Q1 2016

VOI CONSULTING
CASE STUDY

Employing Data Analytics to Reverse Negative Marketing ROI for Brand Drug Company

www.voiconsulting.com

Introduction

The days when market segmentation exercises yielded a handful of large, homogenous customer blocks are long gone. Like modern political campaigns, today's pharmaceutical companies must be able to identify, understand, and effectively communicate with target audiences at the micro-level. At VOI Consulting, we help our clients adapt to the challenges of an ever-changing environment by combining state-of-the-art data analytics with decades of pharmaceutical industry experience to create tailored strategies that deliver results. This case study describes one engagement where VOI successfully employed these resources to resolve a marketing challenge that might otherwise have seriously and irreversibly eroded sales of our client's brand drug.

Like modern political campaigns, today's pharmaceutical marketers must be able to identify, understand, and effectively communicate with target audiences at the micro-level.

As readers of the case study will learn, VOI was brought in to help a pharmaceutical company identify why a major marketing effort was failing to achieve desired results. After breaking down promotion-response activity to the individual-physician level, we found that prescribers of the leading competitive drug tended to respond positively to promotions but prescription volume and share actually exhibited net declines among current, loyal prescribers who were exposed to the same materials. Our analysis further revealed that this problem was ultimately caused by a failure to modify the campaign for different audiences. This case study describes the data analytics we performed to identify and understand these dynamics and how we were able to reverse a negative marketing ROI with a more customer-driven segmentation and targeting strategy.

Note that all confidential information has been removed or disguised in this case study.

Project Description

VOI Consulting was brought in to analyze a marketing campaign for a late-in-lifecycle oral cardiovascular drug. The Client's goal was to protect and increase market share among physicians already prescribing their product (Molecule A) and gain share among those prescribing a competing product (Molecule B). Molecule B had a more established position with over 90% share of the two-molecule market, a more favorable data for certain conditions, and was available in generic form but it carried a relatively common adverse event that Molecule A did not. In patients at risk of this particular AE, Molecule A was substantially safer than Molecule B.

Although our Client's campaign, which included sales calls, direct mail, and sampling, had been underway for over a year, prescriptions for Molecule A were essentially unchanged – up a little one month and down a little the next but flat overall. Hence, the need for an objective review of the program. As described below, VOI performed a deep-data analysis of the marketing efforts, findings of which led to realignment of the Client's messaging and targeting strategies with a dramatic improvement in marketing ROI.

Quantitative Analysis

Design

To assess the effectiveness of the Client's Molecule A marketing, we examined changes in new and total prescriptions during the three months immediately prior to launch of the campaign (the "before" period) and during the three months at the end of the campaign's first year (the "after" period).[1] To provide true micro-level understanding of target behavior, activity was tracked at the individual physician level using IMS Prescribing Numbers for identification.

An interesting early finding was that, although the two products are close therapeutic cousins, nearly 90% of prescribers wrote for Molecule A or Molecule B exclusively and, among the roughly 10% that prescribed both products, one product almost always received a clear majority of prescriptions. Further, the Client's marketing campaign had targeted approximately 50% of Molecule A prescribers and one-quarter of Molecule B prescribers, thus leaving large groups in both the targeted and non-targeted segments. With this in mind, prescribers were grouped into one of the four groups shown below for further analysis.

Table 1 - Analytical Segments

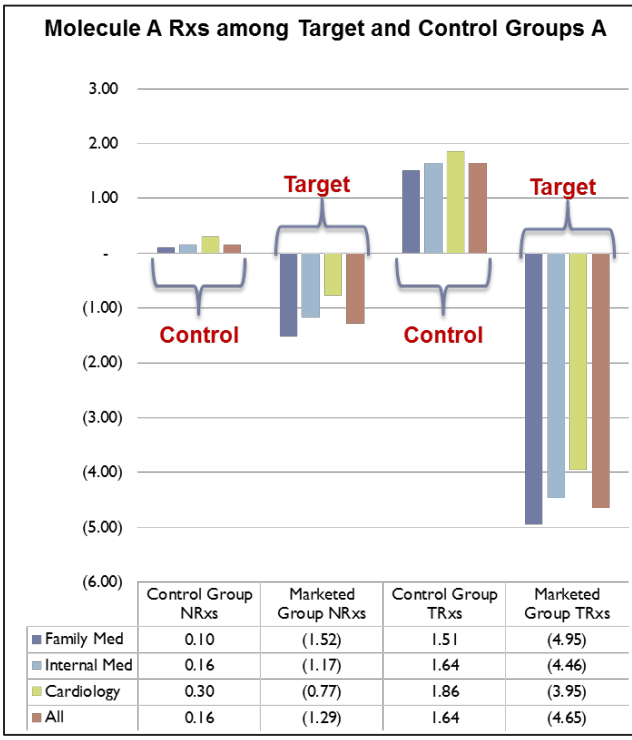
	Prescribe Molecule A (All or Majority of Rxs)	Prescribe Molecule B (All or Majority of Rxs)
Targeted	Target Group A	Target Group B
Not targeted	Control Group A	Control Group B

[1] Put differently, the "after" period constituted months 10, 11, and 12 after campaign launch.

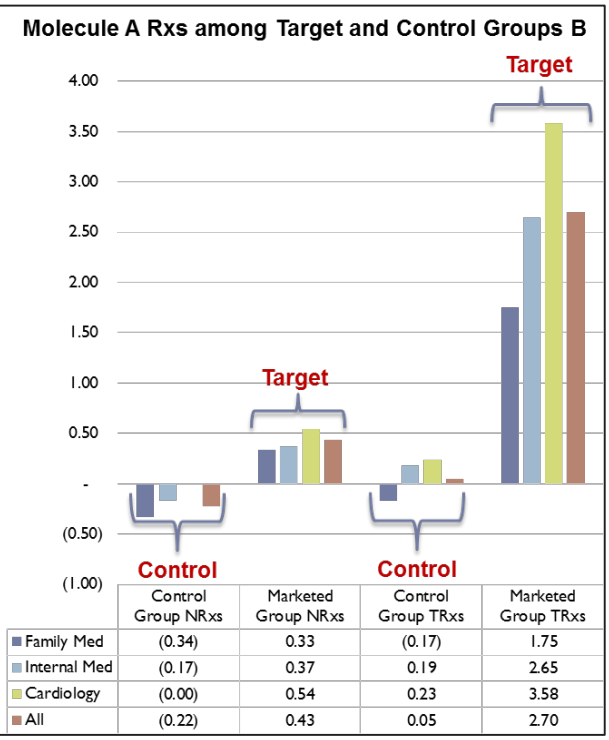
Results

Data analytics revealed that there was a statistically significant change in before and after Molecule A new and total Rxs between targeted physicians and the control group. Unfortunately, the change was the opposite of what one would want or expect from a marketing campaign: specifically, as shown in the left-hand chart in Figure 1, being on the receiving end of Client marketing materials was associated with a decline in Rxs during a period when non-targeted physicians (Control Group A) actually showed a trend toward increased activity. On the other hand, and as shown in the right-hand portion of Figure 1, physicians targeted because they were prescribers of Molecule B showed an increase over their control group in both new and total Rxs for Molecule A. Furthermore, these trends were consistent across different types of physicians.[2]

Figure 1 - Average Per Prescriber Changes in Before and After Molecule A Rxs by Analytical Segment



	Control Group NRxs	Marketed Group NRxs	Control Group TRxs	Marketed Group TRxs
Family Med	0.10	(1.52)	1.51	(4.95)
Internal Med	0.16	(1.17)	1.64	(4.46)
Cardiology	0.30	(0.77)	1.86	(3.95)
All	0.16	(1.29)	1.64	(4.65)



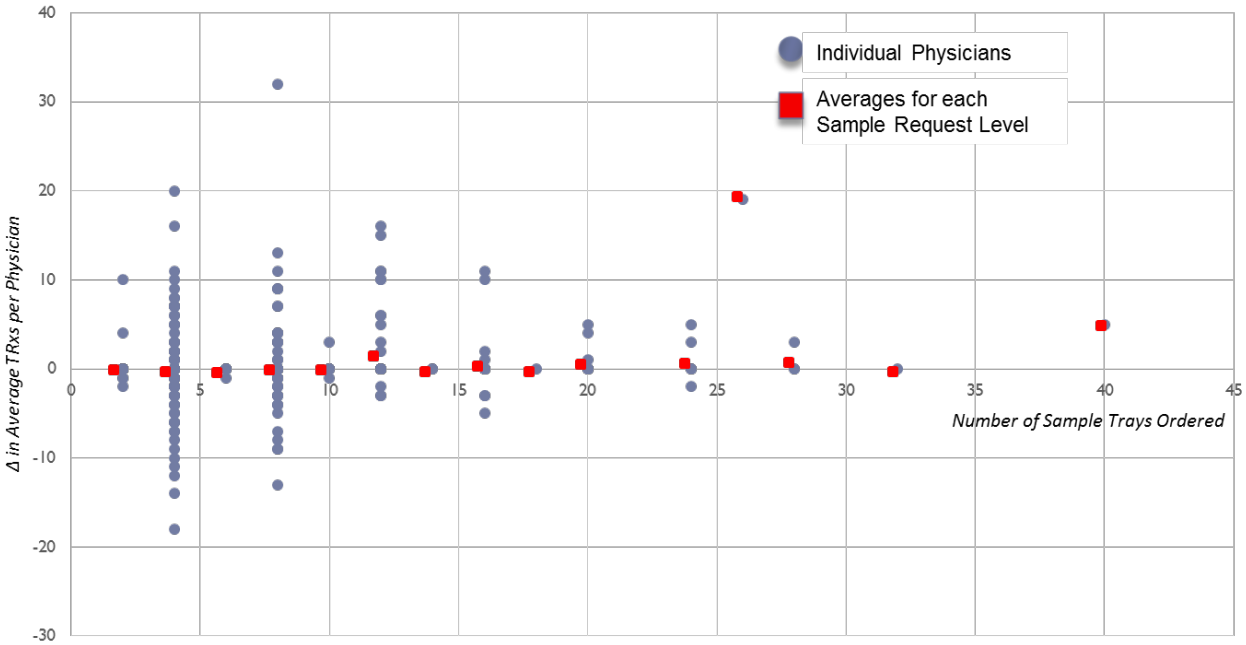
	Control Group NRxs	Marketed Group NRxs	Control Group TRxs	Marketed Group TRxs
Family Med	(0.34)	0.33	(0.17)	1.75
Internal Med	(0.17)	0.37	0.19	2.65
Cardiology	(0.00)	0.54	0.23	3.58
All	(0.22)	0.43	0.05	2.70

Detailed before-and-after analysis was also performed on physicians who were given samples of Molecule A. Here again, the results were contrary to what would ordinarily be expected or desired from such an effort. Looking at Figure 2, we see that while there was a wide range of response at the individual-physician

[2] Although the analysis was conducted at the individual-physician level, specialties were also analyzed to assist in identifying larger trends.

level (blue dots), the average change in total prescriptions (red squares) at almost every level was essentially zero. In fact, the average change in monthly TRxs was only +0.1 and, after accounting for costs, the annualized ROI of the sample program was -18%. Whereas samples were intended to seed the market for new prescriptions of Molecule A, our analysis found that they were, on the whole, displacing paid prescriptions that would have otherwise been written.

Figure 2 – Relationship between Sample Requests and Subsequent TRxs for Molecule A



Qualitative Analysis

Results of our quantitative analysis showed that, with the exception of a positive response among prescribers of Molecule B, the Client's marketing campaign was inefficient at best and actively harmful at worst. The next steps were to figure out what was causing these problems and identify ways to correct them.

Toward that end, we performed an audit of the Client's marketing materials which led us to conclude that the message was too scattered: in particular, as a result of category's mature lifecycle stage, prescribers had well-entrenched attitudes and prescribing habits regarding the two products. As such, they were not paying much attention to general marketing messages on indications and usages. However, the one message that did appear to be breaking through, at least among prescribers of the competitive product, was that Molecule A did not cause the previously mentioned adverse event that occurred in a subset of Molecule B patients. Supplemental research among Molecule B prescribers confirmed that this was indeed

a meaningful competitive advantage for Molecule A that could be exploited to convert at least a portion of competitive prescriptions.

The fact that our quantitative analysis had revealed that very few physicians were writing for both Molecule A and Molecule B suggested another conclusion: specifically, that the two products were being written by different physicians for different purposes. Again, a relatively small amount of supplemental research confirmed that this was the case.

Recommendations

With our quantitative and qualitative analyses complete, we had the foundation to recommend to the Client the following changes in their marketing strategy:

Our quantitative analysis showed that the Client's marketing campaign was inefficient at best and actively harmful at worst. The next steps were to figure out what was causing these problems and identify ways to correct them.

Pursue separate marketing strategies for Molecule A and Molecule B prescribers

Quantitative analysis showed that Molecule B prescribers were already responsive to the Client's current promotional efforts. To strengthen the pitch to these physicians, we recommended that they be targeted with a campaign built exclusively (or as exclusively as Fair Balance regulations will allow) around the message that Molecule A is a second-line treatment for patients suffering from the adverse event occurring in a subset of Molecule B patients.

This positioning strategy offered the best opportunity to leverage Molecule A's most meaningful competitive advantage to maximum effect. Given Molecule B's dominant position in the category and the incidence rate of the AE in question, our calculations showed that for every 1% of the patient group affected by the adverse event, switching to Molecule A would create a 3.2% increase in total prescriptions for our Client's product.[3] Furthermore, the chronic nature of the cardiovascular indication means that this is sustainable business.

In addition, research found that some Molecule A prescribers believed the product was available in generic form; an understandable perception given that it is, in fact, a very mature product. We hypothesized that promotional activity may have triggered recognition that the product was still brand-only and therefore more expensive than generic versions of Molecule B. The best response in this situation was to cease marketing to Molecule A prescribers altogether. To the extent that any marketing efforts should be aimed

[3] To assist with this marketing message, we urged the Client to explore a number of avenues including publishing review articles on the link between Molecule B and hormonal adverse event. In addition, based on prior experience, we concluded that our client had sufficient data to support a comparative claims-based campaign for Molecule A.

at Molecule A prescribers, we recommended limiting promotional efforts to occasional "service-oriented" content. This would consist of issuing coupon cards and similar items, along with a reminder message, to promote use and lower patient costs.

Among Molecule B prescribers, target only the primary care physicians

As our quantitative analysis showed, specialists show a very strong preference for Molecule B. This preference, which was largely unaffected by marketing efforts, was mostly likely due to Molecule B's labeling advantage in high-risk populations (i.e. those more likely to be seen by specialists). Molecule A's adverse event advantage would be considerably outweighed by the data on Molecule B's efficacy among high-risk patients and therefore we recommended that resources not be wasted on specialists.

On the other hand, market knowledge suggested and quantitative analysis confirmed that Molecule A was already relatively strong among family and internists, physicians more likely to treat low-risk patients among whom the AE issue would have greater resonance. Eliminating specialists from the target group freed up additional resources for use with the much larger primary care market.

Restrict samples to a small number

Even before factoring in the cost of the sample program, our quantitative analysis showed that, with the exception of a few extreme outliers, the highest increase in total prescriptions was among those asking for two sample trays. Higher sample levels resulted in diminishing marginal returns, which after factoring for costs, resulted in negative ROI. There appears to have been a displacement effect at work, in which samples replaced rather than triggered paid prescriptions. With a two-tray limit, the promotional effect would be maximized at lower cost of fulfillment. Nonetheless, we recommended allowing multiple orders over time to maintain interest among the most involved physicians.

Use copay cards to offset cost comparisons

The discount cards should be targeted at prescribers of each product, but for different reasons. Distributing to Molecule B prescribers would lower the barrier to prescribing it as second-line therapy. Distributing to current Molecule A prescribers could help offset the lack of a generic alternative. We also recommended offering the cards through physicians rather than pharmacies to make them easier to track and provide another marketing message to the most important decision-maker.

Summary

When VOI was first contacted, our client simply knew that their marketing campaign wasn't achieving the results they wanted. A relatively short time later, they knew that the situation was actually worse: marketing was causing prescriptions to decline among product loyalists while their extensive sampling effort was displacing rather than increasing paid business. Among all this bad news, however, was a very significant piece of goods news: the reason that prescriptions on the whole were holding steady rather than declining was because prescribers of Molecule B were responding positively to the message regarding Molecule A's adverse event advantage.

We arrived at these findings through in-depth analysis of empirical data but we did not stop there. Instead, we asked the questions necessary to arrive at strategic solutions. In this case, what was driving current prescribers to respond negatively to promotions? Why did the same promotions have the opposite effect among competitive prescribers? Why was an extensive sampling program having such a limited effect on market activity?

In the end, our analysis showed that the original marketing efforts were flawed because the client had not explored implications for upsetting the status quo among loyal prescribers, a mistake which led to a one-size-fits-all approach that failed to reflect significant differences in target audiences, and to the most effective message (i.e. the direct comparative claim) being buried amongst a variety of weaker messages. Separately, the number of samples offered was excessive and served to depress rather than promote paid prescriptions.

By jettisoning an underperforming group and narrowly tailoring marketing efforts to specific subsets of physicians, the Client was able to channel resources toward more effective uses. In addition, since we isolated an adverse event as Molecule A's most meaningful characteristic, the Client was able to leverage this advantage to capture prescription share among the large and essentially untapped segment of the market that responded positively to product promotions.

It is also worth noting that IMS data served as the foundation for our quantitative analysis. This is a source that most commercial-stage pharmaceutical companies have access to and, in the larger scheme of things (for example, when compared against marketing efforts that undermine rather than enhance the business), it is relatively inexpensive to obtain even for companies that do not already subscribe. There was, in other words, no need for our Client to obtain expensive information or conduct extensive time-consuming market research. Rather, the challenge was to find creative ways to use available sources of information to solve a previously unidentified problem.

We believe the preceding illustrates how VOI tackles client challenges: we delve into the data, draw upon our years of advising the pharma industry to determine cause-and-effect relationships, and provide our customers with a range of actionable strategic responses. Although this case study is marketing-specific, VOI brings a similar rigorous approach to the array of challenges facing life science companies around the world.

About VOI Consulting, Inc.

Founded in 1998, Value of Insight Consulting, Inc. (VOI) is a pharmaceutical consulting and publishing company dedicated to providing pharmaceutical and biopharmaceutical clients with fact-based analysis and business intelligence to meet market challenges in today's highly competitive global environment. Employing innovative research techniques and advanced analytical tools, our services help clients minimize risks, cut costs and maximize commercial opportunities.

VOI stands for Value of Insight and plays on the statistical term "Value of Information," which describes the difference between expected outcomes in the absence of information and expected outcomes in the presence of information derived through applied research techniques, sound analysis and experienced judgment. For our clients – who have included 19 of the top 25 pharmaceutical companies – this insight translates into measurable success.

VOI Consulting's reputation as a leading publisher of pharmaceutical industry reference books and in-depth pharmaceutical market research reports has distinguished the company as a trusted source of research and analysis.

Our services are global in reach, are relevant for any therapeutic category and span the entire range of the pharmaceutical lifecycle. Whether you are planning a clinical trial or need to assess the market for a generic drug, whether you operate in developed countries or are looking at emerging opportunities in countries like China, India, Russia, Turkey or Latin America, VOI Consulting can help you execute more effectively.

Contact Information

Value of Insight Consulting, Inc.
2522 Center Avenue
Fort Lauderdale, Florida 33308
Phone: (US) 954 302 8852
Fax: (US) 954 252 3927
www.voiconsulting.com
publications@voiconsulting.com

To learn more about VOI Consulting's life sciences advisory services, contact us at (US) 954 302 8852 or visit our website at www.voiconsulting.com.