Typology of Patients' Expectations towards the Health-Care System: A Semiotic Approach

Isabelle Chalamon
Professeur - Chercheur
INSEEC Business Schools

19, place Tolozan
69001 Lyon
Email: isabelle_chalamon@hotmail.com

Inès Chouk
Maître de conférence
Laboratoire THEMA UMR 8184

IUT de Cergy-Pontoise,
Département Techniques de Commercialisation,
49, avenue des Genottes –
BP 8428, 95806 Cergy-Pontoise cedex.
Email: ines_chouk@yahoo.fr

Benoit Heilbrunn
Professeur
ESCP Europe

79, avenue de la République, 75011 Paris.
Email: bheilbrunn@escpeurope.eu

Acknowledgment: This research has been sponsored by Johnson & Johnson (Janssen-Cilag) in the context of the research Chair Johnson & Johnson-ESCP-Europe

Typology of Patients' Expectations towards the Health-Care System:

A Semiotic Approach

Abstract

The purpose of this paper is to propose a general typology of patients' expectations towards the health care system and the services provided by health professionals. Via a semiotic analysis of patients' discourses, four types of values expressed by patients are identified. They are labelled practical, existential, critical, and hedonistic. Based on these values we then empirically identify four patient profiles. This research, by providing a segmentation tool relevant for the health-care sector will enable managers in the health-care industry to better position their offers and to identify communication strategies adapted to the different patients profiles.

Key words: patient behavior, typology, health care.

Typologie des attentes des patients vis-à-vis du système de santé :

Une approche sémiotique

Résumé

L'objectif de ce papier est de proposer une typologie des attentes des patients vis-à-vis du système de santé et des services délivrés par les professionnels de santé. Par le biais d'une analyse sémiotique de leurs attentes, quatre types de valeurs exprimées par les patients sont identifiés que nous nommons approche fonctionnelle, existentielle, critique et hédonique. Sur la base de ces valeurs, nous identifions empiriquement quatre profils de patients. Cette recherche fournit un outil de segmentation adapté au contexte de la santé et permet ainsi aux managers de ce secteur d'identifier des stratégies de communication adaptées aux différents types de patients.

Mots clés : comportement du patient, typologie, système de santé.

Typology of Patients' Expectations towards the Health-Care System:
A Semiotic Approach

What do patients expect of the health-care system? How can we explain the diversity of these expectations and how can we classify them? The purpose of this paper is to answer these questions by proposing a general typology of patients' expectations towards the health-care system and the services provided by health professionals.

In the health-care sector, the patient has taken on an increasingly active role concerning his/her health. He/she often asks to be involved in the treatment decision making (Charles et *alii.*, 1999) and often actively looks up information concerning his/her condition, as well as the treatments available (Wagner Hu and Hibbard, 2001). Being more and more active in health-care, the patient is increasingly viewed as a participant actor, as an *expert patient* (Fox et *alii.*, 1999) and as a consumer actively choosing care. Health care professionals are trying to put him/her back in "the heart" of the system. The literature in this domain discusses new approaches based on shared decision-making or being "centered" on the patient (Charles, et *alii.*, *1999*; Stevenson et *alii.*, 2000; Mellor & Green, 2002; Zandbelt et *alii.*, 2005). In order to improve health care outcomes, the necessity to take into account the final users' expectations is therefore now broadly accepted.

In the literature, several conceptual models describing how patients want to participate in health care decision-making have been proposed and discussed (Vick and Scott, 1998; Flynn, et *alii.*, 2006). On the other hand, less attention has been devoted to classify the variety of their expectations regarding the services provided by health professionals and the health care system in general. Distinguishing these needs and preferences is however an essential step towards promoting patient-centered care, that is to say, care that respects and responds to individual patient preferences (Gerteis et *alii.*, 1993; Flynn et *alii.*, 2006). This observation is all the more important because patient evaluation of health services has long been seen as a legitimate and necessary part of the patient involvement project (Bikker and Thompson, 2006).

With this research, we propose to develop a general typology of patients' expectations towards the health-care system and health professionals. By developing a *segmentation tool* relevant to the health-care context, we hope to improve the quality of the service and the patients' global satisfaction, by helping doctors and policymakers identify more accurately the final users'

needs. Moreover, this classification will help pharmaceutical companies and health care providers to develop a better positioning of their health offers and to choose more accurately their communication strategies.

This paper is divided into three sections. The first section details and criticizes the existing literature on patients' expectations and presents our conceptual framework: the value system of consumption developed by Floch (1988 and 2001). The second section proposes a semiotic analysis of patients' expectations towards the health-care system and the services provided by health professionals. From this analysis, four types of values expressed by patients are identified: practical, existential, critical and hedonistic. On the basis of these values, four patient profiles are then identified and described in a third section. We conclude with the limits and contributions of the research.

1. THEORETICAL BACKGROUND AND CONCEPTUAL FRAMEWORK

1.1 Patients expectations towards health care and decision-making for treatments

Several trends such as improved access to health care information, the growth of self-help groups or the important amount of money and time spent on alternative medicine indicate that patients-consumers are taking an increasingly active role in their own health management (Ouschan et *alii.*, 2006). For several decades now, this evolution in the patient's behavior has greatly influenced the patient-doctor relationship. According to Charles et *alii.* (1999), the legitimacy of the most prevalent approach in treatment decision making (i.e. the paternalistic model) began to be questioned in the 80's. This approach - which is now being challenged - was based on the widely accepted assumption that physicians were in the best position to evaluate different treatments and to make the treatment decision. At the same time, models promoting active involvement of patients in the treatment decision-making were developed and gained widespread appeal to both physicians and patients. In particular, the paternalistic model has been challenged by two other models which strongly emphasize the involvement of the patient: the "shared" and the "informed" models (Charles et *alii.*, 1999).

Table 1: Three models of the treatment decision making (adapted from Charles et *alii.*, 1999)

Analytical stages	Paternalistic model	Shared model	Informed model
Information exchange			
- **Flow**	One way (largely)	Two way	One way (largely)
- **Direction**	Physician ⇨ patient	Physician ⇔ patient	Physician ⇨ patient
- **Type**	Medical	Medical and personal	Medical
- **Amount**	Minimum legal required	All relevant for Decision-making	All relevant for Decision-making
Deliberation	Physician alone or with other physicians	Physician and patient (plus potential others)	Patient (plus potential others)
Deciding on treatment to implement	Physician	Physician and patient	Patient

Rather than advocate a particular model, scholars (Shaffer and Sherrell, 1995; Charles and *al.*, 1999; Flynn et *alii.*, 2006) emphasize the importance of flexibility, and the necessity to structure the treatment decision making process on the basis of patients' expectations regarding involvement, which can be quite variable from one person to another.

Although most patients prefer a high level of information exchange, they widely differ in their preferences for discussing and selecting choice of treatment (Vick & Scott, 1998; Flynn et *alii.*, 2006). According to these two criteria, four main types of patients can be identified (Flynn et *alii.*, 2006). The *deliberative autonomists* desire a high degree of involvement in deliberation and personal control in the treatment decision making. Whereas the *deliberative delegators* prefer greater time spent on deliberation but with the doctor's control concerning the decision. The *non-deliberative autonomist* type refers to little time spent on deliberation but with personal control over decisions. Finally, the *non deliberative delegators* can be characterized by little or no deliberation and total doctor control concerning decisions. In addition, being female, having a higher level of education and having a better self-rated health predict a significantly higher probability of being the most actively involved in discussion and treatment choices (Flynn et *alii.*, 2006 ; Vick & Scott, 1998).

From this brief review, we can conclude that academic literature seems to provide a relatively clear and complete framework concerning the patients' preferences regarding their involvement in medical decision-making. However, the frameworks developed by these scholars are still limited in scope in so far as they focus only on one dimension of the

relationship between patients and the health-care system, i.e. the patient-doctor relationship. In fact, the health care system is not a homogeneous entity (Singh, 1990). Rather, it is composed of multiple health care agents - such as physicians, pharmacists, hospitals or insurance agents - interacting with the patients in order to provide health care. The reality of the health care system is thus the result of the sum of the interactions which compose this complex *servuction process*. With this in mind, a global approach seems to be required in order to provide a more complete vision of the patients' expectations. To achieve this purpose, the semiotic approach of consumption (Floch, 1988 and 2001) seems to provide a relevant interpretative model to describe and classify patients' global expectations towards health care professionals and the services provided by the health care system.

1.2 The value system of consumption

The framework provided by Floch (1988) belongs to structural semiotics (Greimas, 1983; Greimas and Courtès, 1983). On the basis of several semiotic analyses of providers' discourse (car and furniture manufacturers) and consumers' discourse (expectations towards hypermarkets), Floch proposes an organization of the values sought after by consumers. According to him, there are basically two kinds of values associated with objects or services: utilitarian values and existential values.

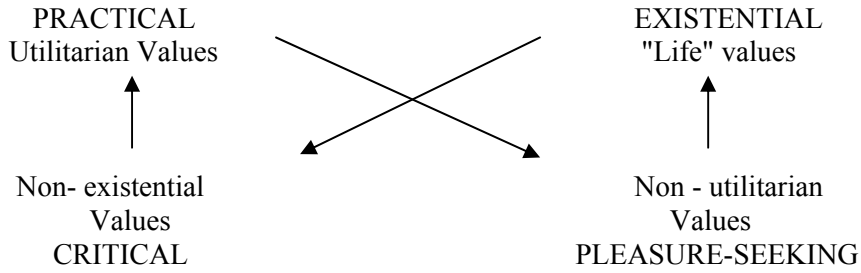
In Floch's view, objects are considered to be utilitarian when they are perceived by the consumer as existing primarily to be used for specific functions. The effectiveness with which they fulfill these functions plays a large part in determining the values ascribed to them. In this case, the consumer information search is done mainly to confirm the effectiveness of the object needed. However, certain consumers may develop relationships with familiar brands which go far beyond their functional aspects (Batra & Ahtola, 1990). In this second context, they might invest in products and brands because of personal and emotional values. In other words, products may have existential connotations in that they are perceived and evaluated by consumers in a way which extends beyond their functional purpose. Existential values might include values such as: social values (the product indicates that the user belongs to a given social category), emotional values (the product arouses feelings or an emotional response), or epistemic values (the ability of the product to arouse curiosity and to provide novelty). The latter refers to the necessity for consumers to live new experiences through the use of products. Therefore, any brand or product might be considered by consumers as having either "practical" values - reliability, functionality, perceived quality - or, on the contrary, "life"

values - social recognition, sentimental response, curiosity. This dichotomy between "life" or "existential" and "practical" or "utilitarian" values, developed by Greimas (1983) and Floch (2001), can be enriched and developed by the use of a semiotic square.

The semiotic square can be considered as the visual representation of the relations existing between the distinctive features constituting a semantic category. The semiotic square will help us to categorize and visualize the relations which exist between the different values expressed by consumers. The pair of words "existential" and "utilitarian" can be regarded as a semantic axis in which either term presupposes the other: these terms are said to be in a relation of *contrariety*. Following Saussure's assertion, the basic principle of structural semiotics is that there is no meaning without difference. In other words, any system of signification or meaning is above all a system of relations. Each of these terms may, through a negative operation, contract a relation of *contradiction*. Consequently, "non-existential"/"existential", and "non-practical" /"practical" can be viewed as the two contradictions. A third type of relation emerges from this typology, a relation of *implication* which exists between "practical" values and "non existential" values on the one hand, and between "existential" and "non practical" values on the other hand.

Consequently, in addition to the "utilitarian" or "existential" types, two other ideal types emerge. Firstly, the "pleasure-seeking" position which is the negation of utilitarian values and which refers to the universe of emotion, feeling, luxury, and gratuitousness. From this point of view, the product is, above all, a source of emotion, pleasure, entertainment or refinement. Lastly, there is the "critical" type which refers to the negation of existential values: the consumer has a rationale of detachment, of calculation and comparison. The product is subject to evaluation criteria and is sought after for ratios such as quality/ price or quantity/ price, for security, for economy or for the guarantee provided. Figure 1 features the semiotic square which illustrates the four types of values which consumers can ascribe to a product or service.

Figure 1. The System of Values in the Field of Consumption (Floch, 1988)



This approach has several interests for our study. Firstly, the conceptual framework developed by Floch is robust and broad enough to analyze the main orientations consumers can have towards a large range of products and services. It could therefore be used to give a better understanding of patients' expectations towards the full range of interactions which make up the *service* provided by the myriads of actors composing the health care system. Secondly, Floch's model is based on consumers' narratives, whose attitudes and preferences are analyzed in an interactive way. By following this analytical procedure, the entire range of the interactions between the patients and the health care providers will be therefore better integrated into our analysis. Finally, this analytical grid enables one to go beyond the usual segmentation approaches that have a tendency to overemphasize the importance of the results (vs. the interactions) in the analysis. More than coming up with a list of *expressed needs*, this framework allows the researcher to identify the main preferences of the patients *in the successive interactions patients have with the different actors of the health care system*.

In the next section, we will establish the link between patients' expectations towards health-care and the values which they, as individual consumers, look for in their consumption of products and services. This first step is necessary in order to identify a typology of patients based on these values. For this purpose, we made a semiotic analysis of patients' expectations towards the health-care system and the services provided by health professionals.

2. SEMIOTIC ANALYSIS OF PATIENTS' DISCOURSE

2.1 Methodology

We carried out 38 comprehensive, semi-structured interviews taken from a general-population sample of individuals aged 21 to 76. The sample was composed of 17 males and 21 females, with a wide range of professions (excluding health professionals). Respondents were asked to talk successively about their experience with the various dimensions of the health system. The main interview themes were the following: attitudes towards professionals and the health-care system, the rationale underlying the consultation of doctors and pharmacists, information-search behavior, trust in the effectiveness of medicine, degree of openness towards alternative medicines, the role of peer pressure, sensitivity to the cost of medicine, the issue of generics and sensitivity towards brands. The interviews which point out various types of expectations regarding the various dimensions of the health system were transcribed and analysed according to Floch's (1988 & 2001) semiotic framework.

2.2 Patients' values concerning the health-care system

From the qualitative material, it appears quite clearly that patients' views are organized around two distinct visions of health and well-being: the instrumental or functional viewpoint and the existential viewpoint. With the projection of these values onto a semiotic square, four types of health, health-care and medication consumption values can be determined: the functional, critical, existential and hedonistic values. The practical and critical segments are complementary and refer to utilitarian values, whereas the existential and hedonistic segments refer to existential values and are also complementary. These different types of values involve divergent attitudes towards health, health-care and medication.

The rationale behind a visit to the doctor. The "practical" view is based on functional values: *"When I go to the doctor I don't want to waste time: usually I explain how I feel, try to describe my symptoms and I expect brief and clear answers", "I hate having to wait when I go to the doctor"*. Conversely, the "existential" approach is based on existential values: *"I go to the doctor when I feel ill; but I also go to see her when I feel down or when I need help tackling family problems…", "For me, a doctor should be a good listener: a doctor not only prescribes medicine, but is also a counselor and a confident"*. Patients with "critical" values

are more skeptical and seek optimization: *"I have previously decided not to go and see my doctor, because of the cost of the visit", "My relationship with my doctor is not particularly friendly. Above all I need a competent doctor. Whether I like him or not doesn't really matter"*. For patients with "hedonistic" values, going to a doctor is devoid of any practical value going so far as to be the very negation of "practical" values: *"I will visit my doctor whenever I feel I need to, even if I do not feel ill", "above all, my doctor needs to be sympathetic"*, *"for me going to the doctor is part of my general health, it is a pleasure, even if I am not particularly ill"*.

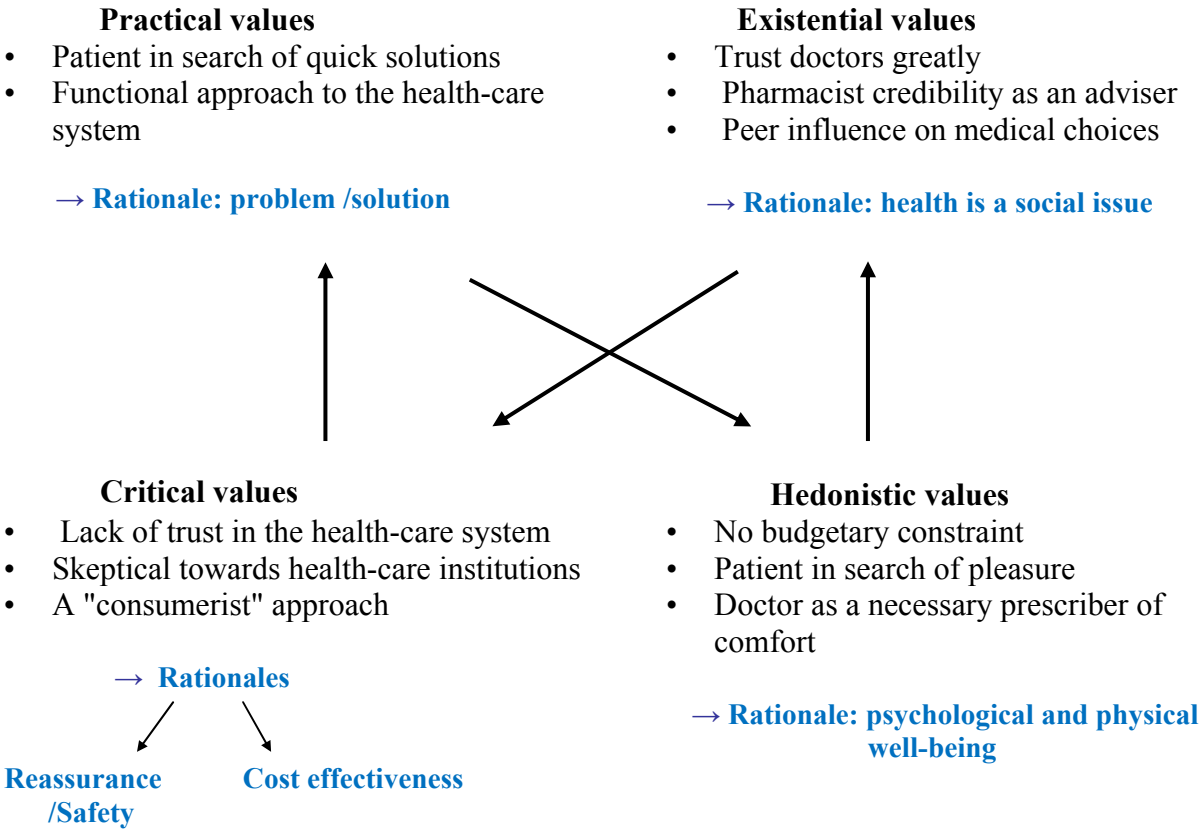
Attitudes towards Self-medication. For a patient who has a "practical" rationale, self medication is a way to save time: *"I only use medicine if it is necessary", "Often I go to buy a product in the pharmacy because I have no time to waste to go to the doctor"*. As for the existential patient, he/she may be influenced by peers and external advice: *"I Buy OTC products only on the advice of the pharmacist"*. A patient who has a "critical" approach is guided by a rationale of optimization: *"for me, self-medication is a useless expense", "I don't want to pay for the medicine"*. The hedonistic patient is a true consumer of OTC products and is in search of pleasure: *"I like to try products and drugs promoted in pharmacies or advertised on TV", "I sometimes buy OTC products for the pleasure of it", "for me, buying prescription medicines or OTC products is a purchase like any other"*.

Attitudes and expectations towards Pharmacists. A "practical" patient has a functional definition of the pharmacy: *"I never go to the pharmacy to do shopping", "For me, a good pharmacy is a place near my house or my office and where you don't have to stand in line."* Conversely, the "existential" view would be the search for a personal link with the pharmacist: *"I go to the pharmacist when I need it, and he gives me a consultation", "The pharmacy… is a place where I can go for advice", "I always go to the same pharmacist: she knows me, I know her, she is my friend!"*. The critical patient is skeptical towards pharmacists in general: *"The pharmacist is a salesman. He will try to sell anything", "I am always afraid that I will get ripped off when I use the pharmacy"*. For the hedonistic patient, the pharmacy is a place to do shopping: *"I like to go to the pharmacy, and look at new medication, it's great! Sometimes I give in to the temptation and buy new products", "I love big pharmacies with lots of special offers…", "I often buy on impulse in the pharmacy"*.

The four major types of values expressed by patients are depicted in the following figure:

Figure 2. The main values expressed by patients

(Adapted from Floch, 1988)



Based on this value system, we have then identified a typology of patient profiles. For this purpose, we carried out a quantitative study.

3. IDENTIFICATION OF PATIENT PROFILES

The aim of this quantitative study was twofold. Firstly, an exploratory factor analysis was performed in order to provide empirical evidence for the existence of the four types of value systems identified in the qualitative study. Secondly, a cluster analysis was used to propose a classification of individuals based on these values.

3.1 Methodology

The quantitative research was carried out in February 2007. Our sample consisted of 200 consumers. Respondents were contacted via an e-mail survey. Only completed questionnaires were used for the analysis. The descriptive statistics of this sample are presented in Table 2.

Table 2: Demographic Variables

Variables	Percentage of respondents	Variables	Percentage of respondents
Gender		*Education level*	
Male	52%	No college	1%
Female	48%	Undergraduate	87.5%
		Postgraduate	11.5%
Age			
15 - 24 years	15%	*Dependent children*	
25 - 34 years	16%		
35 - 49 years	26%		
50 or older	43%	None	59.5%
		1	19.0%
Monthly Income		2	13.5%
Under 900 €		3	7.0%
900 - 1500 €	21.0%	4	0.5%
1500 - 2300 €	38.0%	5	0%
2300 - 3100 €	27.5%	6 or more	0.5%
3100 - 4600 €	9.0%		
Over 4600 €	2.0%		
	2.5%		

Based on the qualitative interviews, specific measures were developed for the four types of values. A variety of topics were included in the questionnaire: attitudes towards visits to health professionals and the rationale involved (doctors and pharmacists), attitudes towards alternative medicine and self-medication, expectations regarding the health-care system and attitudes towards brands and promotions. Using 10-point Likert scales, we asked participants to assess the health-care system and their consumption of medication. In the last part of the questionnaire, participants answered a number of demographic questions. Internal reliability tests show acceptable values of Cronbach's alpha, ranging from 0.53 to 0.83.

In the next sections, we will first discuss the results of the exploratory factor analysis of values expressed by patients. We then present the typology provided by the cluster analysis.

3.2 Identification of values expressed by patients

We conducted a principal component exploratory factor analysis on a total sample of 75 items. Those with loadings of less than 0.5 were removed and redundant items were dropped. The

factor analysis was performed on the 19 remaining items. We obtained 5 factors. The final structure solution explains 58% of the total variance. Table 3 shows the items loading on each factor.

Table 3: Factor Analysis of Patient Values

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Pleasure with the discovery of new medication	.825				
Temptation to buy new medication	.819				
Pleasure in trying new medication	.762				
Pleasure regarding promotion of medication	.749				
Pleasure in buying medicine	.734				
Private discussions with the doctor		.727			
Doctor as a confident		.700			
Trust relationship with the doctor		.668			
Pharmacist as an adviser		.664			
Doctor as a friend		.630			
Critical attitude towards health-care system reimbursement			.798		
Critical attitude towards prices for medication			.767		
Critical attitude towards the price of a doctor's visit			.662		
Self-medication as a solution for minor health problems				.698	
Functional role of the pharmacy	-.318			.685	
Functional role of the medication				.571	
Functional role of the health-care system				.500	
Critical attitude towards pharmacist					-.855
Fear of the pharmacist				.358	.635

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

The first factor extracted refers to hedonistic values. This combines items referring to the patient's enjoyment when buying products from the pharmacy or testing new medicine. The second factor characterizes existential values. This consists of items pertaining to social links with the pharmacist and the trust relationship with the doctor. By engaging in informal

discussions, some patients are likely to develop relationships with their pharmacist or doctor. The third and the fifth factors extracted depict two dimensions of critical values. The third factor captures patients' sensitivity to the price of health-care products, while the fifth factor consists of items representing lack of trust in the health-care system. Finally, items with high loadings on the fourth factor reflect patients' expectations regarding the promptness of the health-care system. This factor refers to practical values.

3.3 Patients typology

A two-stage clustering approach was applied. First, a hierarchical cluster analysis was performed on the 200 observations. The dendogram produced by Ward's method suggested four classes. Individual variables for each group of patients are shown in Table 4.

Table 4: Individual variables

	Cluster 1	Cluster 2	Cluster 3	Cluster 4
Age (mean)	39.9	42.6	48.6	43
Female (%)	57.1	50	46.9	54.2
Anxiety (mean)	4.6	4.6	5.3	6
Monthly Income				
Under 900 €	26.2	25	12.2	22
900 - 1500 €	28.6	29.2	36.7	52.5
1500 - 2300 €	31	27.1	34.7	20.3
2300 - 3100 €	9.5	14.6	8.2	5.1
3100-4600 €	0	2.1	6.1	0
Over 4600 €	4.8	2.1	2	0

In the second stage, a k-means cluster analysis was used to identify the profiles of the groups of patients. Since cluster analysis is sensitive to outliers, two observations were identified and then dropped. Cluster centers were used to depict the groups of patients (see Table 5)[1]. Four clusters were identified: "hedonists", "functional skeptics", "functional optimizers" and "critics". In addition to this, an Anova analysis was carried out. The results show that the mean differences across the four groups are significant (Table 6).

[1] We have chosen to use the cluster centers instead of the cluster means provided by the Anova analysis because the solution is easier to interpret.

Table 5: Final Cluster Centers

	Cluster			
Values	1	2	3	4
Hedonistic values	1.43207	-.29315	-.41542	-.48255
Existential values	-.27958	-.13282	.16149	.17976
Critical values (price)	-.12741	-1.01631	.31018	.67629
Practical values	-.56598	.61931	.24450	-.24723
Critical values (lack of trust)	-.11975	.40118	-1.19608	.72433

Table 6: ANOVA

		Sum of Squares	Df	Mean Square	F	Sig.
Hedonic values	Between Groups	389.359	3	129.786	117.503	.000
	Within Groups	214.280	194	1.105		
	Total	603.640	197			
Existential values	Between Groups	42.258	3	14.086	4.248	.006
	Within Groups	643.215	194	3.316		
	Total	685.473	197			
Critical values (price)	Between Groups	350.116	3	116.705	44.387	.000
	Within Groups	510.076	194	2.629		
	Total	860.191	197			
Critical values (skepticism)	Between Groups	45.405	3	15.135	5.829	.001
	Within Groups	503.741	194	2.597		
	Total	549.146	197			
Practical values	Between Groups	130.958	3	43.653	25.911	.000
	Within Groups	326.829	194	1.685		
	Total	457.787	197			

"Hedonists" (N= 42; 21% of the sample). For these patients, buying health-care products is similar to shopping. They enjoy going to the pharmacy and like taking care of themselves. They visit a doctor even when it is not necessary. These persons enjoy purchasing new health-care medicine and are less sensitive to price.

"Functional skeptics" (N= 48; 24% of the sample). Patients in this cluster look essentially for rapidity and promptness. They go to the pharmacy or visit a doctor only when it is necessary. The more practical the health-care system is, the more satisfied they will be. Moreover they are less confident in the health care system. They are not sensitive to the price.

"Trustful optimizers" (N= 49; 25% of the sample). Besides trusting the healthcare system, these patients have a cost-optimization approach. Consequently, they are more sensitive to health-care product prices. They adopt strategies to obtain lower prices or totally reimbursed products (through their health insurance).

"Consumerists" (N=59; 30% of the sample). Patients in this cluster don't trust pharmacists or doctors and are sensitive to the price of medicine. They need to ask questions and solicit advice to feel more confident. For example, for these patients, the aim of the pharmacist is to sell his products without any consideration for the patients' interest. Hedonistic and functional aspects are not important for this group.

CONCLUSION AND MANAGERIAL IMPLICATIONS

The aim of this paper is to provide a better understanding of patients' expectations towards the health-care system and the services provided by health professionals. The qualitative study has identified four types of values expressed by patients regarding health, health care and medicine consumption: practical, existential, critical, and hedonistic. Based on this value system, a typology of four patient profiles has emerged: "hedonists", "functional skeptics", "trustful optimizers" and "consumerists". By increasing our understanding of market needs and value drivers, this study underlines the importance of putting the expectations of the patients at the heart of the health care system. In addition, by providing a segmentation of the patients' expectations concerning the service provided by the health care system, this study also generates several insights for marketing managers, policymakers, and health care providers.

First, our findings can help managers in the pharmaceutical industry and health care providers to develop and adjust their communication strategies. Depending on the cluster characteristics, different communication strategies should be adopted. Those who are "hedonists" pay

attention to the benefits products have on their welfare (vitality, energy, etc.). The "functional skeptics" are sensitive to practical aspects (quick service, quick appointment with a doctor etc.) and are looking for reasons to trust the health care system (transparency, finding information easily etc.). The "trustful optimizers" are interested in cheaper products (promotions, fully reimbursed medication etc.), and finally, the "consumerists" who must be convinced of the benevolent attitude of the pharmacist/doctor (looking out for the patient's interest and well-being).

Second, this typology could help policymakers choose the best way to set up awareness campaigns concerning major health issues such as compliance – i.e. following the prescribed treatment – or the importance of using generic medication whenever possible. Unlike standard slogans or generalized messages, specific messages could be adapted to the different patient types so that users would be better targeted. For example, to sensitize "functional skeptics" to the importance of following the prescribed treatment, it would be necessary to emphasize the importance of following the doctor's advice so that the treatment would be more effective and to remind them that the best way to a quick recovery is by following this advice which would spare them another visit to the doctor's office. In communicating with "hedonists", one would insist on the link between well-being and compliance. In order to convince "consumerists" to use generic medicine, one would have to underline the higher cost of brand names and the savings made when using generic products. As for the "functional skeptics" and the "trustful optimizers", they would need a reassuring message which assures them that brand name and generic products are the same. Finally, in addition to their importance in awareness campaigns, these targeted messages could also be used by pharmacists in order to convince patients who hesitate to take generic products at the counter.

Third, this study adds to the current debate on the best practices to adopt concerning information exchange and involvement in the treatment decision-making process. Our study is consistent with the idea that not all patients want to take control of their medical care and actively dialogue with professionals. The results also emphasize the importance of flexibility by physicians when structuring the decision making process, in order to respect patients' preferences (Shaffer and Sherrell, 1995; Charles et *alii.*, 1999; Flynn et *alii.*, 2006). Although the literature on the nature of communication during the consultation has been able to identify the characteristics of "good" communication, it hasn't been able to assess, from the patient's point of view, which characteristics are the most important for him/her and which ones are

irrelevant (Kassirer, 1983; Vick & Scott, 1998). To identify what the patient is looking for is of crucial importance since doctors have limited resources during the consultation. To use this limited time effectively, they need to be aware of those aspects of communication that will respond most to the patient's expectations. Our research partly answers this need. We wish to emphasize that, besides knowing whether or not the patient wishes to receive a lot of information from his/her doctor, two things are essential for an effective and mutually satisfying exchange: the content of the information that is given, and the way medical information is given must both be adapted to the patient's profile. Whereas the "functional skeptic" will expect clear and concise answers from his/her doctor which are based on facts, the "hedonists" will be particularly sensitive to the way in which the message is given and the ease with which the doctor is able to speak about health, wanting him to be light and reassuring, even if the condition is serious. The two other profiles - "consumerists" and "trustful optimizers" - who are more skeptical concerning health care providers, will need to exchange very interactively with their doctor and feel that their choice will be based on a shared decision-making process.

Finally, our research has a number of limitations which opens up new areas of research. First, the study was conducted within the French context. Future research should verify whether the results can be generalized to other countries. Specifically, a comparative study could enhance our understanding of differences in patient preferences across countries. The second limitation is inherent to the sample. Since we have used only 200 observations for the quantitative analysis, additional research is needed to determine the extent to which the results can be generalized to larger samples. Third, one major limitation of this research is related to the measures. Indeed, the scales used to measure patient values need to be improved. As noted earlier, these measures were specifically developed in the context of our research. The majority of items were derived from the patient interviews. Further studies will undoubtedly be useful to enhance these scales.

REFERENCES

Batra R. & Ohtola O. (1990), Measuring the hedonistic and utilitarian sources of consumer attitudes, *Marketing Letters*, 2, 2, 159-170.

Bikker A.P. & Thompson A.G.H. (2006), Predicting and comparing patient satisfaction in four different modes of health care across a nation, *Social Science & Medicine*, 63, 1671-1683.

Charles C., Gafni A. & Whelan T. (1999), Decision-making in the physician-patient encounter: revisiting the shared treatment decision-making model, *Social Science and Medicine*, 49, 651-661.

Floch J.M. (1988), The contribution of structural semiotics to the design of a hypermarket, *International Journal of Research in Marketing*, 4, 3, 233-253.

Floch J.M. (2001), *Semiotics, Marketing and Communication*, London, Palgrave Macmillan.

Flynn K.E., Smith M. & Vaness D. (2006), A typology of preferences for participation in healthcare decision making, *Social Science and Medicine*, 63, 1158-1169.

Fox N.J., Ward K.J. & O'Rourke A. J. (1999), The "expert patient": empowerment or medical dominance? The case of Weight loss, pharmaceutical drugs and the Internet, *Social Science and Medicine*, 60, 6, 1299-1309.

Gerteis M., Edgman-Levitan S., Walker J.D., Stoke D.M., Cleary, P.D. & Delbanco T.L. (1993), What patient really want, *Health Management Quarterly*, 15, 5, 2-6.

Greimas A.J. (1983), *Du Sens II*, Paris, Seuil.

Greimas A.J. & Courtès J. (1983), *Semiotics and language: an Analytical Dictionary*, Indiana, University Press.

Kassirer J.P. (1983), Adding insult to injury**:** usurping patients' prerogatives, *New England Journal of Medicine*, 308, 898-901

Mellor P. & Green S. (2002), A novel Approach to modeling the prescribing decision, intergrating physician and patient influences, *International journal of Market Research*, 44, 4, 449-491.

Ouschan R.J., Sweeney J. & Johnson L.W (2006), Customer empowerment and relationship outcomes in healthcare consultations, *European Journal of Marketing* 40, 9/10, 1068-1086.

Singh J. (1990), A multifacet typology of patient satisfaction with hospital stay, *Journal of Health-care Marketing*, 10, 4, 8-20.

Shaffer T.R. & Sherrell D.L. (1995), Exploring patient role behaviors for health-care services: the Assertive, activated and passive Patient. *Health Marketing Quarterly*, 13, 1, 19-35.

Stevenson F., Barry C., Britten N., Barber N. & Bradley C. (2000), Doctor-patient communication about drugs: the evidence for shared decision making, *Social Science and Medicine*, 50, 829-840.

Vick S. & Scott A. (1998), Agency in health-care. examining patients' preferences for attributes of the doctor-patient relationship, *Journal of Health Economics*, 17, 587-605.

Wagner T.H., Hu T.W. & Hibbard J. (2001), The demand for consumer health information, *Journal of Health Economics*, 20, 1059-1075.

Zandbelt L.C., Smets E.M.A., Oort F.J. & De Haes H. (2005), Coding patient-centred behaviour in the medical encounter, *Social Science and Medicine,* 61*,* 661-671.