represented, including oncology and non-oncology. Optum aims for a high level of granularity for every patient in its cohorts. Aside from bringing diverse data types together, the company

stands out in its ability to view the entire patient journey rather than simply a snapshot.

Optum's capabilities include acquiring genomic data or biospecimens that the company then sequences through collaboration with a network of data partners, including molecular testing firms, biobanks, healthcare systems, and patient advocacy organizations. The company prioritizes diversity in its commercially available clinicogenomic dataset. It engages in cross-functional collaboration to comprehend the relationship between patient characteristics, social determinants of health (SDoH), healthcare provider characteristics, and clinical and economic outcomes.

Optum's emphasis on RWE and diversity, the combination of claims and EHR data, and the incorporation of genomic insights make it the partner of choice for biopharmaceutical (biopharma) companies seeking to create higher-value treatments while improving their time-to-market.

Distinguished Capabilities

Optum provides three primary capabilities to assist partners in developing and conducting data-enabled clinical trials:

- **Protocol optimization.** Optum's study feasibility and protocol design tool, Prospector, facilitates access to over 100 million deidentified clinical data assets. It lets companies generate complex cohorts and test how inclusion and exclusion criteria affect patient availability to plan and run trials. Since Prospector includes demographic and SDOH indicators, sponsors can refine protocol

criteria in the context of diversity, inclusion, and health equity goals. Prospector also allows clients to see the percentage of trial-eligible patients available within the Digital Research Network (DRN) and connects sponsors with DRN sites for study conduct. Additionally, upon request from a study site, select Optum staff can access identified EHR data in Prospector to assist in patient recruitment or further analysis.

- **Precision patient finding.** The Optum DRN is a collection of technology- and data-enabled research sites that can opt to conduct pharma-sponsored trials via Optum. By participating in the DRN, sites are given access to pharma-sponsored trials and tools from Optum that enable them to perform those trials more efficiently and effectively (including Prospector and True Source). By conducting a trial through Optum's DRN, pharma sponsors tap into a network of sites equipped with technologies to streamline study startup, patient recruitment, and ongoing data management. Optum leverages its DRN to support pharma sponsors both with early trial planning, including feasibility and investigator identification, as well as downstream study conduct, including patient identification, recruitment, and management of study data.
- **Data management.** Optum offers an automated capability known as True Source that enables the direct transfer of clinical data from the EMR to the Electronic Data Capture (EDC) system, eliminating the need for healthcare professionals to enter data manually, thus saving time and resources and minimizing the risk of data entry errors. True Source also allows pharma sponsors to leverage unique trial designs, including hybrid and pragmatic trials.

Case Study

A large pharma company designed a novel trial incorporating Optum's clinical trial capabilities. The company used Optum's data and Prospector tool to identify opportunities for minor tweaks in inclusion and exclusion criteria that could impact the patient population and reduce patient attrition. The company implemented Optum's suggested changes, resulting in a 600% increase in the eligible patient population, making it much easier to find and enroll patients.⁴

With a legacy of industry leadership, Optum's compelling value proposition underpins its sustained success. Frost & Sullivan is impressed by the company's innovative offerings that effectively address market gaps.

Roadmap to Success: Customer-centric, Continuous, Proactive

Optum goes beyond its extensive expertise and best-in-class capabilities, with customer value as a strategic imperative. Through the years, the company has earned a sterling reputation supporting clients' path toward effective healthcare. One of its primary objectives is to connect RWD, convene stakeholders from all healthcare sectors, and seek opportunities to bolster its portfolio to meet the life science companies' needs throughout the product development lifecycle. Optum invests in innovative connections between RWD and the healthcare ecosystem, including payers, providers, and patients. By doing so, it accelerates scientific advances and improves health outcomes.

Optum's recent acquisition of Change Healthcare will give it and its clients access to a broader set of claims

⁴ Interview with Optum, 15th March 2023.

data, enabling it to draw insights and produce evidence to assist healthcare system decision-making. The company also collects unstructured data from over 100 million lives worth of EHR data and employs algorithms to extract symptomology and map it to client-specific vocabularies, such as SNOMED CT. Optum intends to enable more clinical note-driven research so clients can apply natural language processing (NLP) and other forms of AI to gain efficiencies and uncover insights.

The company ensures customer satisfaction across the patient journey through a multi-step approach. First, it works closely with clients and reframes their questions for maximum impact, helping them avoid wasteful investments and find suitable data sources and teams to meet their needs.

Then, Optum's Client Services team supports clients' needs with licensed Optum data. These team members understand Optum's data assets and help clients maximize their return on investment by assisting in developing research rules, defining cohorts, and interrogating data. Finally, the organization conducts annual Net Promoter Score client surveys, after which it forms working groups to improve customer service based on feedback.

Overall, Optum prioritizes proactive engagement, ongoing support, and incorporating customer feedback into its operations. Frost & Sullivan believes the company's transparent, seamless, and frictionless approach and close relationships position it as a partner of choice.

Innovations and Collaborations Fuel Growth Potential

Since its inception, Optum's reputation and customer-centric framework have led to its coveted preferred partner status. Over the years, it added a range of new customers to its established base. In 2022, the company served 113 life sciences organizations, including 18 of the top 20 biopharma companies, several mid-range, small, and emerging companies, and medical device and diagnostics firms.

Optum prioritizes building and strengthening product brand equity. The company recognizes that consistent messaging across traditional marketing platforms is essential but that actions speak louder than words. It builds brand equity by consistently connecting data, ideas, and the life sciences industry to the healthcare ecosystem. This strategy boosts customer loyalty, brand awareness, and revenue.

As a result of its diverse approach, Optum is leading life sciences innovation and healthcare impact through consistent messaging, investment in new technology, stakeholder engagement, and portfolio development.

Innovations and Collaborations

Optum Life Sciences leverages the Optum enterprise's role at the epicenter of the healthcare ecosystem to help the life sciences sector understand the evolving needs of stakeholders across healthcare. A common thread across its solutions and initiatives is the application of high-quality, real-world data to help generate evidence and help leaders make impactful decisions.

Clinical Trial Diversity. To address the disparity between trial demand and patient availability, the company strives to be patient- and provider-focused while enabling more clinicians to participate in clinical trials.

Sustainable Innovation. Optum Life Sciences partners with Optum Health, Optum Rx, and an affiliated

national payer to identify opportunities that advance the Quadruple Aim pursuits of improved patient outcomes, lower cost of care, better patient experiences, and reduced physician burden. Combining skills and talents, it seeks to aid clients in fostering innovation, accelerating therapeutic access, and lowering wasteful medical expenditures.

Medication Adherence. Optum collaborated with a major pharma manufacturer to address the low utilization of cholesterol-lowering medications among adults in the US. The company designed a program to improve patient and provider awareness of the therapy's eligibility and advantages by applying its RWD expertise and a cross-industry approach.

The campaign included the following:

- Working with payers to send patients a mailer, encouraging a discussion with their provider about their potentially high LDL-C levels during their next appointment.
- Working with providers to share information about their patients with hyperlipidemia.
- A comprehensive study of claims and EHR revealed a substantial increase in patients treated per recommendations and obtaining suitable treatment.

The program's success has prompted efforts to expand its scope. This case study exemplifies Optum's approach to generating RWE and producing value and impact across all healthcare stakeholders.

The company expects continued growth in the market due to the expanding use cases for RWE, the Food and Drug Administration's increasing appetite for the use of RWD in regulatory submissions, payers' openness to RWE, new cloud-based options for data management and analysis, and the rise of precision medicine driving the demand for clinicogenomic data.

Frost & Sullivan believes Optum is well-positioned to drive the RWE IT solutions for healthcare space into its next growth phase by catalyzing innovation, expediting therapy access, and reducing medical costs.

Conclusion

Organizations in the real-world evidence (RWE) information technology (IT) solutions for healthcare are presented with several growth opportunities. Optum, Inc. (Optum) skillfully captures these market trends and addresses customers' unmet needs with a strong leadership focus that incorporates customer-centric strategies and exemplifies best practice implementation.

Optum's Market Clarity dataset provides research-ready real-world data to fuel RWE. Continued investment in its clinicogenomics offering and distinguished capabilities such as the Digital Research Network, Prospector, and True Source reflect its commitment to meeting the industry's evolving needs. Moreover, the company ensures customer satisfaction across the patient journey. With collaborative efforts to drive clinical research diversity, sustainable innovation, and medication adherence, Optum remains a trusted partner, earning a reputation for offering the overall best RWE IT healthcare solutions.

With its strong overall performance, Optum earns Frost & Sullivan's 2023 North American Company of the Year Award in the RWE IT solutions for healthcare industry.

What You Need to Know about the Company of the Year Recognition

Frost & Sullivan's Company of the Year Award is its top honor and recognizes the market participant that exemplifies visionary innovation, market-leading performance, and unmatched customer care.

Best Practices Award Analysis

For the Company of the Year Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Visionary Innovation & Performance

Addressing Unmet Needs: Customers' unmet or under-served needs are unearthed and addressed by a robust solution development process

Visionary Scenarios Through Mega Trends:

Long-range, macro-level scenarios are incorporated into the innovation strategy through the use of Mega Trends, thereby enabling first-to-market solutions and new growth opportunities

Leadership Focus: Company focuses on building a leadership position in core markets and on creating stiff barriers to entry for new competitors

Best Practices Implementation: Best-in-class implementation is characterized by processes, tools, or activities that generate a consistent and repeatable level of success

Financial Performance: Strong overall business performance is achieved in terms of revenue, revenue growth, operating margin, and other key financial metrics

Customer Impact

Price/Performance Value: Products or services provide the best value for the price compared to similar market offerings

Customer Purchase Experience: Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

Customer Ownership Experience: Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

Customer Service Experience: Customer service is accessible, fast, stress-free, and high quality

Brand Equity: Customers perceive the brand positively and exhibit high brand loyalty

