MAY 19, 2020

More Accurate Product Forecasting

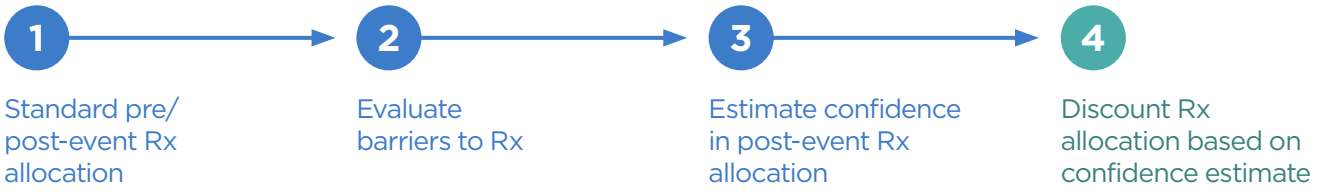
> What market share will go to our new product?

> How will this market event impact our current share?

These are some of the most critically important questions in pharmaceutical market research, with far-reaching implications. An accurate prediction of future market share can help optimize strategy beyond sales and marketing, impacting decisions as far-reaching as manufacturing and future product development.

Yet as most market research professionals know all too well, accurate predictions of future market share are extremely challenging to achieve. The typical approach is to present healthcare providers (HCPs) with information about a new product or market event, ask them to estimate their anticipated use of products in the class, and then average their responses. However, HCPs often think about what they could do in the future, rather than what they would do in real life. This typically results in an overestimation of future preference share (or patient share) for new products, creating unrealistic projections of demand that lead to poorly informed business decisions. Most market researchers are aware of this tendency to overstate uptake of new products, but they don't understand the root causes. Lacking a better approach, they will apply an arbitrary "haircut" to the estimate – for example, simply slashing the estimate in half. Not only is this approach arbitrary, it doesn't take into account the fact that HCPs may differ in their tendency to overstate uptake; simply applying the same rule to every respondent undermines subgroup analyses and predictive modeling efforts. We have developed a four-step approach that draws from social science to provide a more accurate estimation of preference share. As we discuss below, our approach addresses the underlying cause of overstatement of future behaviors, as well as additional cognitive processes that lead to imprecise estimates.

Figure 1: Fulcrum's core approach to minimizing preference share overstatement



The Core Approach

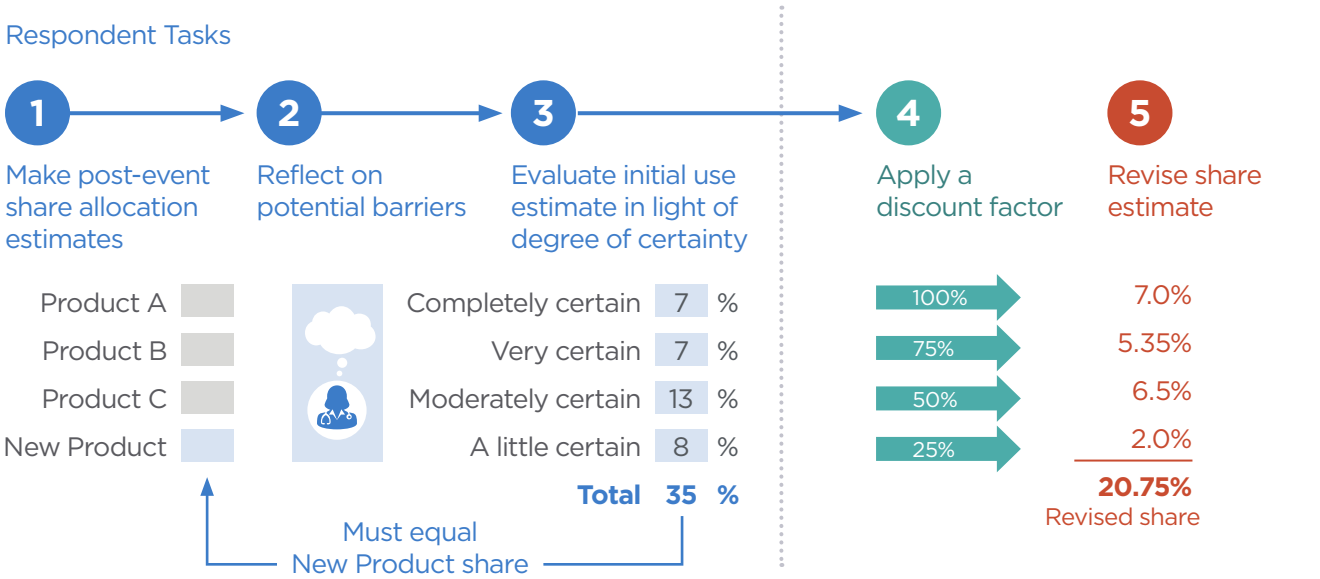
STEP 1: As shown in Figure 1, our core approach begins with the typical task most market researchers use. HCPs complete an allocation of their current prescribing behavior in a specified patient group. Respondents are next shown information that may affect prescribing, such as the introduction of a new product or another market event, and complete a "future" prescribing allocation based on the new information. While most market researchers calculate preference share solely based on this information, we use three additional steps to refine uptake estimates.

STEP 2: Following the standard pre/post event analysis, we provide HCPs with an opportunity to think more realistically about how they would use products in the future scenario by considering drivers of and barriers to behavior change. In a typical task, we ask HCPs to rate drivers and barriers on how they would impact product usage; this forces the HCPs to internalize potential factors impacting the use of a new drug in the actual clinical setting. Assessing drivers in addition to barriers helps prevent HCP over sensitization to barriers, and provides additional insight into what influences prescribing behavior.

STEP 3: We now ask HCPs to assess how confident they are in their previous allocation, given the potential prescribing barriers they just assessed. We choose verbal qualifiers (e.g. completely, very, moderately, a little) identified via social science research as corresponding strongly and consistently with a measured intensity level (e.g., 100%, 75%, 50%, 25%).

STEP 4: This estimation of confidence in the initial post- event allocation provides the basis for discounting their original preference shares (see Figure 2).

Figure 2: Discounting share preference by accounting for confidence estimates



Additional Considerations

Our core approach addresses one of the largest sources of bias in preference share estimates: HCPs' failure to consider real-world barriers to prescribing. We further tailor each project to address other relevant sources of bias. Some examples are provided below.

Pull to the middle. The cognitive tendency to "pull to the middle" can color usage estimates. This is particularly problematic when existing classes or products of interest are known to have very small or very large shares. When respondents aren't very confident in their estimates, the "middle" of the scale (e.g., 50% if there are two products or 25% if there are four products) serves as an estimation anchor, so products with low shares are overestimated, while those with high shares are underestimated. We help eliminate pull to the middle by providing the respondent with a more localized anchor in the form of real-world statistics (see Figure 3). By definition, these real-world anchors are closer to the HCPs' actual behavior than their perceived "middle of the scale" would be, which mitigates the impact of this cognitive bias on the resulting estimate.

Figure 3: Real-world anchors mitigate "pull to the middle" effect

A1. The table below shows the percent of dyslipidemia patients in the US taking each class of medication, according to national prescribing statistics. We would like you to tell us how this compares with the dyslipidemia patients in your practice. What percent of your patients on pharmaceutical therapy for dyslipidemia would you estimate are taking each of the following classes of medication? Please include prescription medication only, not OTC. *Note that your answers may sum to more than 100% if some patients are on multiple therapies.*

		National Statistics	Your Practice
1	Statins	82%	☐ %
2	Fibrates (e.g., Lopid, TriCor, Trilipix)	9%	☐ %
3	Ezetimibe (as Zetia or Vytorin)	5%	☐ %
4	Niacin (e.g., Niaspan, Simcor)	2.5%	☐ %
5	Lovaza	2.1%	☐ %
6	Bile Acid Sequestrants (e.g., Welchol)	1.4%	☐ %

Rounding. Respondents tend to provide share estimates in increments of 5%. This tendency can be particularly harmful to estimates when the therapy area is crowded with a number of small players, each of which may have shares less than 5%. The cumulative impact of rounding up each of the small-share products can be quite detrimental to the overall allocation. Real-world anchoring (see Figure 3) helps mitigate the rounding tendency; in addition, when we ask an HCP to consider several classes and multiple brands within each class, we use multi-step allocations as an additional hedge against rounding. The HCP first provides allocations at the class level, which then drills down to provide further estimations at the brand/product level. Using this strategy, we can assess the total treatment landscape by multiplying brand-within-class estimates by class estimates (see Figure 4 for an example). This approach reduces respondent overstatement of smaller-share brands, and improves overall accuracy.

Figure 4: Multi-step allocations help sidestep the tendency to round to increments of 5%

B1. First, please assume that the patents for Niaspan all expire and that generic versions of this product become available. Assume that, like most generics, there is very good formulary coverage. If generic versions of Niaspan had been on the market for at least 1-2 years, **what percent of your patients on prescription pharmaceutical therapy for dyslipidemia would you estimate would be taking each of the following classes of medication?** Note that your answers may sum to more than 100% if some patients are on multiple therapies. For your reference, your previous answers are shown in the table below.

☐ The percent of my patients taking each medication would not change

		Current Rx	Future with generic Niaspin
1	Statins	[A1_1]	☐ %
2	Fibrates (e.g., Lopid, TriCor, Trilipix)	[A1_2]	☐ %
3	Ezetimibe (as Zetia or Vytorin)	[A1_3]	☐ %
4	Niacin (e.g., Niaspan, Simcor **INCLUDING generic Niaspan**	[A1_4]	☐ %
5	Lovaza	[A1_5]	☐ %
6	Bile Acid Sequestrants (e.g., Welchol)	[A1_6]	☐ %

B2. If generic versions of Niaspan had been on the market for at least 1-2 years, **what percent of your patients starting on Niacin therapy for dyslipidemia would you estimate would start on each of the following medications?** For your reference, your previous answers are shown in the table below.

☐ The percent of my patients taking each medication would not change

		Current Rx	Future with generic Niaspin
1	Niaspan (branded or generic)	[A2_1]	☐ %
2	Advicor, Simcore	[A2_2]	☐ %
	TOTAL	**100%**	**--%**

Summary

Overstated and imprecise share estimates are a chronic issue in healthcare market research. Preference share assessed via primary market research plays a pivotal role in key business decisions, and inaccuracy can negatively impact nearly every aspect of brand strategy.

Building on social science research, our approach addresses the cognitive shortcuts underlying these inaccuracies, resulting in better predictions and, ultimately, more informed decisions for our clients.

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Fulcrum Research Group specializes in rare disease and healthcare-related market research with a focus on creativity, teamwork, and partnership. We opened our doors in 2010 in Waltham, MA.