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A Case for Marketing in Medicine: Using Consumer Theory to Understand Patient Choice and Improve Patient Care

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What is the message?

Three key concepts from consumer theory can aid in patient-centric care: Decision heuristics (how patients choose in uncertain environments); quality signals & priming (how patients judge the quality of healthcare); value propositions (how patients perceive value in considering their options)

What is the evidence?

Author's experience in teaching and practicing marketing

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Introduction

The healthcare landscape is increasingly impacted by technologies, institutional trends, and cultural shifts that put the individual patient and his/her decision-making process squarely in the spotlight. Those in healthcare are urged—*ad nauseum*—to consider how:

- Patients have agency in their treatment choices
- Patients must buy-in to facilitate treatment adherence
- Patients have choices in providers
- Patients have choices in healthcare modality
- Patients have power through rating systems of providers and experiences
- Patients have individual perceptions that impact their choices of providers
- Patients have individual histories that color their experiences

And, yet, the real challenge is that this same movement of individual choice and experience is operating at the same time as the growing need to create *systems* of healthcare and to think of *populations* in the design of these new systems. In the same breath that we want to talk about the individual patient in patient-centric care, we are forced to scale our insights into a consideration of how we can deliver the best in patient-centric care efficiently and consistently to large groups. It's a dizzying task.

Fortunately, a body of knowledge exists that speaks directly to this conundrum and offers many solutions. Unfortunately, that body of knowledge is *marketing* theory. Marketing, as both an academic field and a practitioner pursuit, is not well respected or well understood outside of the business school. Many hear "marketing" and assume its purpose is to trick the unsuspecting into drinking more sugary soda or buying more expensive frivolities.

And, yet, that is not the case—the domains we study in marketing, especially in consumer theory, cover a gamut of diverse topics (from how people perceive and process risk to how people build relationships through their consumption practices), using diverse methodologies (from psychology-based experiments, to economic models, to anthropology-based ethnographies, to physiological measures like brain imaging and salivary assays), for diverse purposes (from consumer protection and well-being to corporate innovation success). If anybody can tell you how to deeply understand an individual's choice process and unique experience in order to design a system to successfully deliver a complex product or service to a

massive population, it's a marketer.

Given that, here are three key concepts from consumer theory that can be put into practice in aid of patient-centric care:

1. **Decision heuristics**—*How patients choose in uncertain environments*
2. **Quality signals & priming**—*How patients judge the quality of healthcare*
3. **Value propositions**—*How patients perceive value in considering their options*

Patient Choice in Uncertainty: The Compromise Effect

Consumers must often make choices when part of the decision context is uncertain. In a product choice (say a first-time parent considering the purchase of a mini-van), consumers may not be sure what attributes are important, how different brands perform on those attributes, whether the product or its technology might change and make new models more desirable, whether they will continue to need the product in the future, or whether their preferences may simply change over time. Car purchases are uncertain enough to engender anxiety in many buyers, but almost any healthcare decision involves this level of uncertainty and more—how will I respond to a treatment, will it really work, are the side-effects manageable or not, is there a better option, should I get a second opinion.

Consumer theory outlines many ways that people cope with making decisions under uncertainty. One way is to use *decision heuristics*—"rules of thumb" that guide choice based on abstract theories (1). One everyday example in marketing is the *price-quality heuristic* which holds that, within any given product category, the price of a particular brand and its quality are positively correlated (2).

I believe that there is one decision heuristic in marketing that has a surprisingly strong impact in healthcare: the *compromise effect*. The compromise effect is, simply stated, the human tendency to choose middle options in any given choice range (3). For example, the middle-sized cup of soda may seem like a good choice at a movie when you aren't sure how much you'll want to drink over the next two hours…or the mid-range health insurance plan (*not* the most expensive bells-and-whistles option *or* the least expensive bare-bones option) may seem like the right choice when you don't know how much health care you'll need over the next year.

The compromise effect is rooted in our intuition of a normal distribution (i.e., the Bell curve) and the belief that middle options are the most "normal" or the most common option of the "normal person" and that the options at the extreme ends of the choice range are atypical and for more extreme circumstances. Because of this, the middle option often feels right and is the option that gives decision-makers the most confidence that they've chosen wisely.

But, doctors and other providers often—in an attempt to give patients agency—offer two choices. The doctor might say, "I see the bump that you are describing and I really believe that it is likely nothing to worry about. But, we have two choices. We can do an invasive and expensive test with its own possibility of complications OR we can simply do "watchful waiting" where we don't do anything now but we keep an eye on it." Faced with this choice, the patient is torn by the two extremes…should I do what may be *too much* or what may be *too little*? This is a difficult place for the patient.

Now, instead, consider the impact of a simple shift to three options. Imagine that the doctor explained *three* options as (A) an invasive, expensive test, (B) "watchful waiting" where an appointment is made in two months time and the patient notes any changes, and, finally, (C) doing nothing and assuming that it really isn't anything worrisome. Now, watchful waiting is the middle option and seems more like the rational "normal" choice to the patient. In this way, doctors may be able to allow more patient agency in decision-making *and* nudge them more effectively toward whatever option is the empirically-based standard of care.

But the compromise effect has far-reaching effects beyond simply choice of therapy. Expecting first-time parents may see their choice for delivery as two options—their regional "home-town" hospital or traveling to their state's premier teaching/university hospital. In this case, one option may seem too convenient ("What if our baby needs special care?!") and the other too inconvenient ("What everything goes smoothly and we get teased for being over-anxious first-time parents?!"). If a new option emerges in their town that is even more convenient than the current two—say a new service is heavily marketed promoting a doula-assisted home-birth service—then the regional hospital becomes the middle option and may subsequently become more popular.

How Patients Judge Healthcare Quality: Signals and Priming:

One robust tenet of marketing theory is that, when quality is hard to observe – such as the difficulty of looking at a car engine and knowing whether it will be reliable – consumers use more observable or superficial cues to make evaluations of quality (4). In fact, marketers categorize goods into three types based on the observability of quality: search goods are those whose quality can be objectively searched for and found prior to purchase (e.g., an art poster), experience goods are those whose quality can only be assessed after purchase and use (e.g., a cookie), and credence goods are those whose quality is not even fully knowable after purchase and use, but rather only knowable after long experience (5).

Examples include things like higher education, car repairs, and, most certainly, medical treatment. How can a patient assess the quality of their vitamin supplements, their physical therapy exercises, or their cardiologist's recommendation? Only over time and imperfectly, at best. In such cases, decision-makers rely on quality cues. These cues can be signals – deliberately sent by the seller and noted by the buyer – or primes that impact consumers without their awareness.

Signals

Consider the role of *signals* in healthcare. In any market, the sellers or providers of goods and services may attempt to send signals about their quality. Common signals include price, packaging, the service environment, the appearance and action of front-line personnel, advertising, endorsements, and even technology. For example, in the "glass house era" of technology in the 1960's and 70's, many firms kept their mainframe computers in glass rooms located in the lobby of their headquarters in order to signal the innovativeness of their company (6). Visitors to the firm were supposed to take note and be impressed. Today, many firms outfit their sales reps and other outwardly-facing personnel with high-tech mobile devices with similar effect.

In healthcare, what signals reinforce the quality of the care provided? For patients, it may be mundane details—the décor of the waiting room, the technology they see in use, the confidence or warmth in the doctor's manner, the age or experience of the doctor, the number of people "on their team," the connection to well-known hospitals or universities, or even the cleanliness of the ceiling tiles (while one is lying on a hospital bed or examining table).

To the overworked provider, the impact of interpersonal details may feel unfair or overwhelming and, yet, to the patient, it is very easy to draw the conclusion that the doctor who can't pronounce your name either isn't very smart or simply doesn't care. To cash-strapped medical facilities or hospitals, the impact of the office's appearance may feel superficial or frivolous, and yet to the patient, it is very easy to draw the conclusion that a stained carpet or dusty corner in the waiting room doesn't speak well to the cleanliness of the surgery.

Priming

The influence of details in evaluating quality also goes beyond those elements that the consumer consciously notes and deliberately uses to draw inferences. *Priming* is a process by which peripheral or unnoted details in the environment activate conceptual schemas in the consumer that are subsequently influential in their evaluations and behaviors (7). For example, exposure to images of guns can make people more negative and aggressive in subsequent interactions and, in one study, exposure to images of bikinis increased risk-seeking and generalized impatience in men (8, 9).

One might reasonably assert that medical facilities would never prime patients with images of guns or bikinis. Yet, I've observed both – many hospitals have images of guns on their doors (as part of a notice of carry-conceal laws such as "No Concealed Weapons") and many have waiting room TVs set to news stations that report on war, crime, and other gun-related stories. In waiting rooms, magazines frequently have covers or ads that feature bathing suits or similar *deshabil*e. It is important to ask how these primes may influence patients' perceptions of the quality of their experience, but also how they may impact the patients' own choices of therapy or other medical decisions.

Value Propositions: How Patients Perceive Value in Considering the Options

Finally, it is increasingly true that patients have more options in choice of provider, therapy, insurance, and technology than ever before. How do patients judge comparative value and make choices between competing options? To answer this, there is value for healthcare professionals in thinking about an often-abused marketing concept—the *value proposition*.

Many organizations think of value propositions as a generic part of their work in crafting a

mission statement. In doing so, an unfortunate phenomenon occurs. By trying to equate one's value proposition to a mission statement, the resulting proposition is often so abstract and superlative that it loses any concrete meaning. For example, in working with universities writing their value propositions, I've noticed that every place describes their institution as providing *excellence* in education, research, and external outreach. If all places promise it, does "excellence" have any meaning to consumers?

An effective value proposition should be a practical "work-a-day" statement that is crafted from careful research on the key decision-maker. The statement should clearly show why the decision-maker should, *all else equal,* choose you or your organization over other options.

There are three types of value propositions: (a) the "All Benefits" proposition, (b) the "Favorable Points of Difference" proposition, and (c) the "Resonating Focus" proposition (10). In the first, the value proposition is a laundry-list of all possible benefits that come from the product or service. This type of proposition seems good ("I'm telling you so many wonderful things about me or my product!") but is often ineffective because it is too long and unfocused.

The second type, the Favorable Points of Difference proposition only mentions those benefits that are different or better than competitors' benefits, thus creating a somewhat shorter and more focused list. This type of value proposition is better than the first, but the gold standard proposition is the last—the Resonating Focus proposition.

In the Resonating Focus proposition, the list of benefits that favorably compare to the competition is winnowed down to the *one* benefit that is most important to the decision-maker. Because of this specificity, a firm often has several different value propositions for different consumer segments (or different types of decision-maker) that they are trying to influence.

It's interesting to see how this type of Resonating Focus proposition plays out in the promotion of pharmaceutical products. Imagine that a pharmaceutical company is going to market with a new extended-release form of one of their drugs. The general benefit of this new product might be that it regulates the level of drug in the bloodstream creating more even perception of relief, longer perceived effectiveness, and reduced nausea. But, effective value propositions in this case would differ for three key decision-makers: the patient taking the drug, the doctor prescribing it, and the insurer deciding whether to put it on formulary.

For the patient, research might show that the resonating benefit is about nausea and identity, specifically that "This product significantly reduces the number of days that you feel nausea and, in doing so, gives you more days when you don't feel defined by your illness (i.e., a ___ patient)." For the prescribing physician, the firm's research might show that the resonating benefit is less stress because of greater patient adherence or, specifically, "This product increases patient adherence—which means less time for you in appointments having the stressful "you *really* need to stick to your medications" talk with patients." For the insurance administrator, the resonating focus may well be the cost-savings or, specifically that "This product, while marginally more expensive than alternative formulations, lowers re-hospitalization rates by 32% which in 2016 would have saved $14.82 million in hospital costs alone." It is easy to see how the concreteness of these propositions creates a more powerful persuasive statement of value for each distinct group.

The Bigger Picture

Ultimately, these are just a few concepts from marketing and consumer theory. There is much more in the science of marketing that could be used to improve the well-being of both sides of the healthcare equation—the people who get the care and the ones who provide it. It is important to remember that marketing is a holistic pursuit that examines everything from the design and development of new products/services to the experience (both objective and subjective) of the end-user—marketing is *not* just about brochures and advertising!

Good marketing is consumer-centric and seeks the "triple bottom line" in which the buyer, the seller, and society all benefit from a well-designed enterprise. Nowhere is this more important than in modern healthcare.

What are options to better integrate the knowledge that exists in consumer theory into medical practice? Below are just a few options that range from the individual to the systemic:

- **Practical consumer theory:** Encourage practitioners and administrators to read popular press consumer theory books or listen to related podcasts. (Examples include Dan Ariely's book, *Predictably Irrational*, or Wharton's weekly broadcast of *Marketing Matters*)
- **Expert talks:** Invite marketing academics to give talks at medical conferences or universities

- **Academic translations**: Seek translations of existing academic work on consumer theory specifically in health-oriented domains of interest. (Examples include *Journal of Consumer Research* curations on Food Decision-Making, https://academic.oup.com/jcr/pages/food_decision_making, or the Psychology of Innovation, https://academic.oup.com/jcr/pages/the_psychology_of_innovation)
- **Courses**: Hire a marketing professor at major medical universities or a consumer researcher at large medical facilities/organizations to lead specialty courses and initiatives.
- **Partnerships**: Build integrated partnerships between medical universities and their affiliated business schools to create a specific curriculum of business classes for doctors and other practitioners (i.e., make curricula available in many current Healthcare MBAs more accessible to all medical and nursing school students).

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