Marketing Research in Health Services Planning: a Model

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HEALTH SERVICES HAVE BEEN DEFINED as "all personal and public services performed by individuals or institutions for the purpose of maintaining or restoring health" (*1*). Decisions about the design and delivery of services by private clinics, hospitals, neighborhood health centers, and health maintenance organizations (HMOs) are made primarily by professionals. Yet consumer input into these decisions is increasingly being sought, even demanded. Generally this input has been obtained by four methods: (*a*) consumer representation on boards, (*b*) consumer advocacy (for example, Ralph Nader's Health Research Group), (*c*) a diagnosis of the community (the community being regarded as the patient) and assessment of the community's needs, and (*d*) behavioral and social science research (*2*).

These four methods provide for firsthand contact between health professionals and the lay public and a medically objective review of health care requirements. Yet, in application, weaknesses in the methods may be revealed, such as presumed representation of the whole consumer population, a tendency toward professional domination of decisions, and ineffective integration of consumer input into the organization's planning. These weaknesses often preclude the creation of programs and services that are sensitive and responsive to all sectors of the population (*3*).

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The strengths of the four methods must be integrated into a managerial structure in order to produce programs and services that are satisfactory to health care consumers. To accomplish such integration, a framework is needed, and marketing research can provide it.

Marketing research is the organizational activity of systematically gathering, recording, and analyzing the information needed to make planning and implementation decisions that affect the quality or intensity of an organization's interactions with consumers (*4,5*). We propose that a marketing research model and marketing research methods be incorporated into the health services planning process at the institutional level.

Marketing: Responsiveness to Consumers

In business, marketing is the matching of a company's capabilities and resources with consumers' needs and wants (*6,7*). Needs and wants are the things that are important to consumers and that underlie their behavior. Because consumers' preferences and expectations vary, companies provide many different products or services. Through marketing, management can foster mutually beneficial exchanges between the company and specified segments of consumers. Exchanges occur when something of value is given up for something of value received—goods, services, money, attention, devotion, ideas, and so forth (*8*).

Defined in this way, marketing encompasses far more than the narrow activities of advertising or promotion in a traditional business setting. To be successful a business or any other organization must satisfy various consumer segments by providing appropriately designed products or services. Simultaneously, it must also achieve its internal goals and objectives, whether these be defined as profit, market share, health outcomes, or patient compliance. To reach these goals, a

business or an organization has to offer the right product or service at the right price and deliver it at the right time and place. When planning is oriented toward the marketplace, effective and efficient exchanges are more likely to take place between the business or organization and its consumers. Such an orientation, however, requires an understanding on the part of management as to how and why consumers choose specific products or services in the marketplace.

Marketing in the Health Sector

In the health sector, consumers' needs are traditionally viewed as equivalent to their health or medical care requirements (*9–11*). Health providers create "products" to respond to these requirements. These products (usually specific services) include the technical knowledge and skills of the provider, the technological capacity of the institution in which the provider functions, and the specific tests, surgical procedures, and regimens that are prescribed.

Health professionals primarily consider health services in technical terms (*12*). Consumers, on the other hand, often use very different criteria when considering health services (*13,14*), placing greater emphasis on the nontechnical components of service delivery from which they expect to derive values or benefits. These benefits become, in turn, surrogates in the consumers' minds for the technical components of the health service. Among the nontechnical benefits that consumers desire or expect in a medical facility are a pleasing appearance, physical comfort, an opportunity for effective communication with the staff, and ease in obtaining services (*15*). Priority in program planning should be given to identifying the benefits that most influence consumers in deciding whether or not to use health services and where to obtain them. Consumers' choices of sources of health care are becoming increasingly important to health care management because consumers are beginning to shop around for care (*16*). If services are to be responsive to consumers' preferences and expectations, the benefits that consumers seek have to be identified. Information on consumers' preferences and expectations also has to be made available to managers in a usable form before decisions are made about the service design.

Two Planning Approaches

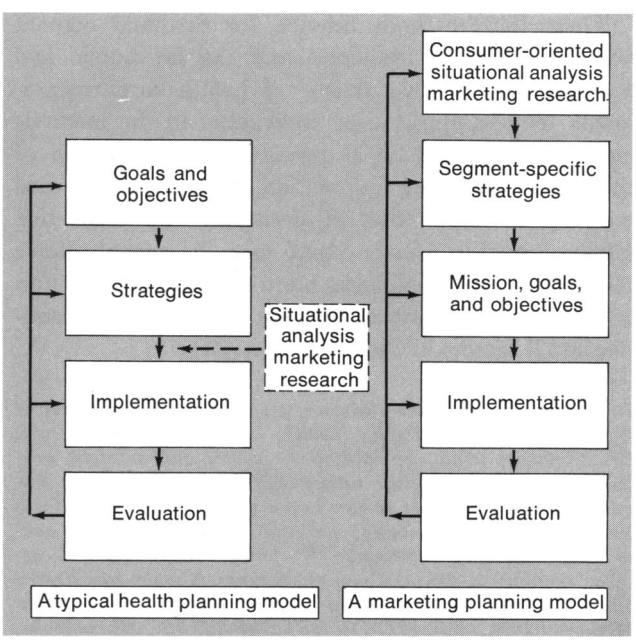
Collection of information from consumers should be a primary concern of any organization. The time of collection in terms of the planning sequence is also of great importance. Managers of clinics, hospitals, neighborhood health centers, and HMOs typically consider information about consumers' preferences and behavior only after they have set goals and objectives and decided on service strategy (*17*). That is, they turn to consumers only after having already decided what they are going to do for them. And although the information about consumers collected at this stage may aid in selling the services being offered, it comes too late to be of value in helping managers determine whether the consumers actually want or need the services.

In a marketing approach, the planning sequence is different. Consumers are the focal point for the key decisions that determine the organization's success or failure (fig. 1). Therefore consumers are considered at the beginning of the planning process (*18*). Information gathered from and about them provides the foundation for defining the organization's goals and objectives. Consumers are viewed in terms of subgroupings, or segments, based on similar behavior or preferences. Each segment is profiled according to identifiable characteristics. In the initial analysis, both the organization's internal capabilities and the preferences of its current constituency are taken into account.

Once the initial analysis is completed, a strategy is devised for each segment of consumers. Only after consumers have been segmented, does the organization specify its operational goals and objectives and the means that will be used to achieve them through control of the design, location, price, and promotion of services.

A marketing approach and traditional approaches in the health sector differ only in the timing of the steps in the planning process. This difference, however, is critical to the design of strategies that are sensitive to

Figure 1. Models for planning health programs



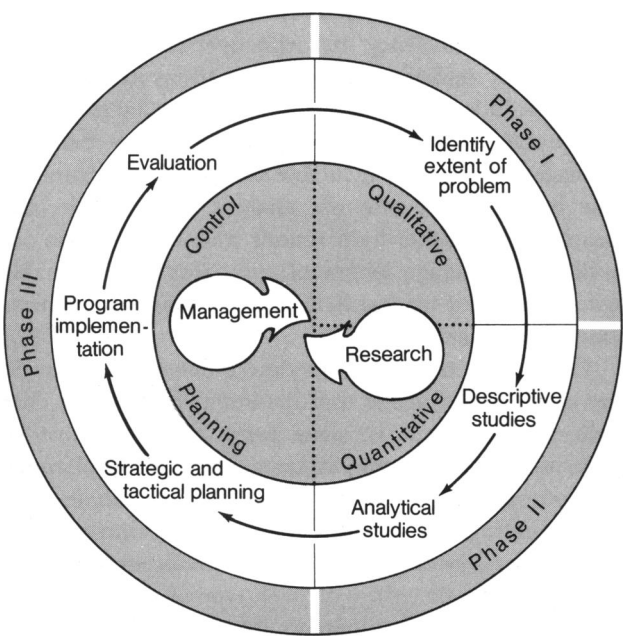
SOURCE: Adapted from reference 18.

consumers' preferences. Traditionally, the planning of health services organizations has been done from inside the organization out to the consumer. That is, the organization determines what the health professionals' needs are, what consumers should have, and how consumers' needs are to be filled. Current trends and pressures, however, such as those causing consumers to shop around for service alternatives, dictate a change from the traditional approach to one more responsive to the marketplace. Because planning begins with the consumer in a marketing approach, consumers' preferences and needs, particularly those not directly related to medical techniques, guide the organization's strategy. Consumer segments then form the basis on which appropriate and selective strategies, objectives, and goals can be constructed. Because information is available from consumers, programs and services can be made more responsive to them. Consequently, the levels of their satisfaction can be expected to be higher because of the greater congruence between their expectations and the actual service features.

Integrating Research on Consumers

As the conceptual framework for market-oriented health services planning in figure 2 shows, the essential link in such planning is between research on consumers and planning and control by management. To respond appropriately to consumers' preferences, an organization needs to have an information gathering or research program that is well integrated into the management process. There are three phases in this process. The first two involve the research program. In the first phase, the extent of the problem is determined in qualitative terms. Management seeks to learn what factors affect relationships between the organization and its consumers. In the second phase, quantitative studies are conducted to identify the various consumer segments in the health care marketplace so that their future behavior can be forecast.

Figure 2. A framework for integrating consumer research and management planning and control



Upon completion of the research, the information must be disseminated, so that the results can be translated into programs that are sensitive to consumers' preferences and needs. This translation is done in the third phase. This management phase involves the formulation of plans incorporating the results of the research, implementation of these plans, and the evaluation of their results. As program outputs are observed and measured against the plans, new problems may surface, creating a need for additional information. Thus, for an organization to be effective, research has to be a dynamic process and an integral part of planning.

Applying the Marketing Model

Many hospitals are currently trying to broaden their target markets from primarily inpatient care to a wide range of non-inpatient services. In one plan under consideration in a major midwestern metropolitan area, for example, hospitals would provide acute care through ambulatory (outpatient) services. (We use this plan throughout this paper to illustrate the actual application of a marketing model to health services planning.) The outpatient market in this metropolitan area already includes large fee-for-service multispecialty group practices, HMOs, and neighborhood health centers. Consumers also are served in part by hospital emergency rooms. As with traditional business services, successful expansion of hospitals into a new market—the outpatient market—requires an understanding on the part of the managers about consumers' perceptions of the hospital, as well as the identification of the potential segments of the market that would use hospital-based ambulatory care services. A marketing approach can aid in such an exploration.

Phase 1. Qualitative studies. In the first phase of the investigation, the components of the problem or problems relevant to planning decisions are delineated. Often health care providers assume that they understand these components. However, because consumers may have different perceptions, an opportunity should be taken at the outset of planning to verify or challenge providers' conventional assumptions (*13*).

Several qualitative research techniques are used in this phase of investigation. The first, focus group dis-

cussion, is used frequently in business to elicit consumer perceptions about a given subject (*19,20*). After a representative group of actual or potential consumers is brought together, a general subject for discussion is introduced by a moderator, who generates discussion by a few carefully selected "focusing" questions. In a focus group discussion, the aim is to elicit emotional and subjective statements revealing the participants' preferences in respect to the issues under discussion. The participants' statements are subsequently analyzed to identify the components of the research problem that seem worthy of more exact assessment. As opposed to other methods of qualitative group research, such a discussion is supposed to be as expansive as possible, so that the full range of participants' opinions are revealed. Group consensus is not a goal.

In our study in the midwestern metropolitan area, focus group discussions helped clarify key elements in consumers' perceptions of hospitals. In these discussions, four focusing questions were posed to determine what consumers—when new in a city—considered important about hospitals, what in a hospital indicated that the place was all right, or on the other hand, that they should never go back, and what influenced them in determining a hospital's reputation for quality. The discussions were held in the evening in the community rooms of a public library and a commercial bank. Participants were selected by telephone solicitation of households in the appropriate geographic area. Criteria for the participants' selection included having no exposure to a hospital in the previous 6 months and having no family member working in the health field.

In our analysis of the focus group discussions, we identified nine attributes related to consumers' perceptions of hospitals. Six have some face validity, since they have been cited in earlier studies as important dimensions in consumers' perceptions and choices of hospitals (*21–24*); namely, the attitude of the staff, the quality, cost, location, and range of services, and the appearance of the facility. Interestingly, however, the focus group discussions elicited three other organizational attributes not mentioned in the literature; namely, the hospital's reputation, the hospital's cleanliness, and the hospital affiliation of the respondent's personal physician. All nine attributes were included in the quantitative phase of our analysis. Transcripts of the focus group discussions were of help in preparing attitude statements for the survey instrument that we used in the second phase of the research.

A second qualitative research technique, the individual depth interview, is often used to clarify issues that have been raised in focus group discussions, but in a form too vague for useful pursuit in quantitative research (*25*). In individual depth interviews, the decision-making processes or reasoning of the participants is probed on a one-to-one basis through structured questionnaires, comprised primarily of open-ended questions. Although the responses to such questions are subjective, analysis of the responses can further clarify the problem under consideration.

A third kind of qualitative research, nominal group and delphi processes, is used when group consensus is desired (*26*). In these processes, a highly structured format is used to minimize group interaction and, consequently, to help the group reach creative or judgmental decisions. By working within a group, the managers or planners can reach agreement on the critical issues related to future planning decisions.

Phase 2. Quantitative studies. Once the components of the problem are defined, the second phase of research begins. The conditions that affect the relationship between the organization and its consumers are identified through descriptive studies (*4*). The behavior and the demographic profiles of both the consumers and the providers are then assessed. The demographic profiles show who comprises the market and who provides services to the segments within it. Much of the data needed for descriptive studies can be found in secondary sources, both inside and outside the organization: patient origin studies, previous research studies, clinic or hospital discharge or case-mix records, county records, census data, and so forth. Secondary sources are used whenever possible since they speed data collection and reduce costs.

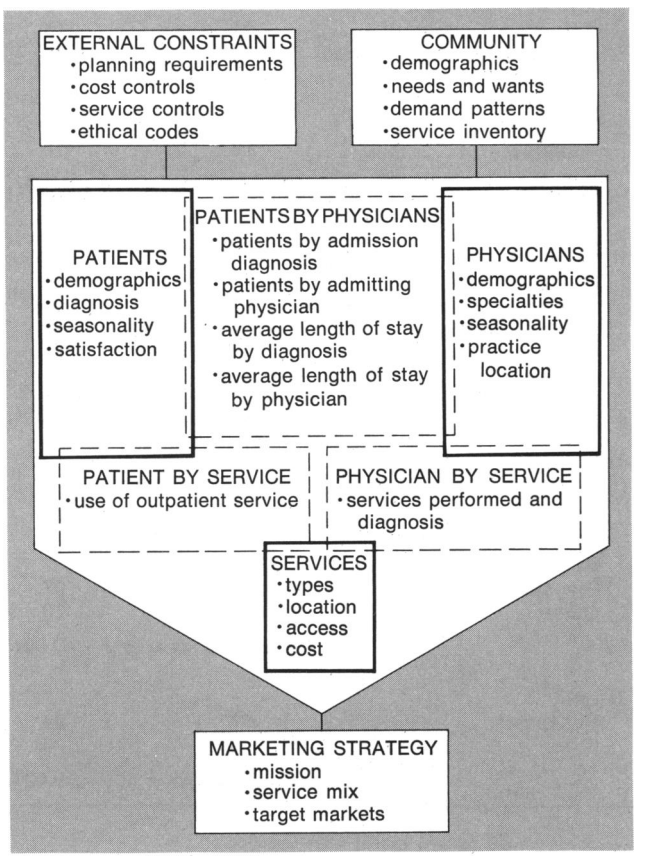
Figure 3 shows some of the data that a hospital might want to have available in its information system to improve the efficiency and effectiveness of a descriptive market analysis. The solid-line boxes indicate how data should be stored; namely, by patient, by physician, and by service. The two-way classifications that the manager should have available are also shown (broken-line boxes). In a case-mix analysis, for example, the number of patients by diagnosis and by physician, as well as by average length of stay, would be valuable information for managers to have to plan the organization's strategies.

Other sources of data for descriptive studies vary in terms of ease of access and the complexity of the data collection methods. In some cases, the data must be collected through survey instruments. Care in planning the questionnaire's design, selecting the sample, and administering the survey will prevent the introduction of systematic error through the data collection method. Distinct tradeoffs exist with each type of data-gathering approach—mail questionnaire, telephone interview, and

personal interview—and therefore the kind of information required must figure in the selection of the correct alternative. The criteria for this selection include the cost, timeliness, and sensitivity of the information that the method can be expected to provide. After collection, the data are compiled to address the research hypotheses and are analyzed by appropriate techniques so that the patterns of association or relationship among the variables can be determined.

Planners and administrators need to know how to group consumers in segments based on their demographic characteristics as these relate to consumers' service preferences or service utilization patterns. Planners and administrators also need to know how changes in the service design might affect utilization. Forecasting the future behavior of the various consumer segments requires careful study and analysis, a requirement that analytical studies can meet. By such studies, (*a*) information about the relationships between the variables that identify the consumer segments can be determined, (*b*) the research environment can be monitored so that before and after relationships can be specified, and (*c*) any other factors that might have been responsible for the phenomenon under investigation can be identified. Although a discussion of analytical approaches is not within the scope of this paper, it is appropriate to note that recent advances in multivariate statistics permit data to be examined in an operationally useful way (*27–29*). For example, differences between several segments can be identified by discriminant analysis, and underlying attitudes can be structured by factor analysis.

Figure 3. Information needed to formulate a marketing strategy in the hospital setting



Whenever possible, both the descriptive and analytical studies are conducted with the same survey instrument. But, when they are necessary and appropriate, quasi-experimental before and after studies are done. Before and after studies are particularly helpful if new services or new service features are available for testing before full implementation.

In our study in the midwestern metropolitan area, data for assessing consumers' perceptions of hospitals, as well as for identifying consumer profiles and market segments, were gathered by a mail questionnaire. The questions in this instrument were designed to elicit the importance to the respondents of various hospital attributes, the respondents' attitudes toward hospitals and health care, and the respondents' demographic characteristics. The content of the eight-page survey instrument was based on analysis of the content of the focus group discussions. The survey instrument was sent to 4,844 randomly selected households in the area, along with a post card which, when returned with the completed form, made the respondent eligible to win a television set. There were 1,465 usable responses (response rate 30.2 percent). There were 1,446 respondents who answered the question, "Do you have

Table 1. Importance of various hospital attributes to consumers with and without a personal physician

Hospital attributes	*Values for consumers with a physician* [1] $\bar{X}$	*Values for consumers without a physician* [1] $\bar{X}$	*Pooled "t" significance level of difference*
Location	2.30	2.43	Not significant
Cost of services	1.94	2.04	Not significant
Quality of care	1.09	1.17	0.005
Range of specialized services	1.76	2.03	<0.001
Attitude of staff	1.41	1.69	<0.001
Reputation	1.69	1.96	<0.001
Cleanliness of facilities	1.27	1.49	<0.001
Appearance and decor	2.73	3.00	0.001
Hospital affiliation of consumer's physician	1.80	2.59	<0.001

[1] Values are mean responses on a 5-point scale on which "very important" = 1 and "not very important at all" = 5.

a personal physician?" Of these, 1,213 (83.9 percent) responded affirmatively and 233 (16.1 percent) negatively. These results are similar to those in other studies in which the size of the segment of the consumer population with no physician has been estimated (*30,31*).

In the study, our overriding concern was what the potential was for expansion of outpatient services by the hospitals in the area. People in the area with no personal physician were viewed as the potential users of these services. Thus, the research problem was first to determine what attributes of hospitals were important to this group in choosing a hospital and then to profile this segment relative to consumers who had a personal physician. Table 1 shows how each of nine attributes (which had been identified as being important in phase 1, the qualitative portion of the research) were rated in importance by the two groups. Although both groups rated all nine attributes as rather important, significant differences were observed for seven attributes. For example, the range of services and the

Table 2. Comparison of demographic profiles of consumers with and without a physician

Demographic characteristic	Percent of consumers with a physician	Percent of consumers without a physician
Age group:		
20–29	20	37
30–39	24	29
40–49	18	12
50–59	17	14
60 and over	21	8
	$x^2 = 49.4$, df = 4, $P < 0.001$.	
Marital status:		
Single	12	36
Married	74	55
Other	14	9
	$x^2 = 86.2$, df = 2, $P < 0.001$.	
Sex:		
Male	31	53
Female	69	47
	$x^2 = 39.3$, df = 1, $P < 0.001$.	
Children:		
0	51	59
1	16	15
2	20	14
3	9	8
4 or more	4	4
	$x^2 = 6.4$, df = 4, P = N.S.	
Home ownership:		
Own home	82	65
Rent home	18	35
	$x^2 = 35.0$, df = 1, $P < 0.001$.	
Years at present address:		
Less than 1	6	12
1–3	16	31
3–5	15	16
5–10	19	21
10–25	31	15
More than 25	13	5
	$x^2 = 61.2$, df = 5, $P < 0.001$.	
Occupation:		
Managerial	12	11
Occupation—*Continued*		
Skilled trade	6	10
Laborer	4	5
Officer worker	14	13
Technical	4	5
Professional	24	30
Homemaker	22	10
Student	1	8
Retired	13	7
	$x^2 = 66.0$, df = 8, $P < 0.001$.	
Education:		
Less than 12 years	8	6
High school graduate	28	16
Technical-vocational school	12	11
Some college	19	22
College graduate	21	28
Graduate or professional degree	12	17
	$x^2 = 17.7$, df = 6, $P < 0.007$.	
Annual income:		
Under $8,000	11	18
$8,000–$11,999	10	10
$12,000–$15,999	12	20
$16,000–$19,999	15	15
$20,000–$24,999	18	13
$25,000 or more	34	24
	$x^2 = 28.2$, df = 5, $P < 0.001$.	
How medical expenses paid:		
Self-paid	23	21
Mostly insurance	57	38
Mostly Medicare	7	3
Mostly Medicaid	1	1
Prepaid plan	8	27
Other	5	10
	$x^2 = 92.0$, df = 5, $P < 0.001$.	
Race:		
Caucasian	97	94
Other	3	6
	$x^2 = 6.93$, df = 1, $P < 0.001$.	

NOTE: df = degrees of freedom, N.S. = not significant. Percentages add vertically to 100 percent except when rounded.

reputation of the hospital were more important to consumers with a physician. Yet it is interesting that even this group of consumers rated the attribute of having one's physician affiliated with the hospital as only the sixth most important hospital attribute.

Once the existence of different needs is determined, each consumer segment is profiled. Hospital management can then determine whether potential or actual consumers who match the profile are present in the hospital's current service area in sufficient numbers to justify the establishment of appropriate outpatient services.

In our example, consumers with and without a physician differed significantly in respect to a variety of demographic and social characteristics (table 2). Two distinct profiles emerged. The consumers with no physician tended to be younger, to be single, and to include more males than the other group. The respondents

Table 3. Attitudes of consumers with and without a personal physician about hospitals and their services

Statements used to elicit consumers' attitudes	Values for consumers with physician [1] $\bar{X}$	Values for consumers without physician [1] $\bar{X}$	Pooled "t" significance level of difference [2]
Hospital systems			
1. Some hospitals are better than others	1.63	1.64	0.907
2. I prefer a hospital with my same religious affiliation	3.40	3.72	*<0.001*
3. The best hospitals have a wide range of services	2.45	2.67	*<0.001*
4. New teaching hospitals usually have all the services you need	2.83	2.87	0.512
5. Most hospitals are all alike	3.58	3.41	*0.016*
6. Hospitals associated with medical schools and universities are usually better	2.67	2.48	*0.008*
7. There are not enough hospitals to care for the people who need them	3.79	3.83	0.570
8. People's faith in hospitals has gone down dramatically in the last 2 years	2.86	2.78	0.229
9. All hospitals should offer special services like diet workshops, stop smoking programs	3.02	3.13	0.216
10. It is important for all hospitals to have plans for low-income consumers	2.03	2.05	0.767
Time			
11. It usually takes forever to check in for emergencies	2.89	2.80	0.289
12. Hospitals should find some way to help pass the time while you wait	3.02	2.92	0.203
13. It often takes days to learn of test results from hospitals	2.73	2.70	0.625
14. In an emergency it's best just to go to the closest hospital	2.35	2.31	0.627
15. I always choose the hospital that is closest to where I live for my medical needs	3.36	3.33	0.723
Having choices			
16. I don't choose my hospital, my doctor does	2.31	2.67	*<0.001*
17. It's easier to go to the hospital when I have a problem than to get an appointment with a doctor	3.57	3.24	*<0.001*
18. I trust my doctor's opinion about hospitals	1.90	2.32	*<0.001*
19. It would be nice to have a consumer rating service	2.13	1.94	*<0.001*
20. It's important to ask around to learn a hospital's reputation	2.70	2.59	0.108
21. Hospitals should advertise their services and rates	2.98	2.69	*<0.001*
22. Before choosing a hospital, it's best to find someone who's been there	3.27	3.09	*0.010*
Hospital ambience			
23. Most hospitals have a sterile, cold atmosphere	3.34	3.27	0.319
24. Cleanliness is one of the first things I check when entering a hospital	2.22	2.48	*<0.001*
Hospital ambience—*Continued*			
25. The hospital building tells a lot about how people are cared for	3.36	3.39	0.647
26. When I enter a hospital, the first thing I do is look at how it is decorated	3.96	3.96	0.928
27. Hospitals should make their waiting rooms nicer places to sit	3.00	2.93	0.276
Price			
28. If hospitals were run like a business, costs would go down	2.72	2.81	0.225
29. Hospitals don't really try to keep costs down	2.50	2.54	0.603
30. If hospitals start to advertise, costs will go up	2.83	3.01	*0.014*
31. If hospitals were to share services, costs would be lower	2.18	2.04	*0.016*
32. Hospital costs seem to be rising for no real reason	2.74	2.85	0.172
33. Governments should be more active in lowering hospital charges	2.60	2.52	0.349
34. The best way to lower hospital costs would be to close some hospitals	3.32	3.21	0.104
35. The saying "you get what you pay for" is definitely true in medicine	3.64	3.68	0.593

Table 3. Attitudes of consumers with and without a physician about hospitals and their services—*Continued*

Statements used to elicit consumers' attitudes	Values for consumers with physician [1] $\bar{X}$	Values for consumers without physician [1] $\bar{X}$	Pooled "t" significance level of difference [2]
Interpersonal relations			
36. I often feel intimidated in hospitals	3.36	3.15	*0.008*
37. The attitude of the hospital staff is one of the best ways to tell what the hospital is like	2.23	2.29	0.364
38. Nurses should show more respect for patients	2.55	2.69	0.051
39. Most people who work in hospitals forget patients are human	3.52	3.35	*0.019*
40. It's hard to get a straight answer when you ask a question in a hospital	2.83	2.84	0.888
41. I've had good feelings about the hospitals I have been in	2.10	2.43	*<0.001*
Hospital management and operations			
42. Hospital billing procedures are too complicated	2.64	2.54	0.248
43. I often wonder who is in charge when I enter the hospital	2.94	2.90	0.590
44. Hospitals should survey patients to see what their feelings are	2.08	1.99	0.154
45. It is very rare that hospitals make mistakes in billing people	3.52	3.67	*0.028*
46. Health care is big business	1.63	1.55	0.114
47. I feel that most hospitals have high ethical standards	2.25	2.33	0.179
48. It is irritating to be given medicine without being told the purpose	1.70	1.62	0.179

[1] Values are mean responses on a 5-point scale on which "strongly agree" = 1 and "strongly disagree" = 5.

[2] Italicized numbers are significant at < 0.05.

without a physician were more likely to rent than own their own homes, and unlike the group with a physician, almost half had lived at their present address less than 3 years. Consumers without a physician were also more likely to have their medical expenses paid primarily through a prepaid health plan or through a mixture of Medicaid, self-pay, and other means. Analysis of the racial differences between the two groups suggested that minority respondents were less likely to have a personal physician. The small number of minority respondents in the study sample precluded more detailed analysis of this variable. However, even though the number was small, it reflected the proportion of minorities in the population in the survey area.

A third area of investigation focused upon the attitudes of the two consumer segments toward hospitals and health care. A profile of consumers' attitudes is often helpful, because an understanding of them may provide direction for explaining plans and encouraging acceptance of new services. Table 3 shows that the differences between the consumers with no physician and those with a physician extended beyond demographic characteristics to attitudes. For ease of discussion, the attitude statements from the survey instrument have been arranged by topical areas. The first set of statements relates to hospital systems in general. The consumers with a physician appeared to be more discriminating with regard to hospital systems. Some significant differences were observed between the two consumer segments in respect to four statements (No. 2, 3, 5, and 6). The responses of the consumers with a physician indicated that they did not believe that all hospitals were alike. They also apparently believed that better hospitals offered a wide range of services and were associated with medical schools.

Although no significant differences were observed in respect to the statements on the questionnaire relating to time, the two segments clearly differed as to whether they had an opportunity for personal choice. As expected, the consumers with no physician appeared to be more skeptical about allowing a physician to control hospital choice. They indicated that they would prefer a consumer rating service for hospitals. Also, this segment expressed the belief that it helps to find out about a hospital from someone who has been there and that advertising would provide an appropriate source of information about hospital services and rates. For six of the seven statements related to choice, differences between the two groups were significant at the 0.01 level or better.

On the price dimension, both segments agreed that if hospitals were run like a business, costs would decrease. Yet significant differences were observed between the two consumer groups as to the strategies for lowering costs. Although neither segment appeared to believe that advertising would raise costs, the con-

sumers with a physician were not so sure. Both segments agreed that sharing services would lower costs, but the consumers without a physician were more positive about this strategy. The respondents with no physician seemed to have had more negative experiences in interpersonal relationships. For example, they were more likely to report that they felt intimidated by hospitals and did not have good feelings about them.

In the final area of investigation, hospital management and operations, there were significant differences between the segments on only one statement (No. 45). Both groups indicated that they felt billing mistakes were not unusual, but again this opinion was more strongly held by the segment without a physician.

The two groups had rather interesting differences in attitudes. The segment with no physician appeared to be far more critical and negative about hospitals and health care. Yet the commonalities between the two groups cannot be overlooked. Both segments expressed the belief that the current number of hospitals is sufficient. And as their ranking of hospital attributes revealed, neither group paid much attention to hospital ambience. Both groups expressed general agreement that hospitals do little to keep costs down and that government intervention in this area would help. Both segments indicated that they would prefer more surveys of patients and agreed that health care is big business.

Phase 3. Planning, implementation, and evaluation. In the final phase of the marketing research approach, the results of data collection are translated into feasible programs. At this point the concepts illustrated in figures 1 and 2 can be integrated into the planning process. Following an outside-in approach, consumer-based research is conducted and specific segments profiled. Next, strategies and tactics must be devised. The information gathered in the qualitative and quantitative phases of the research is then used in conjunction with organizational expertise to devise program strategies and tactics. Such information can validate or challenge the subjective knowledge of the organization's managers. When different subgroups have different preferences and profiles, programs may have to be set up for each of them. Criteria for evaluating program implementation are outlined, as is done in the present planning process. Program effectiveness, for example, is measured by analyses of service utilization, revenues and costs, consumers' compliance and satisfaction, and health outcomes. A program is more likely to be successful with a marketing research approach than with traditional health planning, because with a marketing approach, a monitoring system is designed specifically for each segment of consumers before implementation begins.

In our study, consumers with no physician differed from consumers with a physician in many respects. Particularly interesting were the results showing the importance that each consumer segment attached to various attributes in selecting a hospital. Consumers with no physician placed less importance on all nine hospital attributes on which they were queried than did consumers with a physician. Of particular note were the significant differences between the two groups in their rating of the importance to them of a hospital's range of services, reputation, and appearance.

Demographically, also, the two segments differed. The consumers with no physician tended to be young, single males with relatively high levels of education. These consumers were more critical of hospitals and less concerned with a hospital's size or reputation. Their attitudes implied that the traditional association with a physician was not essential, indeed, was possibly not even desirable. The responses of these consumers showed that they preferred to maintain control and decide for themselves which health resources to use and when. Therefore, a hospital or other health care system seeking to respond to these values would need to provide access for these consumers to an organized, integrated system of health services that they could use as needed on a periodic basis. This conclusion does not imply that members of this segment might not align themselves with a specific physician if a long-term problem were to occur. Given their current health status, however, they consider a personal physician to be less essential than a comprehensive system to which they can have relatively immediate access. Managers of hospitals and other organized systems of health care should consider creating programs and services for this market segment. Following are some guidelines for making some of the necessary strategic decisions:

- Services should focus primarily on short-term acute care, not on emergency and nonacute chronic conditions. (The segment with no physician views an appropriate set of services more favorably than a wide range of them.)
- Services should be designed so as to provide consumers with alternatives in terms of the type of health manpower that they see, the times and places that services are offered, and the basis on which they are offered—walk-in visits or appointments. (The desire to have a choice and be in control of decisions seems to be a key characteristic of consumers with no personal physician.)
- Information about services should be made available in carefully targeted ways, such as by advertising and stimulation of word-of-mouth referrals. A consumer-rating service might also be appropriate for reaching the target market. (Consumers with no physician seem

to put a high value on having information about their available options.)

- Finally, management might want to survey actual and potential consumers to determine their feelings about the specific mix of services that should be offered and the best way to present them.

Conclusions

In a marketing approach to planning, problems are defined and studies are designed in the sequence that we have shown. First, the extent of the problem is determined by qualitative research. Second, the characteristics and current behavior patterns of the participants in the health care marketplace are described. Third, trends and relationships are analyzed in order to identify the various segments of consumers and to forecast their future behavior and future utilization of health care services.

Already widely used in business, the marketing approach is beginning to be applied successfully in the health care field. In a family practice clinic in the Southwest, for example, the results of personal interviews with clinic patients, as well as information from an adjacent hospital, helped to identify a segment of consumers who preferred to have access to nonemergency, acute-care medical services outside of the hospital on a 24-hour walk-in basis. Because of the estimated size of this segment, planning has begun at the clinic to add a 24-hour walk-in medical service to its existing appointment-based services. This new program will provide the clinic an opportunity for growth as well as remove a considerable portion of the current inappropriate demands on the hospital's emergency room.

In a 170-bed community hospital in a major midwestern city, individual depth interviews with private practice physicians were used to identify ways to increase the number of physicians affiliated with the hospital. This investigation revealed that physicians newly entering practice in the area had a need for help in setting up their offices. The hospital therefore appointed a management staff to assist private practice physicians who affiliated with the hospital to apply modern management methods in their offices.

The approach to planning presented here may seem in many respects obvious to health care providers. Yet the differences between it and the traditional approach, which are highlighted in figure 1, are distinct. In a marketing planning model, phases 1 and 2 of marketing research (fig. 2) take place before any strategies or tactics are decided upon. Marketing research is just that, an examination of the market, that is, of an organization's present and potential customers or users. Information about these groups (their attitudes, perceptions, needs, and wants) dictates the organization's strategic decisions.

Planning and research are not separate activities, each producing a distinct outcome. Rather, they are both part of a sequence of actions, beginning with consumer research and ending with the service mix appropriate to the organization's various publics.

Upon implementation of plans and feedback from evaluation or control procedures, this total sequence of activities becomes a dynamic process that enables the organization to adjust effectively and rapidly to the factors that determine the success or failure of its programs.

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SYNOPSIS

FLEXNER, WILLIAM A. (University of Minnesota School of Public Health), and BERKOWITZ, ERIC N.: *Marketing research in health services planning: a model. Public Health Reports Vol. 94, November–December 1979, pp. 503–513.*

With an appropriate framework, the methodological strengths of traditional approaches to institutional health services planning can be successfully integrated within a managerial structure. To provide such a framework, a model based on a marketing research approach is proposed. This approach will result in more effective and efficient exchanges between health care organizations and consumers than present approaches to health planning. In a marketing approach, the essential element is the timing of each step in the planning process. Typically, health service organizations plan from inside the organization out to the consumers. With a marketing approach, planning begins with the consumers. It is their preferences and needs, particularly those related to the nontechnical aspects of health care, that guide the organization's strategy. Moreover, consumers are considered in subgroupings, or segments, based on similar demographic characteristics, behavior, or preferences. These subgroupings enable the organization to specify better its operational goals and objectives and the means for achieving them (for example, through control of the design, location, price, and promotion of services).

To respond appropriately to consumers' preferences, the organization needs an information-gathering or research program that is well integrated into the management process. The first step in such a program is to determine the extent of the problem (usually through qualitative research), so that the factors affecting the relationship between the organization and its consumers can be identified. Second, quantitative studies are conducted to identify the various consumer segments in the health care marketplace, so that forecasts can be made of how these segments will behave in the future. Third, after incorporating the results of the research, management draws up and implements plans and subsequently evaluates results. Problems for which new information is needed are identified, so that ineffective strategies can be changed or abandoned. The organization is thus enabled to respond to changes in the environment in which its programs operate.

The proposed framework based on a marketing research approach has been used in actual field research in a major midwestern metropolitan area to identify potential market segments of health care consumers who would use hospital-based ambulatory care services. In this field research, a qualitative research technique called focus group discussion revealed nine attributes related to consumers' perceptions of hospitals.

Two consumer segments were identified quantitatively by analyzing the responses to a questionnaire mailed to 4,844 randomly selected households in the area. The segments that were identified, respondents with and without a personal physician, were then compared in terms of (*a*) how they perceived the importance of the nine hospital attributes, (*b*) their demographic characteristics, and (*c*) their attitudes toward hospitals and health care. With the differences between the two groups identified, several strategies are suggested to develop hospital-based ambulatory care services responsive to the segment of consumers with no personal physician.