

CASE STUDY:

Using Big Data to identify high-volume clinicians who may impact local practice decisions



The following case study illustrates how one pharmaceutical client met the challenge of local physician education and dissemination of knowledge about its product by using Big Data to identify the local clinicians whom community-based specialists turn to for professional advice.

How Truven Health can help you

At Truven Health Analytics[®], an IBM[®] Company, we understand the challenges of identifying and engaging with the right audience—whether you're interested in reaching provider networks, advocacy groups, patients or payer decision-makers—we can help you identify and engage with the right stakeholders for your business questions.

Beyond individual diseases or therapeutic areas, when it comes to hard-to-reach, less conventional or specialty settings, we can help you identify patient populations and accompanying KOLs, including practicing physician networks, to deliver important insights that help you commercialize your drug.

For more information, please contact us at lifesciences@truvenhealth.com or truvenhealth.com/lifesciences/sms.

Life sciences companies often engage with physicians who are key opinion leaders (KOLs) with a strong scientific and research background and prominence on the national, or even, global stage. From our work and feedback from clients, we have found that these KOLs sometimes have less of an impact on product utilization decisions made by local physicians. Conversely, local physicians are frequently not recognized or vetted as KOLs who may impact the commercial outcome for a product.

Identifying and engaging with top-tier KOLs has become increasingly challenging for drug manufacturers that need to receive feedback from physicians. This is due in part to payment restrictions, and also because many pharmaceutical companies are vying for the same specialists' time. There is also the fundamental reality of KOLs having limited time to share and speak on a particular treatment or therapy.

While life sciences companies continue to seek the knowledge of top-tier academic and scientific leaders in their fields, there is an ever-expanding gap between the thought leaders companies are engaging with, and physicians making prescription and utilization decisions in their local practices.

In key therapeutic areas such as oncology, patients are increasingly being segmented into specific patient sub-segments, and more personalized approaches for treatment are being developed. As a result, more treatment decisions are being made at the local community oncologist level, further away from the global platforms where scientific thought leaders are speaking and engaging with industry.

Community oncologists are one subset of physicians who need to fully understand the precautions and benefits associated with administering drugs to their individual patient populations. This is why it is important that they benefit from the insights of key specialists they know and whose professional knowledge they trust.

Objective

A mid-sized pharmaceutical client was struggling with local physician education and the adoption of its product, which has a differentiated mechanism of action. The client had strong knowledge of the scientific KOL community (leaders at major associations, top authors, and recognized speakers and researchers), but these specialists did not seem to have the proximity to community-based decision-makers who have tangible impact on uptake of the client's product.

Approach

Truven Health Analytics provided the client with a Big Data approach to KOL identification in the US oncology community by building on three distinct data assets: desk research, primary research through physician surveys and clinical volume analysis.

Desk and primary research provided comprehensive data on physicians' professional activities and expertise in the therapeutic area. For oncologists working in inpatient or outpatient hospital settings, clinical volume data was extracted from Truven Health proprietary healthcare research databases. Clinical volume can be determined by the number of procedures performed or the number of diagnosed patients seen.

Through the integration of clinical volume data into the KOL identification process, we were able to rank physicians based on their practice volume. From these rankings, we weighed each physician's individual knowledge in the broader commercial context.

Determining the Clinical Specialist at the Hub for Local KOLs

Physicians responding to a phone or online survey were asked to nominate other clinicians whose expertise and knowledge impacted their individual practice patterns. For every physician surveyed, we queried our proprietary databases to calculate the physician's clinical volume based on one or more procedure or diagnosis codes specific to the project.

For each nominated KOL, we aggregated the clinical volume from all of the physicians who nominated that KOL. The aggregated clinical volume helped us to develop an index score. This score was then cross-referenced with other aspects of a KOL's profile, such as publication and research history, public speaking history, and competitive involvement. Data on a particular KOL's clinical volume—typically relevant for local KOLs who might be speakers or educators in their local areas—was loaded into their online profile and available to the client for further analysis.

Results

By closely integrating clinical volume with the technologically advanced KOL identification and profiling, we provided the client with a meaningful community of oncology specialists to whom local practitioners may rely on for keeping clinical knowledge current. These identified local KOLs are now a critical component of the client's commercialization strategy in their complex, community-driven specialty area.

Conclusion

In an increasingly competitive landscape for pharmaceutical manufacturers, where there is a widening gap between scientific thought leaders on the global stage and the clinicians delivering care at the local level, we can help pharmaceutical field teams access the information they need to better understand their KOL targets and build enduring relationships with them.

All client examples cited or described are presented as illustrations of the manner in which some clients have used IBM products and the results they may have achieved. Actual environmental costs and performance characteristics will vary depending on individual client configurations and conditions.

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For More Information

If you would like to know more about this case study, or to speak with us about how we can help you identify and engage with stakeholders globally, please contact us at lifesciences@truvenhealth.com or visit truvenhealth.com/lifesciences/sms.



About Truven Health Analytics, an IBM Company

Truven Health Analytics*, an IBM Company, provides market-leading performance improvement solutions built on data integrity, advanced analytics, and domain expertise. For more than 40 years, our insights and solutions have been providing hospitals and clinicians, employers and health plans, state and federal government agencies, life sciences companies, and policymakers the facts they need to make confident decisions that directly affect the health and well-being of people and organizations in the U.S. and around the world. The company was acquired by IBM in 2016 to help form a new business, Watson Health. Watson Health aspires to improve lives and give hope by delivering innovation to address the world's most pressing health challenges through data and cognitive insights.

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