It's a New World: Innovations in Oncology Data Analytics

By Mahmood Majeed and Prashant Poddar
It’s a New World: Innovations in Oncology Data Analytics

By Mahmood Majeed and Prashant Poddar

Sales and marketing for oncology drugs is enormously complex—a positive clinical experience or outcome alone is no longer enough to make a sale.

Oncologists expect pharma companies to deliver affordability, ease and education for their patients, even as they restrict access to sales reps. Harnessing data to produce customer insight through analytics has become essential for pharma companies, but the particulars of the oncology market have made it especially challenging.

Through two real-life case studies of oncology drug manufacturers struggling with data management challenges, this paper shows how pharmaceutical and biotech companies have improved their commercial operations through effective data management and advanced analytics.
In oncology, there's an enormous sales and marketing opportunity for the taking—and a great deal of that opportunity lies in managing and leveraging analytics to drive growth.

The market will grow enormously in the coming years, as industry observers estimate that oncology drugs will soon top $100 billion in annual sales. Accompanying that sales explosion are more product launches, a crowded market and products that serve smaller and smaller niches.

At the same time, reduced access for sales reps can make it difficult for oncology drug makers to get their message to their customer base. According to ZS’s 2014 AccessMonitor™, reps make 12 or fewer physician calls annually for 86% of oncologists. This comes at a time when delivering information regarding products will be more important than ever, as 19 new products were released in 2013, while more than 2,000 are in development.

And sales and marketing for oncology drugs is enormously complex—a positive clinical experience or outcome alone is no longer enough to make a sale. Oncologists expect pharma companies to deliver affordability, ease and education for their patients, even as they restrict access. Harnessing data to produce customer insight through analytics has become essential for pharma companies, but the particulars of the oncology market have made it particularly challenging (see Figure 1).

MOST COMMON CHALLENGES FACING ONCOLOGY COMMERCIAL OPERATIONS

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imperfect affiliations</td>
<td>73%</td>
</tr>
<tr>
<td>Indications for product use are unclear in most sources</td>
<td>73%</td>
</tr>
<tr>
<td>Developing or managing triangulation rules to consolidate data sources</td>
<td>64%</td>
</tr>
<tr>
<td>Allocating account data to physicians</td>
<td>64%</td>
</tr>
<tr>
<td>Selecting a data source for different applications</td>
<td>55%</td>
</tr>
<tr>
<td>Lack of insight into practice setting</td>
<td>36%</td>
</tr>
<tr>
<td>Data log mismatched across sources</td>
<td>27%</td>
</tr>
<tr>
<td>Block of competitor data</td>
<td>27%</td>
</tr>
<tr>
<td>Collecting pathways and protocols</td>
<td>18%</td>
</tr>
</tbody>
</table>

Figure 1. Commercial operations leaders report common challenges that include imperfect affiliations, difficult triangulation rules and problems in selecting a data source for different applications.

1 “Cancer Drug Market Zooms Toward $100B, Thanks to Costly Targeted Therapies,” FiercePharma, June 8, 2014.
3 Source: Adis; Trialtrove
However, effective data management and advanced analytics can enable sales and marketing operations through identifying the right customers and delivering the right customer experience resulting in a sustainable competitive advantage. An industry survey found that more than 75% of firms with an oncology portfolio find it difficult to develop effective sales and marketing processes such as field force deployment, customer valuation and customer targeting, giving a major leg up to companies that can leverage disparate data sources using state-of-the-art analytics.

Through case studies, this paper shows how pharmaceutical and biotech companies have improved their commercial operations through effective data management and advanced analytics. Each example shows a specific data challenge to oncology commercial operations, and how the right approach leads to effective solutions.

4 ZS research, September 2013.
Case 1: Identifying key oncologist influencers

**Situation:** As with most treatment areas, key opinion leaders (KOLs) and local influencers in oncology shape the treatment paradigm or referral flow of patients in their practice settings and communities. An oncology sales leader we worked with wanted to leverage this idea of local KOLs shaping the treatment paradigm to better guide sales force effort and improve effectiveness.

However, the company struggled to compile the information on key influencers needed for this initiative. It needed to figure out how to identify those key influencers that its sales team did not recognize.

**Challenge:** There is no readily available, robust data source that simply lists all the key influencers for a therapy area. Furthermore, companies need to deduce “influence” from other observable attributes such as patient referral, academic reverse citations, group practice setting and professional society memberships. These attributes need to be synthesized from various different types of sources.

**Solution:** The company developed an initial list of key local influencers and cross-verified them with the help of its sales force. The company then created a process for periodic updates to the list, and integrated the list into their targeting and performance tracking work streams.

The solution required integrating large amounts of structured data from different sources such as patient claims and electronic medical records, and triangulating with unstructured data such as data from academic journals and professional society meetings, ultimately leveraging the resulting customer foresight to guide the targeting program.

Well-devised, proven analytical algorithms with triangulations and advanced visualization techniques helped accurately identify local influencers. The result: The capability to identify and target local influencers has significantly bolstered the company’s oncology sales force effectiveness in driving product growth.
Case 2: Good data—but not the right data

Situation: A company had excellent sales data about its oral oncology drug, sold through a specialty pharmacy-distributor network with contracts to provide product data at the patient transaction level. However, the company lacked a reliable source for determining the relevant market opportunity, as well as customer usage patterns of key competitors.

Challenge: The complexity lay in the fact that competitors’ products were used for multiple indications: Not all of the indications were relevant for the oral oncology product; some competitor products were administered intravenously and thus captured data differently (through hospital accounts instead of prescribers); and some competitor products were blocked, resulting in incomplete data from vendors.

The company needed to piece together this disparate information—though it could measure its own performance, it could not measure performance in relation to competitors and the available market opportunity.

Solution: The solution lay in recognizing that incomplete data still contains vast amounts of valuable information.

The company compiled and maintained a physician-to-account affiliation database, taking into consideration nuances such as multiple affiliations and ongoing changes. It could then allocate product sales from accounts to prescribers using allocation algorithms that leveraged claims and EMR data with sufficient accuracy for estimating market potential.

For some competitor products, patient claims enhanced prescriber sales data to fill in capture gaps. Available information from primary research and claims data separated relevant indications from total competitive sales at a regional level. Sophisticated technology made it efficient to repeat the process.

As a result, the company had a fuller picture of the market and relevant customers, allowing it to guide its sales and marketing efforts with more precision.
Bringing it all together

As seen in both examples, integration of analytics processes can automate sophisticated analytics. Integration of analytics and technology provides significant competitive advantage and foresight in areas that were previously impossible without sizable manual effort.

Just as oncology drugs are extraordinarily complex, so are the analytics to support oncology commercial operations. Pharma companies need to leverage primary research and secondary data—even if partial or incomplete—and measure the effectiveness of their sales and marketing across all customer touch points.

But, as noted above, we see this complexity as a positive for pharmaceutical and biotech companies.

Pharmaceutical companies can gain a competitive advantage through analytics, and have a centralized view of the oncology customer universe. Companies can thus discover opportunities and provide relevant and realistic targeting guidance. The right systems in place to manage data and produce insight allows an oncology treatment can live up to its true potential.
Prashant Podar, a ZS Manager based in Evanston, Ill., has worked on a variety of sales and marketing issues in the U.S. pharmaceutical industry. His areas of expertise include oncology commercial analytics, customer-facing strategy and team deployment, and managed care analytics. Prashant has also worked on the development of several ZS optimization software products.

Mahmood Majeed, a ZS Principal based in Evanston, Ill., is a leader in ZS’ Business Technology practice and leads the data management reporting and analytics area within ZS’ Oncology and Specialty Therapeutics vertical. For nearly two decades, he has worked with clients in numerous industries, including pharmaceuticals, biotech, medical products and services, and high tech. Mahmood’s expertise includes commercial technology transformation, with a specialized focus on sales and marketing effectiveness enterprise mobility, and implementing commercial technology capability building and operations for Fortune 500 companies.
About ZS

ZS is the world’s largest firm focused exclusively on improving business performance through sales and marketing solutions, from customer insights and strategy to analytics, operations and technology. More than 3,000 ZS professionals in 21 offices worldwide draw on deep industry and domain expertise to deliver impact where it matters for clients across multiple industries. To learn more, visit www.zsassociates.com or follow us on Twitter (@ZSAssociates) and LinkedIn.