Psychographic Segmentation in Health Care

By: Dr. Frederick Navarro, PATH Institute and Rob Klein, Klein & Partners
This article was published in Healthcare Marketing Report, July 2017

A Brief Introduction to Segmentation

Not everyone views an organization or product or service in the same manner. We all have different expectations, attitudes, needs, etc. As a result, a single product, pricing, distribution, or marketing and communications strategy seldom is effective. While a single theme or positioning over the long-term can be effective in building the brand, how it is priced, delivered, communicated, and who is most receptive are questions that market segmentation can address. In identifying any market segment, four criteria must be met. Is the market segment:

1. measurable and definable?
2. meaningful and large enough?
3. reachable through communication and distribution channels?
4. responsive to marketing efforts?

And, there are four steps involved in defining a market segment:

1. Situation Analysis: Evaluate the organization's current situation
2. Market Segmentation: Identify bases for segmenting the market and develop profiles
3. Market Targeting: Develop measures of segment attractiveness and select the most attractive segments
4. Product/Service Positioning: Develop a positioning and marketing mix for each target segment

Once adequately identified and defined, market segments help organizations focus resources on those segments that are most desirable and which the organization can best serve.

Consumer Segmentation Comes to Health Care

With the rise of the healthcare consumer, a growing number of hospitals and health care systems are adopting consumer segmentation. This adoption is motivated by a confluence of movements toward better patient engagement, improved patient experience, and the need to push beyond the one-size-fits-all approach to patient care delivery.

Consumer segmentation has much to offer healthcare providers. For one, it is the best way to increase understanding of the diversity of health consumer motivations, preferences, and needs. It is also an accepted strategy for differentiating products and services from competitors.

Interestingly, the focus on health consumer segmentation is not on the typical forms of *a priori* segmentation traditionally used in healthcare, such as by medical condition, health risk severity, or scale level. It's easy to understand why. This type of one-dimensional or condition-based segmentation is insufficient to capture the complexity and diversity of healthcare consumer attitudes, beliefs, preferences, and behavior necessary to understand consumers in a holistic way.

Hospitals and healthcare systems are instead turning to psychographic segmentation.

The fact is, psychographic segmentation is not new to healthcare. It has been applied to better understand nursing students, seniors, and consumer health lifestyles for years. A psychographic segmentation model applied by many hospitals, healthcare systems, and health insurance plans over the past 20 years is the PATH model, based on the health-specific, psychographic segmentation work of Dr. Frederick Navarro. The long history of this model makes it useful to illustrate the potential benefits of psychographic segmentation to healthcare (see Figure 1).

Figure 1
National Distribution of PATH
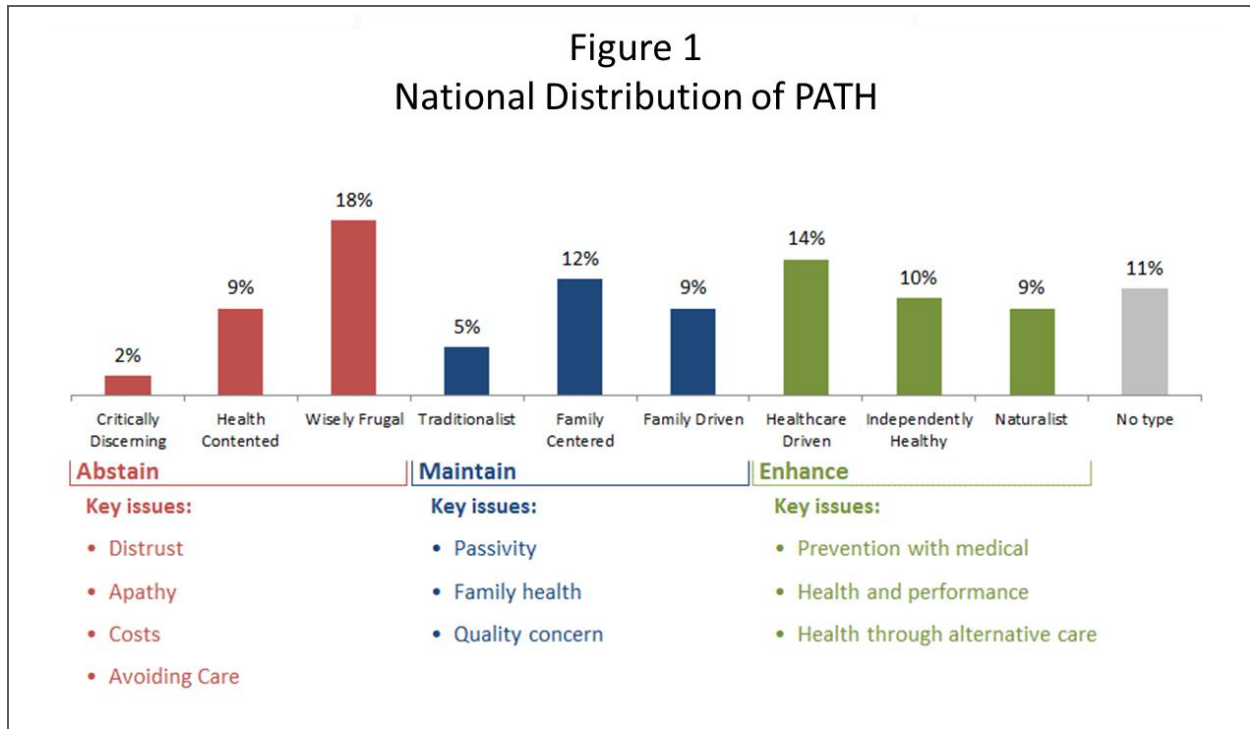
Applying Psychographic Segmentation

Psychographic segmentation can be applied at two levels: the macro level and the micro level. Macro-level applications are those directed at the population. Micro-level applications, on the other hand, are those directed at individuals. Both applications are discussed below.

Macro-applications

Macro applications apply psychographic segmentation to target the population. These include attracting desirable segments through branding and marketing communications, and the use of segment knowledge to guide product or service development.

Segmentation information can be applied to marketing communications in several ways. For example, segmentation research is used to help with media targeting by identifying the television channel, radio stations, and newspapers preferred by identified segments. Psychographic segmentation can aid the tailoring of communications based on segment interest or motivational level. Use of the central or peripheral routes to marketing is often dictated by whether the desired segment is active or passive with respect to attentiveness to health-related information. Psychographic segmentation also has been applied to branding.

Psychographic segment profiles can guide the best words and themes to use. A research study using the PATH segments found that certain words were more attractive than others
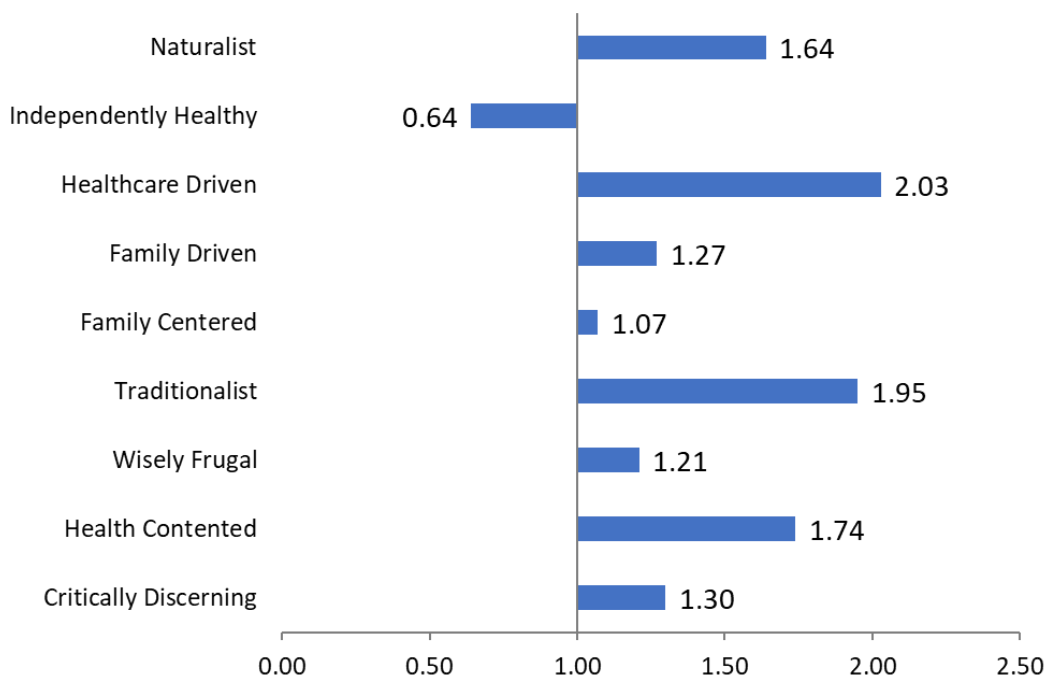
consistent with the preferred health tendencies of each segment. After integrating select words for one of the PATH segments into open-enrollment advertising, a major health plan brand reported a 3% increase in membership among the targeted segments.

Product or service development can be guided by segment behavior. For example, one research study found that the desirable PATH segments had greater odds of using multiple online sites to find a physician. This could motivate the launch, refinement, or linking of multiple physician search portals with content tailored to the desirable PATH segment.

Population health addresses "the health outcomes of a group of individuals, including the distribution of such outcomes within the group…". Population health is another potential fit for psychographic segmentation. A more powerful use of psychographic segmentation could be applied if there was a demonstrated relationship between the segmentation and some aspect of health or disease. A psychographic segmentation that showed differences in health or outcomes is a perfect case for population health.

One of the earliest applications of the PATH psychographic segmentation model was used in the profiling of a healthy vs. a diabetic Type II population in Hawaii. The objective was to see if the PATH segments had any relationship to diabetes. A total of 7,030 adults were surveyed. Type II diabetics were identified by health insurance records and accounted for 44.2% of the sample. After segmenting the sample, the researchers used logistic regression to predict the odds of diabetes Type II based on PATH segment membership. The results showed statistically significant differences (see Figure 2). Increased odds of diabetes were associated with multiple segments and reduced odds with one segment. It surprised the researchers to see that elevated diabetes risk was associated with multiple psychographic profiles.

Figure 2
Type II Diabetes Odds by PATH

Segment	Odds
Naturalist	1.64
Independently Healthy	0.64
Healthcare Driven	2.03
Family Driven	1.27
Family Centered	1.07
Traditionalist	1.95
Wisely Frugal	1.21
Health Contented	1.74
Critically Discerning	1.30

Micro-applications

       Micro-applications, on the other hand, are those where psychographic segment information is applied to individual consumers or patients. Very few healthcare organizations have taken psychographic segmentation to this level. Early evidence suggests, however, that this may be the most fruitful use.

       The most obvious applications are patient experience and patient engagement. In terms of patient experience, it is well established, yet virtually ignored by healthcare organizations that patient expectations influence satisfaction. It also has been shown that the health-related orientation of patients influences their perceptions of care and satisfaction. The same major health plan using the PATH segmentation found this out when its member satisfaction research showed that the odds of met or unmet expectations reported by members varied significantly based on the health psychographic profile of each segment. Psychographic segmentation revealed the holes of their one-size-fits-all approach to patient services.

       Patient engagement has become recognized as an important factor in the self-management of chronic disease. For example, there is evidence that psychographic segmentation has prompted patient engagement with tailored digital messaging. One year-long commercially sponsored experiment showed the potential benefits of psychographic segmentation to engagement.

       The study, sponsored by a national health plan, tested the effectiveness of incorporating health psychographic patient information into the management of five primary diagnoses, including diabetes Type II, cardiac, co-morbid diabetes and cardiac, impact disorders, and asthma. The patient sample totaled 2,763 participants. The PATH model was the psychographic segmentation methodology.

       The health plan's prior research had demonstrated that both connecting to patients (connectivity) and call time predicted patient goal achievement with effect sizes that ranged from $R^2 = 0.20$ to $R^2 = 0.36$, the highest achieved. The hypothesis tested was that psychographically-tailored clinician communications would increase patient goal-achievement and increase its effectiveness, versus having no effect.

       All patients were assessed and classified into the nine PATH segments. The sample was then randomly split into an experimental group and control group. Both groups received telephonic clinician interventions. The control group received the standard untailored telephonic clinician interventions. The experimental group received telephonic clinician interventions tailored to the psychographic profile of each patient. To accomplish this, ten clinician coaches received 12 hours of training to learn about the segments and practice applying tailored inventions accommodating patient levels of health information seeking, attention to diet, and two other parameters (see Figure 3). The predictor variables were the number of telephone calls that connected to a patient (connectivity) and call time. The dependent variable and measure of patient engagement was the number of self-care goals set and achieved.

Figure 3: Tailoring Engagement by Psychographic Dispositions

Health Contented	Healthcare Driven
• Patient engages in little health care information seeking • Patients shows poor attention to nutrition and healthy dieting	• Patient engages in regular health care information seeking • Patients shows good commitment to nutrition and healthy dieting
Improving Learning • Keep exchange brief • Focus on a few key points • Keep light and translate into simple terms • Frequent repetitions • Bring up peripheral topics (e.g., weather, sports, patient hobbies, favorite TV shows) to keep up engagement and attention • Expect few questions, answer briefly	Improving Learning • Exchanges can be longer • More points covered • Go over detailed information • Infrequent repetitions • Keep focus on central topic of call • Expect and answer questions
Improving Diet Focus • More overseeing • Review benefits and minimal acceptable levels • More frequent contacts, expect them to be less adherent with dietary guidelines Disclosure • Get them to talk about resistance to good dieting and reasons for low involvement • Use trust building and confirming responses • Identify potential incentives to motivate compliance or persistence • Negotiate minimal compliance - Jointly with patient identify a level of compliance the patient can accept and be successful with • Yes, use some fear - Make patient aware of some negative consequences due to noncompliance or nonparticipation	Improving Diet Focus • Less Intervention • Expect them to adhere to dietary guidelines on their own • Less frequent contacts around diet Disclosure • Uncover current nutritional patterns and confirm appropriateness based on disease characteristics • Confirm acceptability based on health problem severity • Little need for incentives to motivate compliance or persistence • Negotiate optimal compliance if needed

The trial ran for one year. Analysis of the data at the end of the trial showed that the group receiving psychographically-tailored interventions achieved increases in connectivity (12%), call time (20%), and goal-achievement (12%) over the control group, all statistically significant at the 99% level of confidence. The effect size of connectivity and call time in predicting goal setting and achievement among the patients receiving tailored clinician interventions increased 9 percentage points to $R^2 = 0.45$, representing a 25% increase over the highest previously attained.

Although psychographic segmentation has been used by more progressive healthcare organizations for decades, it is only now gaining a growing audience among hospitals and health systems as patients begin to act more and more like 'consumers' in their expectations of a healthcare experience. No longer is a 'patient a patient;' rather individuals come to the healthcare experience with their life experience and a wide variety of motivations that require a varied response on the part of the healthcare marketer and clinician.