The life sciences industry is facing a data deluge. Scientists estimate there will be as many as 2 billion human genomes sequenced by 2025. It is estimated that the amount of healthcare data will double every 73 days by 2020. This proliferation is overwhelming just from a numbers perspective, and presents life science leaders with several questions, such as:

“I have lots of data, but what do I do with it?”

“Our patients and my leaders expect us to use data for every decision – how do I start?”

“How do I use data to make decisions that are smarter and more cost-effective?”

Despite industry expectations, the availability of data can make life sciences leaders feel like making progress is more difficult than it should be.

However, life sciences organizations could benefit from using the wealth of intelligence to optimize the product development and commercialization process – if they can quickly access information when and where it’s needed most.

**Development**

In IBM’s opinion, clinical trials are the bedrock supporting development of new treatments and products, and more data might make them stronger.

– Protocol design: If more de-identified patient data were available to inform the early stages of protocol design, protocol authors may be better able to avoid issues encountered by other research groups and they may obtain more accurate estimates of the number of patients they could expect to recruit for their study.

– Trial execution: When initial results are ambiguous or are just below a threshold, leaders can find themselves facing a tough decision about continuing a trial. Armed with both the latest research and access to a deep database of patient claims data, leaders may be able to better evaluate insights to give them a broader evidence-based context for making that critical decision.
Launch

To get products to physicians and patients who need them, life sciences leaders could tackle the launch process with the same data-driven focus they used for the clinical trials.

– Support marketing efforts: Companies have often used geo-targeting capabilities to put their ads in front of people living in high-priority markets instead of blanketing entire regions with a message, and consumers are increasingly willing to share their location data for the sake of convenience. Now, databases of de-identified data could show where potential patients live and could help life sciences companies determine which markets to advertise in, what publications to focus on or to identify ideal locations for events.

Commercialization

With de-identified data from social networks and other sources, life sciences leaders have the opportunity to develop a more rigorous, data-based understanding of how their products are being used.

– Strategic access programs: Many pharmaceutical companies and independent organizations have developed, or are supporting, programs to assist certain patients in gaining access to medicines. Once a company knows which geographical areas may be priorities for their efforts, they could evaluate demographic information for that area – such as data on income levels – to determine if that area may benefit from specific access programs, financial disbursements or other approaches.

– Understanding product usage: No matter whether their products are used by providers and researchers or directly by patients, life sciences organizations could use big data to get a better picture of how their products impact health and well-being. For example, partnerships with network platforms, where patients have opted-in to provide data or the data is de-identified, might give companies a window into the experiences patients are having and help them determine how people are benefiting or not benefiting from their products.

Rather than be overwhelmed by the flood of available data, life sciences organizations can take steps to channel that knowledge and benefit from it. Infusing more data into product development and commercialization could lead to better offerings and products.

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