

DATA ANALYTICS EVOLUTION—

MOVING FROM CASTLES TO COMMUNITY



Data has become a commodity. Multiple data and analytics companies now source and procure a myriad of unique and overlapping datasets—spanning from electronic health records (EHR), patient-level claims, health care professional (HCP) prescribing, registry, lab data, and digital experience data, to name a few. These companies have made significant strides in capturing, integrating, and managing datasets for biopharma analytics teams. However, one fundamental challenge remains—generating actionable insights from datasets that drive strategy and execution. In some cases, the “data lakes” that have been built serve as functional “data moats,” with a vendor, data analytics, and information technology (IT) fiefdom ensconced at the center. In many ways, the sheer breadth of data that can be leveraged has become a barrier to insight. At 81qd, we partner with companies to democratize and drive action from data—to bring life to data by leveraging client datasets or our internal open and closed patient-level claims, EHR, and social determinants of health data to inform strategy and execution.

Three principles define how to effectively leverage data to drive commercial and medical action, personalize engagement, and improve patients’ outcomes in today’s “bigger data” environment:

MORE IS NOT ALWAYS BETTER

The volume and variety of data available should lead to better outcomes for patients, providers, and biopharma companies. The art is in choosing what not to leverage. For example, open claims data is valuable for market sizing and targeting due to volume and can also provide a less biased, broad sample for patient journey analysis. However, not all patients will have their complete journey within the dataset. EHR data, while providing clinical depth through SNOMED codes and test results, will similarly not always have the complete journey. Integrating a smaller matched closed claims with open claims and EHR makes for more robust analysis of outcomes and treatment approaches. We made these decisions when partnering with a company developing a product for an ultra-rare disease that did not have an ICD-10 code. The client was interested in estimating the size of the patient population and identifying HCPs managing potential patients for clinical trials. Without an ICD-10 code, the patient population was difficult to assess, with estimates ranging from 12,000 to 20,000 patients. Analysis of 81qd’s EHR SNOMED codes was used to assess the patient journey and define a more confident estimate of patient population. Insights from this assessment supported artificial intelligence—based predictive analytics on 81qd’s linked open claims data to identify undiagnosed patients and the HCPs currently managing them, who could then be engaged for clinical trial recruitment.



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EMPOWER AND EXPAND “CITIZEN DATA USERS”

Currently, many pharma companies and data science vendors work in silos to execute initiatives, or they limit the ownership of analytics to select functions. A “data-driven” culture will *not be driven* by a data science team; “citizen data users” must be at the wheel. “Citizen data users” are data-savvy individuals within the company who may not have data or analytics in their title but are committed to leveraging data for decision-making and sit in departments such as Commercial Operations, Marketing Analytics, and Business Intelligence. Citizen data users lack formal data science training but possess skills to leverage data for insights. They are often the bridge across “data moats” serving as the link between the data experts (data science and IT teams) and the commercial and medical business. The data scientist is the expert on data and modeling, testing hypotheses, while the “citizen data user” is the expert at context—context of what data can lead to insights that address a specific commercialization challenge. It’s the context to glean the right story/insights from the data analytics and the knowledge/experience to apply those insights to drive strategy and tactics. To be effective, they need the right tools—self-service platforms and/or easy-to-manipulate Excel workbooks to access and interrogate data. Too often, analytics partners develop over simplified black box platforms that are targeted at the data naïve or complex CSV files for data scientists and IT teams. We have found citizen users across Medical Affairs, Brand Marketing, and Thought Leader Liaison teams that are searching for tools to support strategy and execution. To drive execution, the outputs of any analytics initiative should allow citizen users to actively and independently manipulate data to define insights and enable action.

LAYERING WORKS FOR ALL SEASONS

We layer clothing to provide flexibility across different temperatures. In website analytics, a data layer carries all selected information from a website to other applications to implement tactics. Data layers support flexibility and ease of implementation by providing focused links across datasets. In many cases, pharma analytics can benefit from data layering vs. integration. Too often, teams want to integrate full datasets, but the value can come with focus. For example, we partnered with a top 10 biopharma digital engagement team to identify clinical leaders, HCPs who drive local and regional treatment practice. Another team within the client layered digital engagement data to uncover that clinical leaders engaged online 2× more than average targets. This insight was driven by layering targeted components within datasets. Layering in.



Data analytics today needs to move from the ivory tower castles of analytics and data science teams to the community of marketing and medical affairs. Crossing the “data moats” will be driven by human intelligence in structuring, supporting, and executing analysis to define the datasets that should be leveraged, empowering citizen data users with data access tools, and layering in additional datasets that provide targeted insights to accelerate strategy development and execution. It is time to lay down the drawbridge and move forward.

