



We usually think of ourselves as sitting in the driver's seat, with ultimate control over the decisions we made...this perception has more to do with our desires-with how we want to view ourselves-than with reality.

Dan Ariely



Improving Marketing Performance With Behavioral Insights:

A Primer for Healthcare Marketers

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I. INTRODUCTION

With the introduction of the Affordable Care Act (ACA), the U.S. healthcare system is increasingly focused on value. Providers, payers, and health systems are challenged to demonstrate value in the form of superior quality of care, lower costs, better patient satisfaction, and improved outcomes. There are, however, many barriers for healthcare brands seeking to achieve their value objectives. Chief among them is the increasing complexity of our healthcare system. This complexity can make it very difficult, if not impossible, for a brand to get their value message out, or to drive the behavior change needed to achieve a value objective.

In an era in which budgets are scarce, healthcare brands need more powerful tools to ensure their value messages, or behavior change initiatives, are effective. Few would argue that healthcare decision makers (whether provider, patient, or payer) are confronted with more regulations, more choices, and more information than ever before. Additionally, extensive research has proven that human decision-making is error-prone and imperfect. Combined, these two factors create a highly challenging environment for brands trying to change perceptions, or create new behaviors.

This complexity challenge requires a refresh, an evolution if you will, in how audience insights are used to plan healthcare marketing programs and interventions. The potential is for campaigns that cut through the complexity by making it easier for all healthcare stakeholders to make more informed decisions and adopt more favorable behaviors, while delivering better business results and health outcomes.

A NEW APPROACH TO MARKETING IN THE POST-ACA ERA

While the post-ACA environment is certainly a challenge for the healthcare industry, it is also an opportunity for marketers to try new and innovative approaches to how they develop, sell, and market their products. In response, some progressive healthcare marketers are exploring how to leverage principles from the behavioral sciences for a more sophisticated and nuanced understanding of the barriers against driving better health decision making, behaviors, and, ultimately, outcomes. This interest is based on a growing body of research demonstrating that public policy interventions designed using behavioral science principles are generating promising results.

An important learning from behavior-based public policy interventions is that even the smallest changes to the program (whether to context, message, or incentives, to name a few) can have a dramatic impact on outcomes. For this reason, it is critical to rigorously test and validate behavior-based interventions before they are launched to ensure the outcomes are consistent with the intended policies.

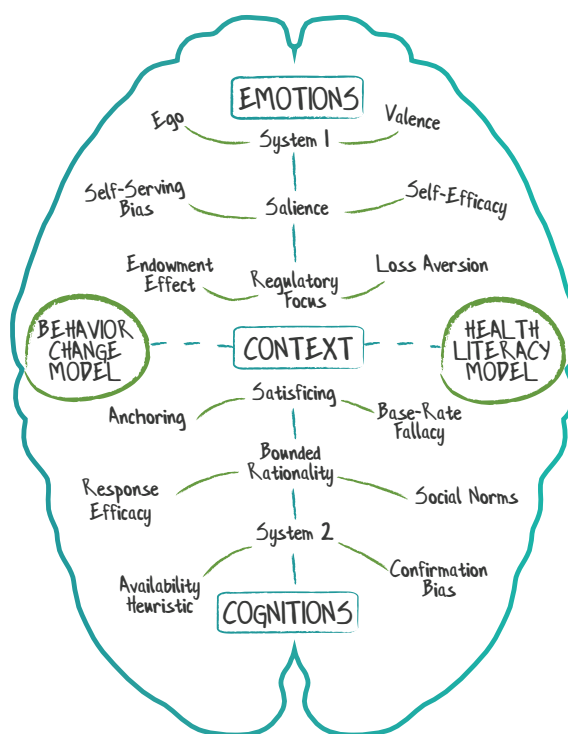
Randomized A/B/n trials are invaluable tools in this setting, as they provide a highly effective and efficient method for comparing the impact of an intervention against what would have occurred in its absence, or against one or more alternative approaches. When combined, these two approaches—interventions based on behavioral science principles, and A/B/n trials—can be powerful tools in achieving better business results and better health outcomes in the post-ACA environment.

II. BEHAVIORAL INSIGHTS: A TOOL FOR OPTIMIZING HEALTHCARE MARKETING

Making decisions and changing behaviors can be challenging for many people. This is especially true in a setting as complex as healthcare; in the healthcare setting, many decisions are so complicated and involve so much uncertainty that people are often unable to make fully informed decisions regardless of their level of sophistication or training. For many, adopting new health behaviors is an even more daunting proposition.

Too often, healthcare marketing programs rely on an overly simplistic understanding of human nature. In many instances, the result is an inadequate campaign that fails to realize its full potential in delivering the desired health decisions and behaviors. To address this shortcoming, it is critical that healthcare marketers incorporate more robust insights into the social, cognitive, and emotional factors that influence a target audience.

A Multitude Of Factors Influence Health Decisions And Behaviors



This is where behavioral science principles come into play. Behavioral science is the collective body of knowledge that is generated through rigorous academic research from fields such as cognitive psychology, social psychology, consumer psychology, neuroscience, and behavioral economics. Of all these disciplines, behavioral economics has been especially effective at offering a deeper and more actionable understanding into how people actually decide and behave in real life situations.

III. BEHAVIORAL INSIGHTS IN ACTION: A FEW EXAMPLES

One challenge in applying behavioral science principles to healthcare marketing is the extensive breadth and depth of knowledge covered by these academic sciences. How should one identify the applicable behavioral concepts with respect to a specific marketing problem? What impact would the application of that concept have on health decisions and behaviors? What follows are a few examples of behavioral insights and how they can influence health decisions and behaviors.

THE POWER OF CONTEXT: CHANGING BEHAVIORS WITHOUT CHANGING MINDS



The apparent complexity of our behavior, is largely a reflection of the complexity of the environment in which we find ourselves.



Herbert Simon

The environments in which we live and work have the potential to have a significant impact on our decisions and behaviors. In fact, how we respond to marketing messages and cues is largely shaped by the context in which they are experienced. Small changes to this context can have profound effects on our behavior. Below are two principles that explain how people often deviate from rational thinking in healthcare settings.



BEHAVIORAL PRINCIPLE	DESCRIPTION	EXAMPLE
Anchoring	The tendency to rely too heavily on the first piece of information offered (the “anchor”) when making decisions	A physician misdiagnoses a patient because he/she anchors on the first piece of information (e.g., a lab value) instead of considering the full mix of information regarding that patient
Framing	How people react to a particular choice or stimulus (e.g., a message or call to action) based on how it is presented	A person responds differently to messages regarding healthy behaviors when they are framed as positive (benefits of engaging in healthy behaviors) versus negative (consequences of not engaging in healthy behaviors)

CASE STUDY

USING DEFAULTS TO INCREASE GENERIC MEDICATION PRESCRIPTIONS

In behavioral economics, default options are preset courses of action that take effect if nothing is specified by the decision maker. Setting defaults can be an effective tool in encouraging a decision or behavior when there is inertia or uncertainty in decision making. Requiring people to opt out if they do not wish to donate their organs, for example, has been associated with higher organ donation rates. A recent multi-phased study conducted at a major university hospital illustrates just how powerful default settings can be. The study examined how a minor change in the default settings for the electronic health record (EHR)—from displaying both brand and generic medications to showing only generic beta-blockers, statins, and proton-pump inhibitors—would have an impact on generic prescribing levels. Physicians had the ability to opt out and prescribe brand name drugs if they chose.

Initial phases of the study revealed that minor changes in the default settings of the EHR resulted in increases of up to 10% in the prescribing of generic medications at some of the clinics participating in the study. This indicates that even the smallest changes in the default settings of a system can substantially affect medical decision making and provider behavior. After a second study produced similar results, the university adopted a system-wide settings change to promote generic prescriptions.



THE SWAY OF SOCIAL SETTING

We all take our cues of what is acceptable behavior from those around us. For example, a considerable body of research shows that the likelihood of people to engage in a behavior is largely influenced by the pervasive norms of the groups or communities to which they belong. Groupthink and social norms are two behavioral principles that highlight this effect.

BEHAVIORAL PRINCIPLE	DESCRIPTION	EXAMPLE
Groupthink	A dynamic that occurs within a group in which the desire for harmony or conformity results in irrational or dysfunctional decision making or behavioral outcome	A cohesive group of nurses in a healthcare facility is influenced by a strong leader whose lack of clinical experience perpetuates unsafe and out of date patient care practices
Social Norms	Rules of behavior that are considered acceptable by a group or community	A member of a highly specialized group of physicians ignores an experimental yet proven therapy that could save a patient's life because using it would be perceived as a violation of the social norms of the group



THE “AUTOMATIC” EFFECT OF EMOTIONS



Ninety-five percent of thought, emotion, and learning occur in the unconscious mind- that is, without our awareness.



Gerald Zaltman

Few would doubt that emotions have a powerful influence over our actions, but what is most surprising is the speed at which they influence us; the effect is so rapid that it is often described as “automatic” as it occurs without our conscious awareness. As a result, emotions can cause people to act in a way that is contrary to logic or against their self-interest without their awareness. Below are some examples of how emotions can influence health decision making.

BEHAVIORAL PRINCIPLE	DESCRIPTION	EXAMPLE
Endowment Effect	A situation in which people ascribe more value to things merely because they own them	A payer has been covering drug A for years even though it offers partial efficacy. New drug B is substantially more effective but has a slightly less attractive safety profile. The payer's attachment to drug A causes them to ascribe more value to drug A and, thus, prefer it over drug B
Loss Aversion	A tendency to strongly prefer avoiding losses to acquiring gains	A drug is viewed more positively by a patient because it is presented as preventing them from dying a year earlier, rather than helping them to live a year longer



THE BIAS OF EXPEDIENCE: IF IT FEELS RIGHT, IT MUST BE TRUE



We're blind to our blindness. We have very little idea of how little we know. We're not designed to know how little we know.

Daniel Kahneman



Misperception of risk occurs because people often prefer to make quick and efficient decisions rather than decisions that require effort and concentration. In these situations, expediency prevents people from seeking out and evaluating relevant information that would support a more informed decision. This is especially true with respect to decisions that require complex evaluation and analysis.

BEHAVIORAL PRINCIPLE	DESCRIPTION	EXAMPLE
Availability Heuristic	The tendency to make a decision based on the information that's most readily accessible to a person, instead of carefully considering other data points and perspectives	Physicians tend to overestimate the risk of addiction when prescribing opioid analgesics for pain relief. In fact, the risk of addiction in these situations is actually low, but because opiate addiction receives high publicity, the addiction risk is often overestimated by physicians
Confirmation Bias	The tendency to look for, notice, and remember information that fits with a person's pre-existing expectations	A physician stops asking questions during diagnosis because he/she reaches an early conclusion that confirms their initial, incorrect hypothesis, thus failing to unearth key data about what is really causing the patient's illness



MISPERCEPTIONS OF PROXIMITY: THE CLOSER THINGS APPEAR, THE MORE VALUABLE THEY BECOME

Extensive research has shown that the closer something (e.g., an outcome or an individual) is to a person in terms of space or time, the greater value that person places on it. For example, if given a choice between receiving \$100 today or \$150 tomorrow, most people would wait the one day; however, when the choice becomes choosing between \$100 today and \$150 three months from now, most people would choose the \$100 even though it is nearly impossible to get a 50% gain on anything over a three month period. Time-based biases frequently manifest in short-term thinking that are ultimately against the long-term interests of the person.

BEHAVIORAL PRINCIPLE	DESCRIPTION	EXAMPLE
Goal Gradient Effect	People tend to increase their effort as they get closer to attaining a goal	A patient with high cholesterol commits greater effort to following a healthy diet and lifestyle as they get closer to attaining the low-density lipoprotein targets set by his/her physician
Temporal Discounting	The tendency to want things now rather than later, and to place less value on rewards as they move further into the future	A type 2 diabetic chooses the short-term benefits of eating rich food and avoiding exercise over the long-term benefits of a healthy lifestyle

IV. A/B/n TRIALS: TESTING YOUR WAY TO BETTER OUTCOMES

As noted, it is critical to rigorously test and validate behavior-based interventions before they are launched. This is where randomized A/B/n trials come into play. An A/B/n trial is a research study that randomly assigns participants to an experimental group or a control group. As an A/B/n trial is conducted, the only expected difference between the experimental and control groups is the outcome variable being studied. The rationale for using A/B/n trials is based on the simple premise that progress (whether in business, science, or public policy) often occurs through a process of trial and error.

A/B/n trials - commonly referred to as randomized, controlled trials (RCTs) - are well known as an indispensable step in the development of new medicines. There is a considerable body of conclusive evidence indicating that the same RCT techniques used in medicine development can be used to significantly improve the effectiveness of marketing programs. For example, A/B/n trials are deployed extensively by e-commerce companies who want to know which website layout or which digital advertising units will generate more sales.

Regrettably, A/B/n trials are seldom used to pre-test the effectiveness of healthcare marketing programs before launch. All too often these programs are selected based on the opinions or hunches of decision makers who believe that experience and common sense are all that are needed to predict what will or will not work in the marketplace. The problem is that the objective judgment of decision makers is frequently impaired by their personal biases and previously formed beliefs that are not likely to be applicable to the marketing challenge.

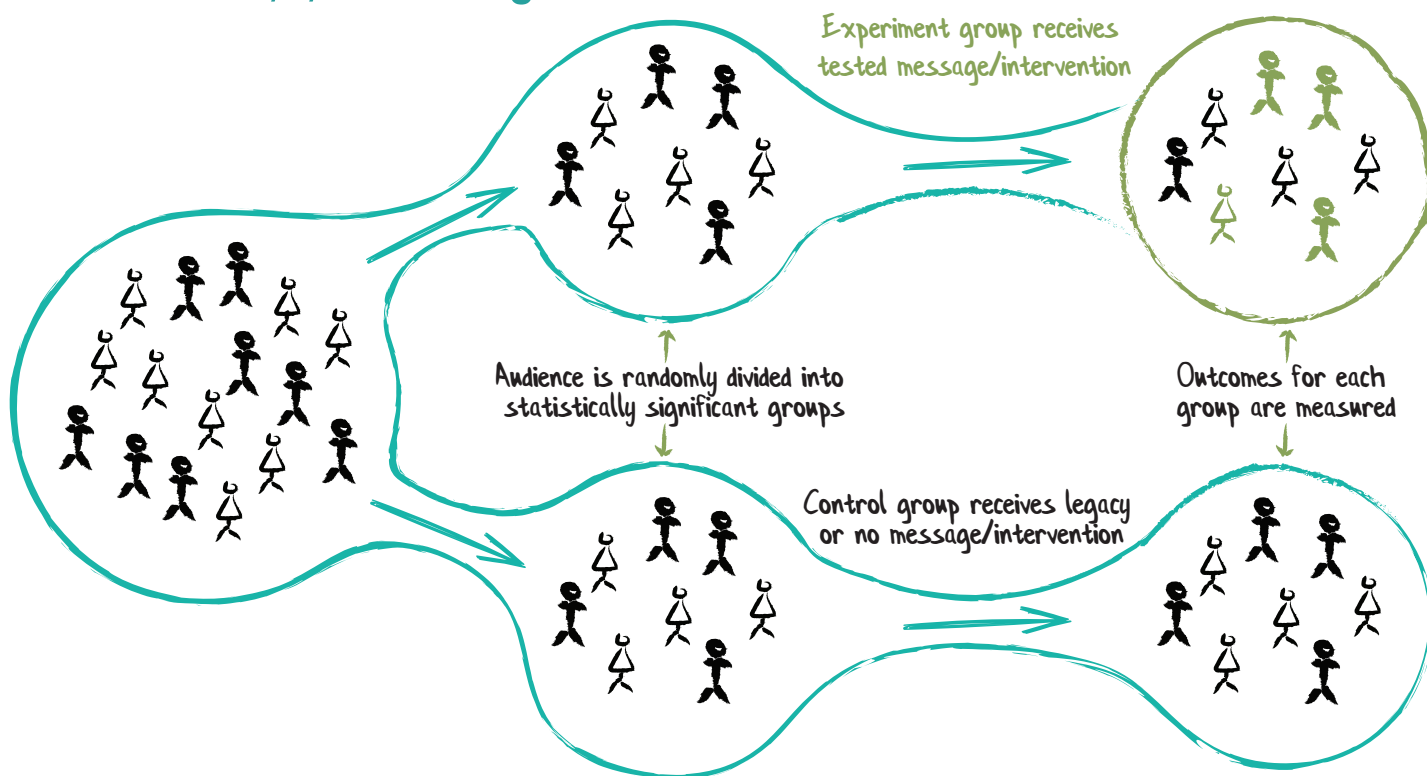
A/B/n trials are a defense against these decision-making limitations because they force the deliberate and objective assessment of marketing programs being considered in a way that isolates and identifies the most impactful and efficient options so marketers can eliminate those that are less effective. Randomly assigning research participants to specific experimental or control groups eliminates the risk of personal biases of marketers and their agencies jeopardizing the quality of the decision-making process.



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Randomized A/B/n Trial Design



AVOIDING PITFALLS WITH A/B/n TRIALS

There is a perception that A/B/n trials are costly; however, they can be less expensive than other forms of validation, especially when there is preexisting data available from established marketing programs. Additionally, it is important to realize the potential opportunity costs and other risks associated with launching a marketing program that has not been validated by a randomized trial and results in a campaign that delivers sub-optimal results. For example, suppose an A/B/n trial reveals that a program under consideration will not work as planned or that the costs and resources required to deliver the expected results will yield an unattractive return on investment. By demonstrating how effective or ineffective a program will be gives marketers a reference point to determine whether or not to fund the program. Accordingly, the question for marketers should not be, "How much will it cost to conduct an A/B/n trial?" but rather, "What are the risks of not conducting an A/B/n trial?"

There is also the perception that A/B/n trials are time consuming and difficult to field. RCTs do not necessarily require an extended period of time to execute. By using rapid prototyping and lean research methods, RCTs can be designed and fielded in a matter of a few weeks. Experienced researchers, however, are required to ensure an A/B/n trial is properly designed and that the appropriate quantitative sampling methods are used. Many of the complexities associated with A/B/n trials can be easily managed by engaging a professional quantitative researcher and by following the steps outlined above.

V. CONCLUSION

There are three valuable benefits of using behavioral science principles when planning a marketing program. First, they provide validated models for better predicting human behavior, as opposed to personal opinions or guesswork. Second, they reveal how non-rational and non-conscious factors influence decisions and behaviors. Third, they provide a conceptual basis for developing campaigns that have the potential to deliver better results and outcomes.

Likewise, randomized A/B/n trials are powerful tools that can help marketers compare the impact and effectiveness of one or more marketing programs with minimal cost and time investment before a final decision is made. By adding a control group to an A/B/n trial that is not exposed to the marketing programs being tested, decision makers can gather greater evidence about which specific experimental program delivered the improved results and why those results were delivered.

ABOUT GUIDEMARK HEALTH

Guidemark Health is a mid-sized, full-service healthcare communications agency headquartered in Parsippany, New Jersey with multiple offices along the pharmaceutical corridor from Stamford, Connecticut to Princeton, New Jersey.

With decades of experience, knowledge and passion for healthcare communications, our mission is to help clients develop deeper and long lasting connections with customers. By combining inspiring, creative, innovative engagement strategies and extraordinary content, we deliver meaningful healthcare experiences that change lives for the better.

We offer a breadth of services in brand promotion, customer engagement, digital innovation, medical communications and learning - all rooted in a long history of excellence in content development.

ABOUT PRAEDICIS

Praedicis is a proprietary Guidemark Health methodology that draws on research and frameworks from the social, cognitive, and decision sciences to more deeply understand the factors influencing the decisions and behaviors of all healthcare constituents. This understanding is used to design more impactful and effective health marketing and communications programs for our clients.

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