

IDC MarketScape

IDC MarketScape: Worldwide Life Science R&D RWE, RWD, Platforms, Technologies, and Consulting Services 2023 Vendor Assessment

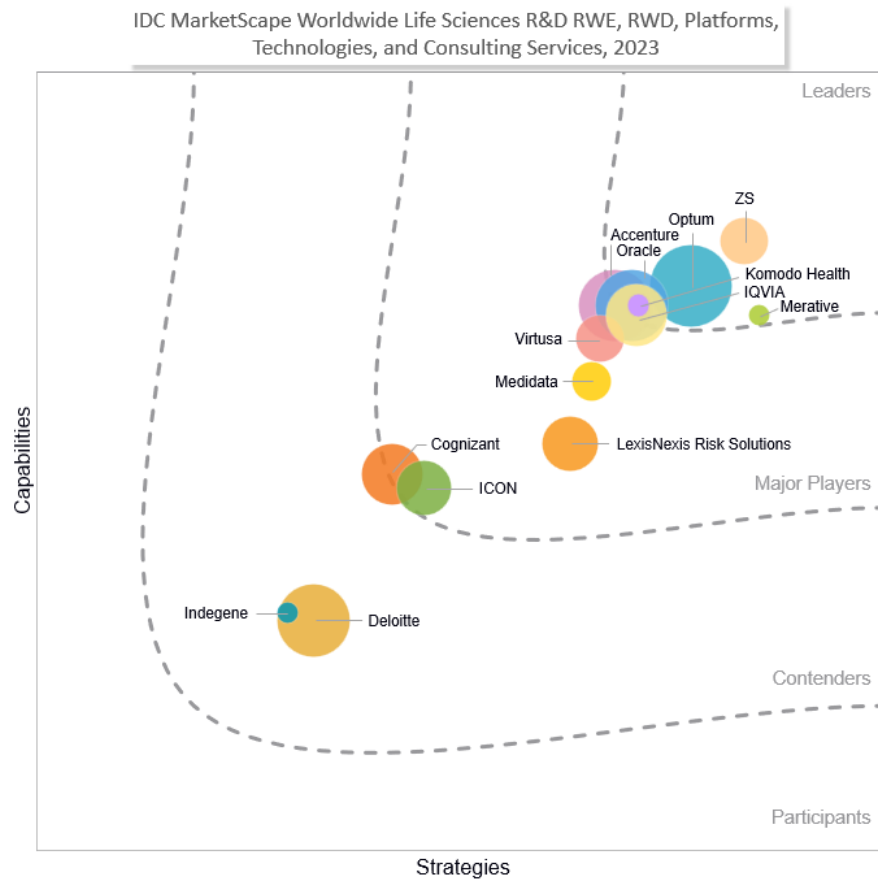
Nimita Limaye

THIS IDC MARKETSCAPE EXCERPT FEATURES MERATIVE

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape Worldwide Life Science R&D RWE, RWD, Platforms, Technologies, and Consulting Services Vendor Assessment



Source: IDC, 20230

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

IN THIS EXCERPT

The content for this excerpt was taken directly from IDC MarketScape: Worldwide Life Science R&D RWE, RWD, Platforms, Technologies, and Consulting Services 2023 Vendor Assessment (Doc # US51126723). All or parts of the following sections are included in this excerpt: IDC Opinion, IDC MarketScape Vendor Inclusion Criteria, Essential Guidance, Vendor Summary Profile, Appendix and Learn More. Also included is Figure 1.

IDC OPINION

Never before has the life science industry been as focused on real-world data (RWD) as it is today. There are few areas, if any, that remain untouched by RWD in the pharma value chain, and this industry has recognized the significant value of RWD. The number of players in this space is simply exploding, ranging from small innovative start-ups, consulting companies, data aggregators, systems integrator, contract research organizations (CROs), and technology companies, offering a few to all of the components of the stack, ranging from data products, insights, technology platforms, and accelerators to consulting and data and technology services.

The volume and variety of RWD is also increasing by leaps and bounds. The FDA defines RWD as data relating to patient health status and/or the delivery of health care routinely collected from a variety of sources. Examples of RWD include data derived from electronic health records (EHRs), medical claims data, data from product or disease registries, and data gathered from other sources (such as digital health technologies) that can inform on health status. The FDA defines real-world evidence (RWE) as the clinical evidence about the usage and potential benefits or risks of a medical product derived from the analysis of RWD. An RWD platform is a comprehensive and integrated system that facilitates the collection, storage, processing, analysis, and visualization of various types of RWD from diverse sources in a scalable, secure, and efficient manner to derive valuable insights and make data-driven decisions.

Sources of RWD

This section provides different sources of RWD that bring forth their own challenges.

- Medical claims submitted by providers typically reflect only services and procedures that were billed or reimbursed and rarely provide a complete picture of a patient's health journey, may not represent those who are uninsured, represent specific medical encounters and may not offer a complete longitudinal view of a patient's health history, and may also have coding errors.
- Pharmacy claims provide insights into medication patterns. However, they may lack broader clinical context such as the reasons for medication changes or nonadherence, capture only prescribed medications, lack information about lifestyle modifications, non-pharmacological treatments, or behavioral interventions; and provide limited insights on the diagnosis.
- Open claims are data derived from broad-based healthcare sources that can highlight a patient's activities over a longer time frame, regardless of a patient's insurance provider, but

since they are still in the process of being resolved, may lack complete information and the outcomes are unknown.

- Closed claims include data derived from payers revealing nearly all of a patient's healthcare activities during a specific enrollment period. Closed claims refer to claims that have been resolved and closed and provide definitive outcomes but provide only limited insights into ongoing care.
- Electronic health records are a valuable resource of RWD, but the data may be inconsistent or inaccurate; data may be present in disparate EHR systems that may not be fully compatible with each other, resulting in fragmented and disjointed records; and some data may be captured as unstructured data, adding to the complexity.
- Patient registries provide key insights in areas such as rare diseases, chronic conditions, and long-term treatment outcomes. However, since the data is collected during routine clinical care, it can result in incomplete data entries. In addition, registries are often disease specific, which may result in selection bias, excluding those with milder or rarer forms of the disease.
- Patient-generated health data (PGHD) may include data generated from wearable devices, mobile apps, patient-reported outcomes (PROs), and social media; may include data gathered from patients, family members, and caregivers; and comes with its own set of limitations, including issues related to patient literacy and patient compliance, inaccuracies in the data that has been captured, bias creeping into as a result of the digital divide, and concerns regarding the validation of the devices and apps used.
- Specialty data sets, such as "omics" data, mortality data, and social determinants of health (SDOH), are gaining increasing importance.

The Regulatory Lens

Regulators have been increasingly encouraging the use of RWD. In detail:

- The FDA has a strong focus on RWD/RWE and has published a series of guidance documents related to the use of RWD/RWE. The FDA also implemented the Sentinel System in 2016 for post-market safety surveillance, based on a large, distributed network of RWD curated using the common data model (CDM). It can evaluate suspected signals of adverse events in drugs. FDA-Catalyst adds on data related to interactions with patients and providers to the Sentinel infrastructure, providing valuable insights on marketed medical products.
- In 2022, the European Medicines Agency (EMA) published a "Good Practice Guide for the use of the Metadata Catalogue of Real-World Data Sources." EMA launched the Data Analysis and Real World Interrogation Network (DARWIN EU) initiative in February 2022 to support regulatory decision making based on RWE from across Europe. EMA and the European Medicines Regulatory Network (EMRN) have recently published a report on studies conducted from September 2021 until the first anniversary of DARWIN (February 2023), wherein 61 RWD research opportunities were identified, 30 studies were initiated, and 27 studies were completed. The European Health Data Evidence Network (EHDEN) project was launched by the Innovative Medicines Initiative (IMI) in 2018 to build out the road map for interoperability solutions and develop infrastructure and harmonize RWD to a common standard, the Observational Medical Outcomes Partnership (OMOP) CDM, within a federated network across the European Union (EU). EHDEN has 98 data partners across 23 countries, and while it aimed to allow standardization of data of 100 million EU citizens, it is currently working with

the data of more than 650 million citizens. Once the data source is standardized and the tools are operational, the data partner would become a member of the EH DEN community and the federated data network and could use this data to support patient recruitment and other aspects of clinical trials.

- The Medicines and Healthcare products Regulatory Agency (MHRA) provided its own guidance on the use of RWD in clinical studies to support regulatory decisions in December 2021. Clinical Practice Research Datalink (CPRD) is a real-world research service supporting retrospective and prospective public health and clinical studies in the United Kingdom. Its research services are delivered by the MHRA with support from the National Institute for Health and Care Research (NIHR), as part of the Department of Health and Social Care. CPRD collects anonymized patient data of 60 million patients from a network of general practitioner (GP) practices across the United Kingdom, and this data is linked to a range of other health-related data to provide a longitudinal, representative U.K. population health data set.
- Swissmedic, the Swiss agency for therapeutic products, has published a position paper on the use of RWE as supportive evidence to data from clinical trials in July 2022.
- China's National Medical Products Administration (NMPA) developed three guidelines related to RWD/RWE in 2020-2021, and Japan's Pharmaceuticals and Medical Devices Agency (PMDA) established a working group in 2021 to discuss regulatory issues related to RWD and RWE and established a scientific advice program as well.
- As regulations related to RWD/RWE evolve across the globe, International Coalition of Medicines Regulatory Authorities (ICMRA), which includes members from over 30 regulatory agencies worldwide, held a workshop on RWE to drive collaboration and to address challenges on RWE integration into regulatory decision making in June 2022.

The Applications of RWD/RWE

The applications of RWD in clinical trials are diverse. They are used to validate study hypothesis; build clinical development plans; address questions early in the study design process; drive intelligent clinical trial design; integrate a broader quality by design (QbD) framework; assess study feasibility; accelerate patient recruitment, especially in areas such as rare diseases; power safety signal detection; support labeling claims; and more. The Clinical Trials Transformation Initiative (CTTI) has developed recommendations for applying RWD to planning and recruiting for clinical trials, determining if the data was "fit for purpose," and developing "patient centric" strategies. CTTI has recommended incorporating RWD-supported recruitment, alongside traditional modes of recruitment, especially when the trial is likely to face recruitment challenges. SDOH data has become extremely important toward achieving diversity goals in clinical trials and evaluating patient access to healthcare. Clinicogenomic data is being used to detect biomarkers to customize care for patients by identifying potential "hyper-responders" or patients whose pharmacogenomic profiles correlate with a higher probability of experiencing specific adverse events.

Furthermore, one of the important applications of RWD for the life science industry is market access, not only for pharma but also for the medical device industry. For example, compliance with Europe's new Medical Device Regulation (MDR) will require the submission of stronger clinical evidence on the efficacy, safety, and value of their products. The FDA has updated requirements for risk assessment for medical devices and diagnostics. With the advent of the era of expensive cell and gene therapies and the development of complex medical devices, CPT codes no longer automatically equate to reimbursement from insurers, and value-based pricing (VBP) is gaining importance. RWD is critical to demonstrate clinical outcomes and cost efficiencies to obtain coverage from payers. RWD is needed to demonstrate benefits other than improved efficacy and safety profiles, such as the long-term benefits of patient care, shortened hospital stays, and the elimination of secondary procedures. Health economics and outcomes research (HEOR) uses RWD to demonstrate the clinical and economic value of drugs and medical

devices to a wide range of stakeholders. The use of RWE to support regulatory decision making is growing rapidly. A systematic review of publicly available FDA approval documents from January 2019 to June 2021 published in 2022 indicated that 116 approvals incorporated RWE in any form, of which, 88 approvals included an RWE study intended to provide evidence of safety or effectiveness. Of the 88 approvals, 65 of the studies influenced the FDA's final decision and 38 were included in product labels. The 88 approvals spanned 18 therapeutic areas. These statistics, coupled with the plethora of guidance issued by the FDA, are a clear indication of the importance of RWE to the FDA.

Challenges Associated with RWD

As the life science industry shifts toward understanding a holistic picture of a patient's health and focusing on a patient 360 view toward developing precision medicine solutions, acquiring and combining the right data from multiple sources in a secure and a compliant manner continues to present a huge challenge.

Challenges for Sponsors

Some of the limitations that pharma, biotech, and medical device companies face are:

- RWD comes in both structured and unstructured formats. Data lakehouses are evolving to help bring these sets of data together.
- Data annotation standards, ontologies, and natural language processing (NLP) techniques are being developed to enhance the annotation of RWD and improve the interoperability of RWD. Dealing with multiple conflicting data standards of data collected from diverse data sources also adds to the complexity.
- Data discoverability of RWD, addressing data privacy and security concerns, the evolving regulatory landscape, and issues related to potential biases in data collection, ethical and legal considerations related to patient consent, data ownership, and the relevancy and currency (timeliness or recency) of the data also present significant challenges.
- Significant data gaps exist in the patient journey. Efforts are being made to link RWD data from diverse sources and to even link RWD and clinical trial data to weave together the entire patient story. Since data sets generated for research purposes are usually de-identified (all protected health information [PHI] is removed to protect patient privacy), it becomes very difficult to connect the dots. Data tokenization is the process by which patient identifiers are de-identified through the generation of a patient-specific "token" that is encrypted. Thus these tokens serve as unique patient identifiers and can help recognize a patient across multiple sources of RWD. Since tokens do not contain any PHI, they protect against patient reidentification and loss of privacy/confidentiality. Tokenization can add immense value toward generating insights about a patient from a dispersed, disorganized data landscape.
- Other challenges include defining the right business model and the right data partner, deciding between owning the data or choosing a subscription model, identifying "fit for purpose" data, setting the right balance between the breadth and the depth of the data while scaling the RWD pipeline, defining the right data governance model, and choosing between a scalable software-as-a-service (SaaS)-based offering versus a service-driven offering that provides bespoke customized output.
- Ingesting and housing a growing volume of data while ensuring regulatory compliance and data sovereignty poses a challenge.
- The ability to demonstrate the quality and provenance of the evidence used to support a regulatory submission can prove to be very challenging.
- A lot of the data providers provide only U.S.-specific data.

- Since there are so many different types of players in the exploding RWD data space, pharma find it challenging to determine whom to partner with. More often than not, a legacy relationship continues over years, even though the vendor is not really meeting the desired needs.
- Finally, demonstrating ROI to justify investment in data assets is no mean task. The increasing cost of RWD, accessibility to the desired data sets, the need to annotate RWD, the lack of availability of the right volume of the desired data sets to train machine learning (ML) algorithms, and the associated time and cost are resulting in a gradual but definitive shift toward the use of synthetic data.

Challenges for Vendors

For RWD vendors, challenges include the fact that customers are often locked into multiyear contracts, the data space is a crowded market with many players, and the growing demands from customers to link disparate data sources increases the risk of patient re-identification. Identifying the ever-evolving data needs of customers to determine which type of data to invest in, which partnerships to establish, and which offering to present to customers remains a critical challenge.

To conclude, with the increasing focus on RWD, one is seeing greater collaboration between RWD organizations and other stakeholders in the healthcare ecosystem. Yet needs are evolving, business models are evolving, regulations are evolving, and technologies are evolving. Customer needs span far beyond data and technology. Most pharma, biotech, and medical device companies are looking for partners that can provide strategic guidance to help navigate the regulatory landscape; provide insights on the choice of data; enable data integration, standardization, and tokenization; and generate the desired insights.

IDC MARKETSCOPE VENDOR INCLUSION CRITERIA

IDC frequently has unique visibility into vendor selection processes within life science companies through clients and contacts in the industry. For a vendor to be considered for inclusion in this study, the vendor's services must have been significantly evaluated for the potential to engage clients within the target IDC MarketScope space. The key inclusion criteria included:

- Vendors should have had at least five customers for their RWD offering for a duration of at least 12 months as of January 1, 2023.
- Vendors should provide platforms, technology solutions, and services to enable the use of RWD.
- Vendors should have guided customers on the use of RWD, including choosing the right data assets and defining the right business models, data optimization strategies, technology implementation strategy, or other consulting activities related to the use of RWD.
- Vendors should have a minimum revenue of \$200 million.

Further research and due diligence were then conducted to narrow the list of vendors to only those that IDC views as legitimate contenders for future deals within the life science R&D real-world evidence, data, platforms, technologies, and consulting space. The 14 vendors selected to participate in this study are:

- Accenture
- Cognizant
- Deloitte
- ICON

- Indegene
- IQVIA
- Komodo Health
- LexisNexis Risk Solutions
- Medidata
- Merative
- Optum
- Oracle
- Virtusa
- ZS

ADVICE FOR TECHNOLOGY BUYERS

It has been clearly established that effectively leveraging RWD provides a significant competitive advantage. With the intense focus on leveraging RWD across the value chain, the life science industry is struggling to partner with the right players, define the right strategies, build the right skill sets, and implement the right guardrails to stay ahead of the curve. Further:

- Architect an enterprisewide scalable and flexible RWD strategy. Build the RWD infrastructure to meet your five-year road map.
- Establish data governance models.
- Implement guardrails to ensure compliance with regulations regarding data security, data privacy, and data sovereignty.
- Grow your data set portfolio, based on your evolving data needs.
- Choose a data partner that can provide you with access to data sets that represent patient populations that align with the geos where you plan to market your product.
- Assess the partnership ecosystem of your data provider, as your data needs may grow.
- Partner with data providers that can provide transparency regarding the derivations of the insights to support publications.
- Partner with data providers that can provide guidance on regulatory strategy leveraging RWD and that can engage with regulators as well.
- Ensure that the recency and relevancy of data meets your specific needs.
- Build empowered data citizens – develop internal skill sets to manage RWD and engage effectively with strategic partners.
- Identify and prioritize the right use cases and business models: data as a product (DaaP), data as a service (DaaS), insights as a service (IaaS), and platform as a service (PaaS)
- Choose strategic partners that can address your data and technology needs and provide strategic guidance as well.
- Build a collaborative ecosystem of data partners – no one has it all.
- Establish RWD/RWE COEs. Build a "data centric" culture.
- Leverage ML and generative AI to accelerate innovation.
- Establish a data tokenization partner.
- Engage early with regulators.

- Remember that digital strategy isn't going anywhere without a well-defined data strategy.
- Get a clear picture of what "fit-for-purpose data" means for you.

VENDOR SUMMARY PROFILES

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description here provides a summary of each vendor's strengths and challenges.

Merative

After a close evaluation of Merative's offerings and capabilities, IDC has positioned the company in the Leaders category in the 2023 IDC MarketScape for worldwide life science R&D RWE, RWD, platforms, technologies, and consulting services.

MarketScan is one of six distinct business divisions of Merative, previously known as IBM Watson Health. After its acquisition by Francisco Partners in July 2022, it emerged as a standalone company with 2,500 employees worldwide.

The MarketScan portfolio is a healthcare data, analytics, and technology partner for providers, health plans, employers, life science companies, and governments and has served the needs of health plans and large employers for nearly 35 years. The top 20 global pharma use its real-world data and services. The MarketScan portfolio has close to 80 life science customers (primarily pharma) and over 150 other customers, including government, nonprofit, academic, health plans, employers, and providers. Two-thirds of its customers are based in the United States, one-fifth in Europe, and the rest in APAC. 70% of its customers have revenue exceeding a billion dollars. Three-fourths of its RWD customers license its data sets, two-thirds license its RWD data set updates and/or its platform, and two-thirds use one or more of its RWD services.

Strategic Initiatives

MarketScan envisions not just being a data vendor but also helping its customers navigate other data sources, supporting them with data linkages, through data tokenization, and enabling access to that data both on premises and in the cloud, through its newly launched cloud-based RWD platform. It is focused on offering tailored versions of MarketScan Research Databases to answer market needs such as health equity, social determinants of health, pregnancy exposure, healthcare cost data, and benchmark data. It is also doubling down on strengthening its regulatory expertise. It has invested \$30 million in acquiring data from different sources, Health Insights, to power analytics on its de-identified claims data sets.

M&As/Partnerships

Key partnerships include Datavant since 2018 (tokenization and linkage), as well as Snowflake (cloud), Prognos (lab data enrichments), Ephir (OMOP-standardized data format), and IHM (clinical data, unstructured notes, and SDOH data from community hospitals throughout the United States) added in 2023.

Strengths

MarketScan's RWD solutions include DaaS, DaaS, DaaS, and IaaS, as well as consulting services. The MarketScan portfolio is made up of MarketScan Research Databases, MarketScan Research and

Analytics Services, and MarketScan Applications. Merative has a team of more than 45 PhD researchers, data scientists, and medical professionals, with an average of 15 years of experience.

An employer-based sourcing model is used to generate data, which is ingested through Health Insights, which provides analytics for employers based on identified data. The data then flows into the MarketScan Research Databases, where it is de-identified, enriched, and linked.

Merative's MarketScan data sets represent over 293 million U.S. patients' lives of fully adjudicated, closed claims, and regulatory-grade data, over 27 years. Its longitudinal data set spans diverse therapeutic areas and is one of the largest and longest-running data sets in the United States. Unlike other vendors that provide imputed costs, MarketScan provides actual costs for most of its data. Over 3,500 peer-reviewed publications are based on this data. The MarketScan Research Databases include its three core claims databases (Commercial Database, Medicare Database, and multistate Medicaid Database) and its specialty databases (Health and Productivity Management [HPM] Database, Benefit Plan Design [BPD] Database, Lab Results Database, Health Risk Assessment [HRA] Database, Reimbursement Benchmark Database, and Dental Database); its MarketScan Weights database is used to fine-tune estimates across states for national-level reporting. 65% of all Merative's RWD customers license regular RWD data set updates.

Its EHR standalone database includes data from 38 Health System Partners (Integrated Delivery Networks and Clinically Integrated Networks). Its MarketScan EHR-linked data set integrates claims data from the MarketScan Commercial and Medicare Databases, with data for the same patients found in EHR standalone database. The linked data sets are de-identified according to HIPAA's de-identification standards. While the EHR data provide a rich clinical context for interpreting utilization and costs observed in claims data, the claims data provide more complete documentation of medical services that may influence the clinical observations in the EHR.

MarketScan's application for noncoding researchers is called Treatment Pathways and is used by 10% of its customers. It enables clients to access data and build cohorts without coding skills. A new cloud platform called MarketScan Workspace has just been launched.

Its MarketScan Research and Analytics Services power RWE initiatives, leveraging its team's deep cross-functional expertise, its proprietary algorithms built on unique access to MarketScan's source data, and experience in three key areas: epidemiology, health economics and outcomes research, and regulatory submissions.

The top 5 areas in which Merative supports its customers are payer decisions, regulatory support, clinical decision making, business decisions (R&D, investment/product acquisition, sales force strategy), and policy decisions.

From a consulting perspective, the MarketScan team provides guidance and executes scientifically robust analyses that demonstrate their product's value to clinicians, payers, and regulatory bodies. Merative's most complex RWD engagements involved most complex regulatory-focused projects.

"MarketScan had Medicaid data that was very valuable for us to conduct our health economics and outcomes research studies. They linked claims and EMR data, which was very valuable in neurosciences as we could also look at physician notes. They provided us with insights not captured in claims, such as symptoms and why certain treatments were being recommended. We also licensed their Treatment Pathways, point-and-click tool, which helped mine pharmacy coverage data. Pricing wise, MarketScan is very competitive. Their team had very good knowledge of the data, and our client rep was fantastic – she really made this more of a partnership and helped address all our needs. All the people we interacted with were very professional and would go above and beyond," said the

director, HEOR, U.S. cardiovascular, of a prominent specialty biopharma, who has worked with MarketScan for eight to nine years.

Challenges

Merative's MarketScan business unit could consider carving out SDOH data sets and genomics data sets, as an offering. It could establish a wider network of partnerships so that it can offer data across the globe as its current data offering is primarily U.S. based. Its data contributors to its Medicaid data set have been decreasing over the years.

Consider Merative When

Consider Merative when you are seeking support from an organization with robust longitudinal regulatory-grade data sets, closed claims data sets, de-identified-linked EMR and claims data sets, and specialty data sets; seeking access to a cloud-based RWD platform (MarketScan Workspace, its MarketScan Research and Analytics Services); and seeking expertise in HEOR, epidemiology, and regulatory consulting.

Should Merative's MarketScan Business Unit Be Considered as an RWD Provider?

- Yes, this is Merative's sweet spot, since the company provides rich closed claims data sets, longitudinal regulatory-grade data sets, and EMR and claims-linked data sets.

Should Merative's MarketScan Business Unit Be Considered as an RWD Consulting Services Provider?

- Yes, Merative's MarketScan business unit provides expertise in HEOR, epidemiology, and regulatory.

Should Merative's MarketScan Business Unit Be Considered as an RWD Platform and Technology Solutions Provider?

- Yes, though currently only 10% of Merative's customers are using the company's coding-free Treatment Pathways application, it has just launched MarketScan Workspace, a new SaaS cloud workspace platform available to all MarketScan data subscribers.

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis, or strategies axis, indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represents the market share of each individual vendor within the specific market segment being assessed.

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

Market Definition

For the purposes of this study, IDC follows the FDA definition of real-world data (RWD) and real-world evidence (RWE). RWD is the data relating to patient health status and/or the delivery of healthcare routinely collected from a variety of sources, and RWE is the clinical evidence regarding a medical product's use and potential benefits or risks derived from analysis of RWD. This IDC MarketScape evaluates real-world evidence, real-world data, platforms, technologies, and consulting services capabilities.

Market Overview

RWD has become an integral part of the life science industry, so much so, that it is almost becoming an industry in itself, with a complex and diverse network of players, ranging from very large mature data providers to small innovative start-ups offering niche data sets and technologies, with system integrators offering data ingestion platforms, data integration and analytics capabilities, and data transformation services, and consulting companies offering evidence-based strategies. The overlaps are significant, and every company wants to dip its finger in the pie.

The industry's transformational journey is as follows:

- RWD solutions have historically been used to study healthcare delivery and inform commercial insights. Population-level data has been used to provide commercial insights. The lens is shifting from the use of RWD for commercial to R&D.
- The industry is struggling to identify the right data/technology partner, determine the right data needs, and define the kind of analysis required to create the desired proof points.
- One sees growth of a data acquisition strategy focused on acquiring high-value, precise data sets, such as closed claims, genomics, imaging, and cost data to address the unmet needs of HEOR researchers.
- Pharma seeks to work with vendors that provide "data catalogs" to provide transparency into the true coverage of data assets and cohort analysis tools that enable customers to explore data assets for specified cohort.
- Access to "blended" data sets that combine value-driven data sets, such as oncology imaging data coupled with SDOH data to examine health disparities in cancer screenings, is gaining increasing importance.

- There is a critical focus on establishing a patient-360 view and the use of data tokenization to link disparate sources of data.
- Vendors are using AI to establish scalable and automated expert determination services, built into data acquisition workflows replacing time-consuming manual expert determination services.
- The demand for the democratization of data is driving the evolution of self-service data marketplaces.
- RWD-based drug repurposing is being examined.
- There is enormous importance being given to social determinants of health data to meet diversity goals and drive health equity.
- There is a growing demand for deep expertise in data science, epidemiology, and HEOR research, integrated evidence strategy and planning.
- There is a shifting lens toward evidence strategy, planning, and research execution for digital therapeutics.
- Increasing priority is being given to the development of AI-enabled, evidence-generation platforms that enable clinical trial patient matching using clinical and molecular data and power intelligent clinical trial design.
- RWD analytics are being used to enable event detection, KOL identification and influence network mapping, AI/ML-driven customer microsegments and optimization, and disease prediction.
- There is a spike in the demand for regulatory-grade, real-world data to support clients' FDA filings.
- One sees growth of cloud-based central data hubs to enable citizen development, aggregated analytics, and the development of patient journeys.
- There is growth of an ecosystem of data partnerships, investment in data/analytics talent, and the establishment of RWD platforms and platform-agnostic insight generation engines.
- The requirement for partners can span early research to late-stage commercialization leveraging RWE/RWD.
- The focus is on value-based pricing, especially for cell and gene therapies.
- The development of concierge services is to assist customers navigate either to pre-blended bespoke data sets or to design their own.
- RWE is being used to optimize and enhance the effectiveness of randomized clinical trials and to demonstrate the global and local value of marketed products during launch.
- There is a growing focus on the development of synthetic control arms and external control arms.
- Decentralized clinical trial companies are entering the RWD space.
- One sees the evolution of a workforce that is equally adept at domain-specific needs and advanced data science.

LEARN MORE

Related Research

- *IDC Perspective: Vendors to Watch for RWE, Data, Platforms, Technologies, and Consulting Services* (forthcoming)
- *Real-World Evidence, Social Determinants of Health, and Digital Biomarkers in Driving Patient Recruitment* (IDC #US50382823, March 2023)
- *Retail Pharmacies – Transforming the Clinical Trial Landscape and Fueling Clinical Research as a Care Option (CRAACO)* (IDC #US50201823, February 2023)
- *IDC Perspective: Real-World Evidence and Drug Pricing in 2022* (IDC #US47235421, March 2022)
- *IDC PlanScope: Leveraging Real-World Data Monetization Models for Life Sciences* (IDC #US48585022, February 2022)

Synopsis

This IDC Health Insights study has a specific focus on real-world evidence, real-world data, platforms, technologies, and consulting services in the life science industry. This document is a qualitative and quantitative assessment based on criteria that should be important to life science companies when considering the selection of an RWD/RWE technology solution provider. This is the first time that an IDC MarketScape assessment on this topic in life sciences has been performed.

"The pharma industry is aggressively building modernized data estates of complex diverse data sets, leveraging technologies for the ingestion, integration, transformation, and tokenization of the same, to cull out extremely valuable insights that will shorten development timelines, scale the probability of technical and regulatory success, and improve clinical outcomes. Data is indeed the new gold, and data magnates are ruling this industry," said Dr. Nimita Limaye, research VP, Life Science R&D Strategy and Technology, IDC.

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets. With more than 1,300 analysts worldwide, IDC offers global, regional, and local expertise on technology, IT benchmarking and sourcing, and industry opportunities and trends in over 110 countries. IDC's analysis and insight helps IT professionals, business executives, and the investment community to make fact-based technology decisions and to achieve their key business objectives. Founded in 1964, IDC is a wholly owned subsidiary of International Data Group (IDG, Inc.).

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