



DEMYSTIFYING DATA & ANALYTICS —

How to Advance Clinical and Business Objectives

The need to develop a strong, comprehensive dataanalytics strategy to support pharma and healthcare initiatives cannot be stated strongly enough. Such efforts can provide demonstrable advantages for pharmaceutical companies as they work to advance the many clinical and business objectives that define success across the healthcare ecosystem. Developing a conscientious strategy requires thoughtful planning and coordination with a long-term view rather than a reactionary, piecemeal approach.

Data is unbiased; it can validate hypotheses or provide direction. But the primary goal is to use data analytics and modeling to develop a more accurate view of what's really going on in the lives of real patients being treated with complex prescribed treatment regimens and to develop data-driven insights and recommendations that can inform the drug company's interactions with patients, prescribers, payers and channel partners. When such a strategy is executed effectively, it can disrupt the "business as usual" paradigms that guide drug development, market access, patient adherence and overall success strategies of healthcare today. However, as most pharmaceutical companies do not have the internal resources to undertake this meaningfully, they can benefit by working in close partnership with a third-party provider who provides deep domain experience in leveraging all available sources of real-world data (RWD) and best-in-class data-analytics methodologies to develop actionable real-world evidence (RWE) that can benefit all phases of the product life cycle.

In recent years, there has been a veritable explosion of viable sources of RWD that can be leveraged to securely access important patient healthcare experiences, track the data at scale and analyze the data to create evidence. These include longitudinal patient-level and population-level data found in the following:

- ☑ Electronic health records (EHR) systems
- Insurance claims data
- Diagnostic medical imaging and laboratory testing
- Orug sales data
- Formulary and coverage data
- Patient- and disease-specific registries
- Mobile monitoring devices and healthtracking apps
- Clinical trial data for the product and prior trials for competing products



Historically, many stakeholders have considered it daunting to work with these vast and complex repositories of RWD. Today's advanced dataanalytics and modeling capabilities — based on artificial intelligence (AI), natural language processing (NLP), machine learning (ML) and other modeling methodologies — are able to efficiently access and glean value from such diverse data sources, allowing reliable analyses, simulations and predictions to be developed.



Driving both clinical and commercial success

Especially within the realm of managing chronic conditions, the patient experience is directly impacted by the ability to surmount challenges or obstacles that are routinely associated with accessing high-cost prescribed specialty therapies, affording medications and being able to adhere to complex dosing strategies and at-home drug administration. By leveraging data analytics in thoughtful ways, manufacturers can effectively address the pain points and remove the obstacles to ensure better patient experiences and outcomes as well as improved commercial success.



All stakeholders benefit

In today's competitive global market, pharmaceutical companies can't afford to waste time or resources on strategies that don't generate patient access and prescriptions or address patient and prescriber needs. By carrying out focused data-analytics initiatives that develop deep clinical insights while enabling a broader understanding of the entire patient experience, pharmaceutical companies can inform stronger relationships with all of the key stakeholder groups in the drug-development and healthcare continuum. The goal is to generate evidence and pinpoint opportunities to support prescribers and patients at all touchpoints along the way, helping to remove the obstacles they routinely face.



Pavers

Developing RWE that identifies which patients benefit most from a given specialty therapy and how the brand compares to competitor products in the same therapeutic class can help to inform negotiations related to drug pricing, formulary status and reimbursement contracts. Such datadriven efforts can improve access to therapy for patients and prescribers. Payers are more receptive to therapies that have a strong, data-driven value proposition.



Patients and physicians

With the help of data-driven insights, manufacturers can improve educational outreach materials, marketing campaigns, field activities and support programs that are aimed at patients and physicians to create a cohesive, impactful brand experience. Data-driven insights help brand teams to revise and fine-tune these outreach strategies and investments over time. Similarly, efforts to model prescriber and patient behavior can also help the brand team improve forecasting, increase prescription adoption and drive improved patient outcomes.



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Regulators

Today, there is a growing willingness among regulators to evaluate a strong, data-driven value case that is complemented by RWE when considering regulatory submissions. Recently, RWE has been used to secure regulatory approvals for both new medications and label expansions for a handful of therapies, and this bodes well for ongoing efforts in the years to come.



Pharmaceutical companies

Well-designed RWE studies can help to close important gaps that arise during the traditional randomized clinical trial (RCT) process, providing insights on how the drug performs in specific patient sub-groups that perhaps were not enrolled in the trial (thereby helping to improve diversity and inclusion in clinical research). Other RWE studies can enable comparisons against competitive products in the same therapeutic space. Important insights can be developed by studying customer relationship management (CRM) systems, phone and video interactions with patients via the product hub and other patient-service offerings, field sales efforts, prescriber trends, co-pay programs and more.

Strategic studies and modeling using such data can sharpen the overall omnichannel activities to support marketing and sales efforts. For instance, such insights can help to improve the reach, timing, volume and flow of messaging sent by the brand team to patients and physicians, driving improved ROI for the marketing investment and informing ongoing program upgrades.

With such a diverse array of opportunities for continuous improvement, manufacturers must adopt a comprehensive data-analytics strategy that aims to break down silos as much as possible — especially those that separate clinical versus commercial activities, as all such activities are related on one big continuum. When this is done successfully, pharmaceutical companies are able to understand and predict changing provider behavior throughout all phases of the product life cycle and adjust outreach strategies and investments as needed to create a cohesive, impactful brand experience. In today's global market, drug manufacturers can't afford to waste time or resources on strategies that don't generate prescriptions or effectively reconcile physician and patient needs and concerns. The common language of the healthcare ecosystem is data.



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