

PRODUCTS, PATIENTS, AND PERSUASION

Uncovering what really influences
physician behavior.

Rob Peters

Senior Vice President, Strategy

Meredith Terry, PhD

Behaviorist

EXECUTIVE SUMMARY

To successfully adapt to a value-based environment, pharmaceutical companies (pharma) have to first overcome the hurdle of physician buy-in. They need physicians to acknowledge their brand, realize its benefits compared with others, and adopt it as part of standard practice. This is often achieved by disseminating data ahead of a big launch or having sales representatives visit prescribing physicians.

Using awareness, education, and sales strategies has been the traditional route to accomplishing this goal, but is that really the most effective way? Getting physician buy-in by relying on the product only is often a tall order because it requires a change in physician behavior. Habits run deep, especially in chronic disease categories where new products often offer only incremental improvement and little differentiation from products already in the marketplace.

Pharma tends to follow a conventional and product-centric formula to marketing and commercialization that focuses on data dissemination and brand attributes – a formula that assumes the message and the delivery channel are compelling in their own right.

- *But what if messaging isn't enough to change behavior?*
- *What if the traditional playbook needs to change?*

As experts in human health behavior, we know real-world behavior is often driven by factors that are not easily articulated — factors that don't show up in any market research studies. Addressing these factors and creating behavior change will not happen through information dissemination alone. Physician decision making doesn't take place during a sales detail; it takes place during interaction with a patient.

With this in mind, we conducted primary research with a unique methodology designed to reflect the real-world environment in which patients and physicians interact. The study included 341 primary care physicians and specialists across 4 disease states: type 2 diabetes, migraine, inflammatory bowel disease, and asthma.

Findings from our study have critical implications for pharma — implications that call for a more effective and efficient approach to product marketing and commercialization founded on the fundamental drivers of decision making, not just product efficacy and safety.

WHAT WE STUDIED AND WHY

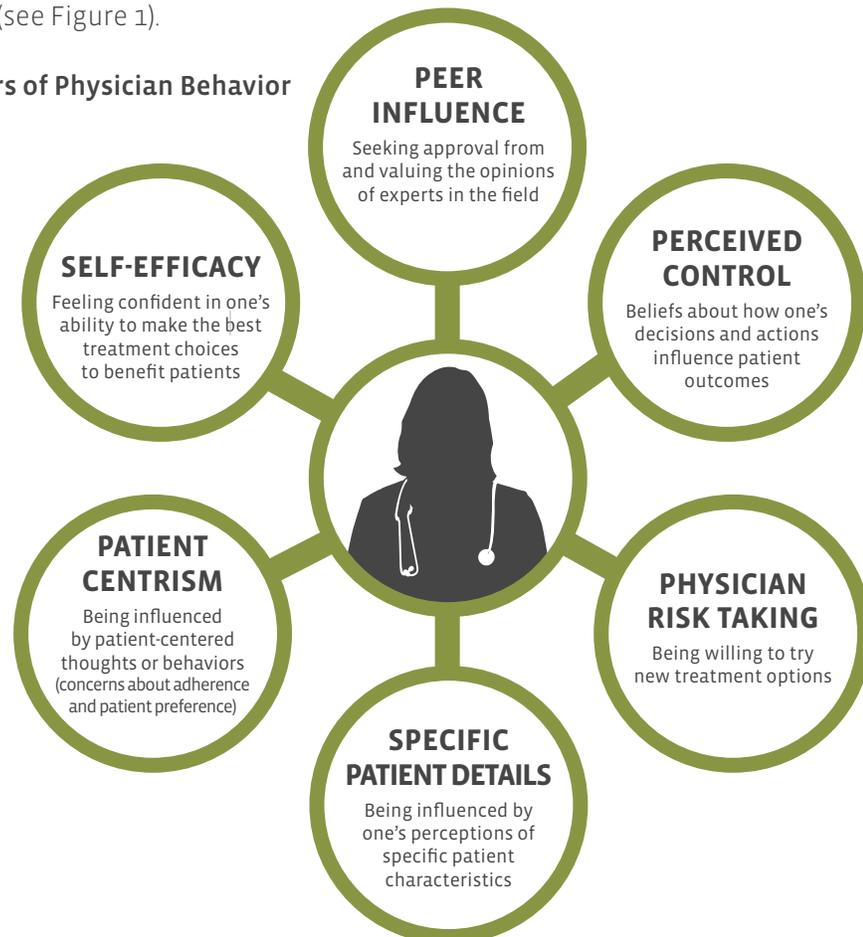
Deeper than data

For decades, pharma has assumed that doctors think rationally and are motivated by one thing — compelling data. Based on our expertise in health behavior, we know that often what influences individuals is much more complex.

We approached this study seeking to identify insights and strategies that can be applied to the real world. We wanted to uncover the deeper, real-world factors that are most likely to drive physicians to make one choice over another and to determine whether these factors vary across disease states and specialties.

We started by examining decades of published behavioral science research to identify potential drivers of physician decision-making and behavior across chronic disease states. Specifically, we chose to focus on factors that can be changed through evidence-based communication strategies (see Figure 1).

Figure 1: Underlying Drivers of Physician Behavior



METHODOLOGY

Real context for the real world

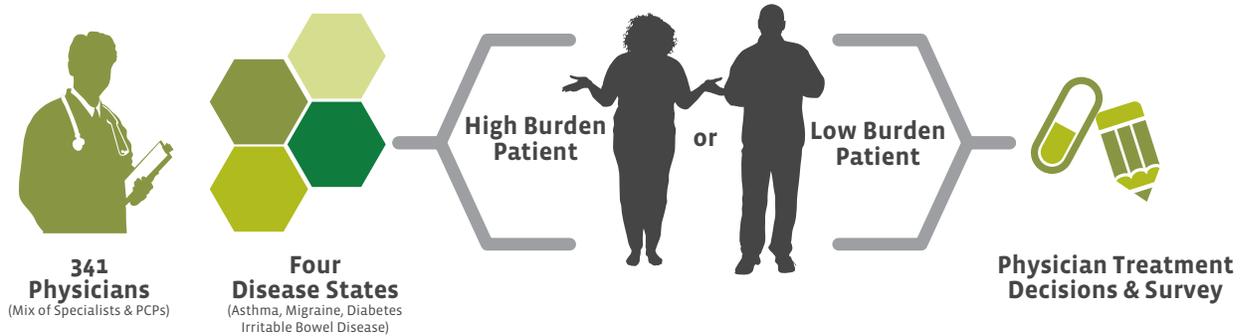
Patients are real people with struggles, hopes, and misconceptions. Disease and life are intertwined, and even though the exam room may be a sterile environment, patients do not usually check the real world at the door. Because physicians have to account for these real-world factors in their interactions with patients, we designed our study to reflect this (see Figure 2).

To establish this real-world environment for our study, we used vignettes to present patient scenarios to physicians. We developed 8 patient vignettes with a low- and high-burden scenario for each of the 4 disease states. Vignettes incorporated both clinical and behavioral data to provide a multidimensional and real-world perspective (see Figure 3). After reviewing the vignettes, physicians indicated how they would treat each patient. In addition, physicians responded to a series of quantitative questions to measure the behavioral drivers that influenced their decisions.

NON-MODIFIABLE FACTORS

Although product data and clinical guidelines play a role in decision making, we chose not to include these factors in our study because they are not easily and quickly modified. We wanted to focus on and isolate the effect of the intrinsic drivers of decision making. In addition, because guidelines and data points are based on controlled clinical studies, they often do not reflect the needs and challenges of each patient.

Figure 2: Summary of Study Methodology



Specific disease states were chosen to

- Allow for both specialist and primary care perspectives
- Provide a comprehensive perspective of chronic disease, covering conditions that follow both symptomatic and asymptomatic courses

Each physician read 2 patient vignettes (low and high burden) in one disease state. Patient vignettes described patients in real-world context (clinical and behavioral factors).

Physicians completed a survey assessing behavioral predictors of physician prescribing. Physicians also described how they would treat each patient

Figure 3: Example of a High-Burden Patient Vignette

	<p>Quick stats: 44-year-old single mother of 3. She has missed several appointments because of the unpredictable bus schedule. She has prescriptions for 2 antihypertensive medications, a statin, and an oral hyperglycemic agent.</p>
	<p>Reason for exam: Follow-up appointment for her hypertension and type 2 diabetes</p>
<p>During exam: Further discussion reveals...</p> <ul style="list-style-type: none"> • She claims that it's too hard to figure out what to take when, so she has not been taking all of her medications • She has not been adherent to your lifestyle recommendations and has gained 18 pounds since her last appointment 6 months ago • She brings her two youngest children to the exam, and her cell phone continues to play a ringtone repeatedly through the visit as you interact with her 	<p>Post-exam: Her blood pressure is 142/92 mm Hg. Her most recent lab results reveal an A1c level of 10.2% and an LDL cholesterol level of 160 mg/dL.</p>

RESULTS

Taking a more comprehensive approach

Professional marketing and medical communications in pharma follow predictable formulas. These entrenched formulas have worked well for years, and few brands feel a need to take a different approach. However, our study results underscore why traditional approaches focused solely on product data are limited in their ability to impact behavior change. Physicians are people, too. Their behavior, specifically whether they choose to write a particular prescription for patients, is affected by more than product features.

Our findings suggest that marketing and commercialization approaches that focus on the true drivers of physician behavior could be more effective than traditional approaches. What are these true drivers? The top two biggest predictors of prescribing behavior across physician type, disease state, and patient characteristics were physician self-efficacy and perceived control (see Figure 4).

Both higher self-efficacy and higher perceived control predict a greater likelihood of physicians prescribing medication. For self-efficacy, every 1-unit increase in self-efficacy increased the odds of writing a prescription 1.5 times. For perceived control, every 1-unit increase in perceived control increased the likelihood that physicians will prescribe products by 1.3 times (see Figure 5).

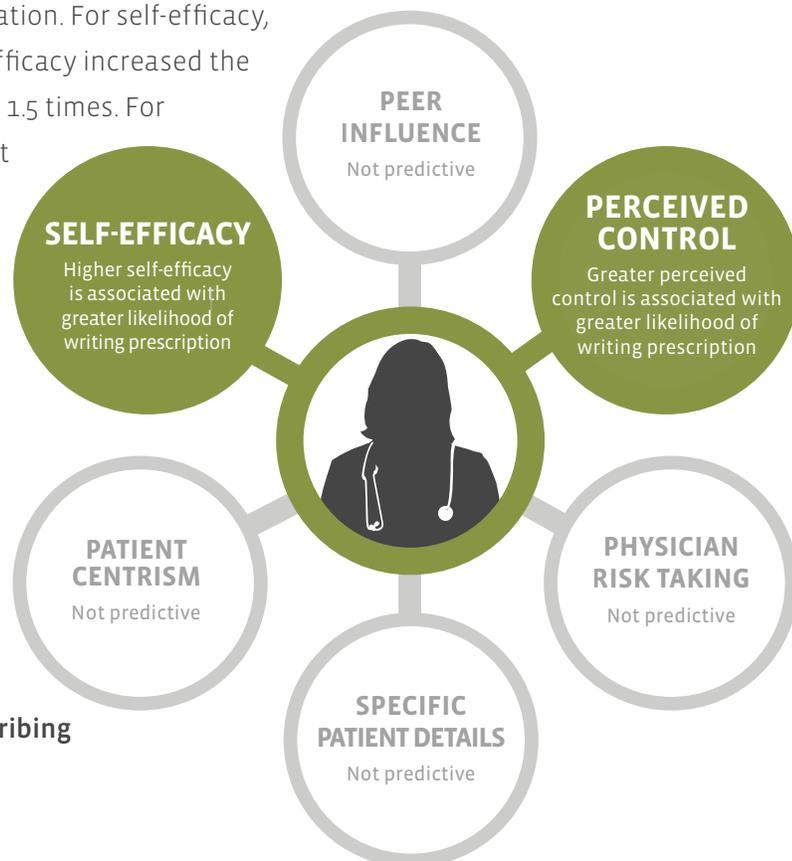


Figure 4: Top Drivers of Prescribing

Why self-efficacy and perceived control matter

Our study determined that self-efficacy and perceived control are the top drivers for prescribing decisions. These drivers have been studied in the behavioral sciences for decades.

Self-efficacy

Self-efficacy is feeling confident in one's ability to make the best treatment choices to benefit patients. This is not a personality trait or based on the amount of knowledge a physician has. It's a belief in one's skill or capability.

Perceived control

Perceived control is a physician's beliefs about how his/her decisions and actions influence patient outcomes. In many chronic diseases, the burden of management largely falls on the shoulders of the patient. The choices patients make every day such as what to eat, whether to exercise, and how to manage symptoms are in their hands, which may make physicians feel that they have limited ability to influence outcomes.

The good news is that these drivers are, in fact, changeable. Physician self-efficacy and perceived control can be increased through skill-building initiatives that integrate well with pharma communications efforts. Physicians and extended-care teams need to be equipped with practical data, tools, and training that increase their ability to influence patient behavior. These can include evidence-based communication approaches such as motivational interviewing, goal setting, and problem-solving.

When physicians see the positive impact that their behavior change efforts have on patients, their self-efficacy and perceived control over outcomes will increase.

Figure 5: Real-World Return on Investment

Our study demonstrates that changing physician behavior can have a tangible return on investment.



IMPLICATIONS

Steps for success in today's marketplace

Self-efficacy and perceived control are two universal drivers that reflect the challenge physicians face in achieving optimal patient outcomes. Although showcasing product features and product data is important, it is not sufficient to truly influence physicians' treatment decisions or prescribing behavior, both of which require that the physician believes the product will impact patient outcomes.

To stay relevant in this marketplace, our results suggest that pharma needs to support physician skill-building and position products to have value in the context of real-world factors. Based on our findings, we suggest 4 imperatives for pharma.

1 GO BEYOND DATA TO BUILD SKILLS

Providing a physician with data alone addresses only part of the equation. As we learned in this study, physicians' confidence and their perceived ability to affect patient outcomes are what truly influence their decision making. Giving physicians data without context that relates to their self-efficacy or perceived control, they are left to their own devices to impact patient outcomes. This leaves a lot to chance with traditional communication strategies. By helping physicians build skills to better assess and improve their self-efficacy and perceived control, pharma can more reliably ensure that physicians adopt their products in the intended way.

Skill-building tactics to consider:

- Train physicians in evidence-based communication techniques such as Motivational Interviewing to improve patient adherence and receptivity to behavior changes that will lead to better clinical outcomes
- Identify tools that can help physicians focus their time and resources on patients who are at risk (behaviorally) for suboptimal outcomes
- Equip physicians with patient engagement and behavior change tools to use at the point of care to promote optimal outcomes:
 - Self-monitoring of symptoms
 - Goal setting to promote positive lifestyle changes
 - Problem-solving to avoid complications and hospitalization
 - Medication adherence

2

RECONSIDER TRADITIONAL TARGETING MEASURES

For many years pharma has relied on well-established measures to identify which physicians will be more likely to respond to specific data or to prescribe a new medication. Perhaps the greatest finding of our research, however, was what did *not* predict physician prescribing behavior. First, physician prescribing behavior was unrelated to the physician's level of preferred patient engagement or level of patient centrism. Though these factors are critical aspects of the physician-patient relationship, they are unlikely to predict prescribing behavior. In addition, the physician's willingness to try new or experimental products by itself did not predict whether the physician took the next step of actually writing a prescription. Based on these findings, we recommend that pharma take a more open-minded approach to customer targeting that accounts for additional metrics of physicians' intrinsic beliefs and attitudes.

3

SHIFT FOCUS OF COMMUNICATIONS STRATEGIES AND TACTICAL MIX

Traditional pharma approaches rely heavily on key opinion leaders (KOLs) and peer-to-peer strategies for data dissemination, but our research suggests that physicians' sensitivity to subjective norms (what others think they should do) does not predict prescribing behavior. These results suggest that pharma should shift resources from KOL strategies, to the broader approach of directly addressing physician skill gaps to achieve optimal patient outcomes.

The exciting news about these findings is that, unlike traditional data, such as prescribing history and practice demographics, self-efficacy and perceived control are both measurable and modifiable. Adopting a brand strategy that addresses these two factors can help optimize audience receptivity before a product launch as well as provide a new approach for established brands to overcome inertia. This approach will return bigger dividends than preparing abstracts or conducting unbranded disease education.

Brands can adopt this approach by

- Generating product data through clinical trials that reflect real-world use and obstacles
- Including patient and physician behavioral data in the study design
- Incorporating behavioral interventions in clinical trials
- Creating an overall brand experience for patients and physicians that supports patients in overcoming real-world barriers to optimal health outcomes

The Bottom Line

As experts in human health behavior, we know that the factors that drive behavior are not easily articulated and are often poorly understood in traditional pharma initiatives. Our results suggest a change is necessary in how pharma markets products to physicians. Specifically, pharma must shift the focus to address physicians' self-efficacy and perceptions of control as a precursor to treatment-specific factors such as cost, side effects, and product efficacy. If pharma can support physician skill building and position products to account for real-world factors, they will find real-world success.

Authors

ROB PETERS

SVP, Strategy

Any initiative to impact patient outcomes must be integrated throughout the process of care with patients and healthcare professionals (HCPs). Rob understands what drives professional decision making and how to disrupt marketplace inertia. Rob's astute understanding of the pharma marketplace, along with his expertise in crafting innovative strategies for HCPs, challenges the status quo. He has extensive global experience in multiple therapeutic areas from research and development through commercialization. Rob uses his expertise to drive recommendations that are clinically and behaviorally relevant.

MEREDITH TERRY, PhD

Behaviorist

Meredith joined MicroMass in 2013 and her expertise in social psychology brings a unique perspective to understanding how thoughts, emotions and behaviors impact health. Meredith's background in academia and behavioral intervention research offers healthcare and pharma clients a valuable blend of evidence-based yet practical strategies to address psychosocial barriers to optimal health outcomes. Prior to joining MicroMass, Meredith's focus was on teaching and conducting independent behavioral research. Meredith started her career as an Assistant Professor of Psychology, then spent 5 years as a Research Fellow and Director of the Interdisciplinary Behavioral Research Center (IBRC) at Duke University. Meredith has expertise in quantitative research methods, experimental design, survey development, data collection and data analysis. Meredith received her PhD, Master's, and Bachelors of Science in Social Psychology from the University of Florida.

About MicroMass Communications, Inc.

MicroMass Health Behavior Group is a consulting and strategy practice that specializes in driving behavior change and delivering better health outcomes for clients in the healthcare industry.

As leading experts in human health behavior, we pave the way for the new healthcare environment by applying strategies that drive lasting change. We've been perfecting our approach for more than 20 years.

We begin with a fundamental understanding of the behaviors that drive patients. We translate this knowledge into evidence-based strategies that can be applied to many stakeholders, including patients, healthcare providers, caregivers, payers, and other customer groups.

For additional information about MicroMass, visit micromassshbg.com.