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HMO Members and Clinicians Rank Health Education Needs

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SYNOPSIS

Before expanding a health education program, the staff of the George Washington University Health Plan conducted a needs assessment of members. Patients in the HMO's adult care and parents in pediatric waiting areas answered survey questions, and a random sample of members was polled by mail. Patients rated their interest in a list of 45 topics, and plan clinicians chose from the same list topics which "would be of greatest help in your practice."

Anxiety/stress was the most popular topic among patients and those who responded by mail. Depression, physical fitness, CPR, and nutrition also rated high. Only 4 topics appeared among the top 10 choices of both plan members and clinicians. After discussion of the patients' choices, the clinicians were asked, several weeks later, to rate the topics again. Clinicians' choices in the second round much more closely approximated the choices of the members.

The most frequently chosen method of instruction was "written material," although videotape and other, more expensive media were also listed. When seminars geared to the members' top choices in the survey were offered, the response was so enthusiastic that additional seminars—a total of 12 in 6 weeks—were held.

HEALTH MAINTENANCE ORGANIZATIONS have been looked to for emphasis on disease prevention and health promotion activities; indeed, their organizational structure, with a stable, accessible member population, and their avowed objectives of preventive health care make the HMO an ideal laboratory for testing and developing ideas about health education.

At the George Washington University Health Plan, a university-affiliated HMO in Washington, D.C., with approximately 21,000 members, the health education program had been structured around the information that clinicians and administrators believed patients should learn. Before expanding the plan's health education program, the authors conducted a needs assessment of both members and clinicians of the HMO. The survey determined the degree of interest and topics of greatest concern to members and clinicians. It proved to be an efficient and economical device to guide the expansion of the health education program and utilize the HMO's own resources. Findings underscored the desire of the HMO members for health education that was prevention-focused rather than disease-oriented.

Methods

The survey listed 45 possible health education topics, as well as an option of writing in other sub-

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jects. Respondents, who were to be anonymous, were asked to rate their interest in each subject on a 3-point scale ranging from "no interest" to "strong interest." If respondents had a strong interest in a topic, they were asked to indicate their preferred method of instruction (by provider on my team, seminar at the health plan, videotape, written material, no preference) and the ability to attend a seminar at various times of the day. They also evaluated health education materials they had received at the health plan during the past year. Patients completed the survey forms in the waiting areas at randomly selected times during September 1981.

To avoid distortion arising from polling only persons who were onsite and possibly sick, the survey was also mailed to a random sample of 1,130 plan members. The mail survey responses were also anonymous. In addition to the questions asked of those onsite, members were asked about their interest in patient handouts, seminars, the newsletter, and video presentations. The survey form concluded with questions about visits to primary care providers, health status, and demographic facts. The mail survey responses were compared with those from the onsite survey groups and analyzed by demographic variables.

The HMO's clinicians, given the same list of of topics, were asked to check those which "would be the greatest help in your practice."

Adult care providers who were polled included 10 board-certified internists practicing primary care medicine, 12 board-certified nurse practitioners or physician's assistants, and 6 second-year primary care residents. Average age was approximately 34 years, and the clinicians were divided equally by sex. Responses were received from 16 adult medicine providers, giving a response rate of 57 percent. The 13 pediatric care providers polled included 5 board-certified pediatricians, 3 nurse practitioners, a child health associate, and 4 second-year pediatric residents. Two pediatricians were male, and the average age was approximately 31. Responses were received from seven pediatric providers, giving a response rate of 54 percent.

Results of both patient and clinician rankings were distributed and discussed with the clinicians. Several weeks later the clinicians were given the same list of topics that they had ranked earlier, as well as the frequency distribution of topics derived from the patients' responses. As a modification of the Delphi technique, clinicians were asked to choose again the topics that would be of greatest help in their practice. The clinicians' responses were then compared with their previous rankings.

Results

Onsite Survey. Of the 404 survey forms distributed at the health plan sites, 299 were returned, a response rate of 74 percent. Responses obtained in adult and pediatric waiting areas were analyzed separately.

In the adult waiting areas, all respondents indicated strong interest in at least one topic. Of the 248 respondents, 48 percent selected anxiety/stress, the most frequently chosen topic. The 10 most popular topics and the proportion of patients indicating strong interest in them are shown in table 1.

Only parents were polled in the pediatric waiting area, and their most frequently chosen topic was childhood emergencies (56.9 percent). Other topics that ranked high were a mixture of parental and personal concerns, as table 2 indicates.

Table 1. Health education topics rated of greatest interest by adult respondents in George Washington University Health Plan survey, 1981

	Strong Interest of respondents (percent)	
Topic	*Onsite N = 248*	*Mail N = 277*
Anxiety/stress	48.0	45.8
Depression	41.9	25.6
Physical fitness	37.9	26.7
CPR	36.7	26.4
Nutrition	35.5	28.2
Interpretation of laboratory results	33.9	27.4
Sinus/allergy	33.5	23.8
Hypertension	33.1	24.9
Birth control	32.7	21.7
Breast examination	31.4	20.2

Table 2. Health education topics rated of greatest interest by parents in George Washington University Health Plan survey, 1981

Topic	Strong interest of respondents (percent)	
	Onsite N = 51	Mail N = 91
Childhood emergencies	56.9	40.7
Sex education for children	49.0	38.5
Anxiety, stress	47.1	49.4
Breast examination	47.1	28.6
CPR	43.1	30.8
Hypertension	41.2	26.4
Physical fitness	41.2	29.7
Parenting-infant, toddler	41.2	28.6
Depression	39.2	29.7
Birth control	39.2	...
Pregnancy after 30	39.2	...
Nutrition	...	35.2
Sinus/allergy	...	28.6
Low back pain	...	26.4

Mail survey. A total of 1,130 survey forms were mailed to a random sample of adult plan members. The random sample was computer generated from a registration listing of all adult plan members. Ten percent, or 113, were undeliverable and 280 were completed and returned, for a response rate of 28 percent. Demographic characteristics of respondents were comparable to those in other recent mail and telephone surveys conducted by the HMO. Because the replies were anonymous, no followup to increase the response rate was undertaken. All but 15 respondents (5 percent) indicated strong interest in at least one topic. Respondents checked an average of six topics as being of strong interest; 46 percent chose anxiety/stress as the topic of greatest interest.

Although the choices of respondents in the mail survey differed slightly in the proportions, they were identical with the top 10 chosen in the onsite survey (table 1).

Responses from parents in the pediatric waiting area showed a basic agreement with mail responses from members with children. In the mail survey, however, two topics—nutrition (35.2 percent) and sinus/allergy (28.6 percent)—replaced birth control and pregnancy after 30 in the top 10 topics chosen (table 2).

Demographic characteristics. The members' choices in the mail survey may be better understood in light of demographic characteristics (table 3). Their mean age was 34 years. The distribution by educational level showed that 43 percent had graduate training and another 46 percent had attended college. A total of 70.5 percent had no health problems requiring continuing treatment; 22.5 percent reported a chronic problem requiring medication or therapy, and the remaining 7 percent (average age 42 years) reported a degree of limitations in their everyday activity because of a health problem.

Overall, the respondents reported an average of 3.0 primary care visits in the previous 12 months. Those with no health problems reported 2.2 visits, whereas those with some health problems reported 5.0 visits (table 3). Nineteen percent indicated that they had had no visits, and 17 percent indicated only 1 primary care visit in the past year.

The low use group (0 to 1 primary care visit in the last 12 months) chose the same topics as the higher use group. Nor did any difference in choices occur when responses were compared by health status of respondent. Unlike perfectly healthy members, members who reported an ongoing health prob-

Table 3. Demographic, health status, and utilization characteristics of mail respondents in George Washington University Health Plan survey, 1981

Characteristic	Number	Percent
Age:		
Mean (years)	235	[1]34.1
Males (years)	103	37.6
Females (years)	132	31.2
Sex:		
Males	120	43.9
Females	153	56.0
Race:		
Black	58	21.5
White	189	70.0
Other	23	8.5
Education:		
High school	24	8.8
Vocational training	7	2.6
College	124	45.6
Graduate training	117	43.0
Health status:		
No activity limitations, no medications or treatment	191	70.5
No activity limitations, takes medications or treatment	61	22.5
Some activity limitations	19	7.0
Utilization:		
Number of primary care visits in last 12 months by those with no activity limitations, no medications, or treatment	162	2.2
Number of primary care visits in last 12 months by those who take medications or treatment	67	5.0

[1] Range of ages was 22 to 76 years for males and 21 to 72 for females.

Table 4. Comparison of patients' choices and clinicians' choices before and after seeing patients' choices of health education topics (topics in capital letters were picked by both groups)

Patients' top 10 choices	*Providers' top 10 choices (1st time)*	*Providers' top 10 choices (2d time)*
ANXIETY/STRESS	SINUS/ALLERGY	ANXIETY/STRESS
DEPRESSION	Low back pain	BIRTH CONTROL
Physical fitness	HYPERTENSION	Herpes
Cardiopulmonary resuscitation	Acne	DEPRESSION
NUTRITION	BIRTH CONTROL	HYPERTENSION
Meaning of laboratory tests	Herpes	Low back pain
HYPERTENSION	NUTRITION	NUTRITION
SINUS/ALLERGY	Alcohol abuse	Smoking cessation
BIRTH CONTROL	Constipation	Menopause
Breast examination	Smoking cessation	SINUS/ALLERGY

lem ranked hypertension second, but like healthy members, they also endorsed mostly primary prevention or self-care topics.

The choices were also compared by sex. There were four differences in the 10 most frequently chosen topics; both sexes chose anxiety/stress (ranked first for both sexes), physical fitness, nutrition, meaning of laboratory tests, cardiopulmonary resuscitation (CPR), and sinus/allergy. Males chose, in addition, high blood pressure, gay issues, jogging injuries, and sexual concerns. For women, pregnancy after 30, breast exam, and birth control were among the 10 most frequently chosen topics.

On the whole, proportionately more women responded, chose more topics, and expressed stronger interest than the male respondents, which resulted in their choices having relatively more weight in the overall rankings. For instance, 56 percent of the respondents were women (45 percent of the sample were women). Of these 81, or 53 percent, endorsed anxiety/stress. Males constituted 44 percent of respondents, and their most frequently chosen topic was also anxiety/stress, chosen by 37 percent of respondents.

This study confirms previous investigations at the George Washington University Health Plan, indicating that patients enrolling in HMOs have a major interest in health education and prevention.

Clinicians' ranking. The 10 topics clinicians chose most frequently during their first ranking were compared with the members' ranking and with their own second-round ranking after they had seen the members' choices. Only 4 of the clinicians' choices were among the patients' top 10 choices—these were sinus/allergy, hypertension, birth control, and nutrition (table 4). The physicians' other choices were low back pain, acne, herpes, alcohol abuse, constipation, and smoking cessation.

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Several weeks later, after discussing the patients' choices, clinicians were again asked to choose topics which would be of greatest help in their practice. In this second ranking, clinicians included the same four topics that, in their first ranking, had corresponded to the patients' choices. This time, however, anxiety/stress ranked 1 and depression ranked 4. Clinicians continued to give a high ranking to low back pain, herpes, and smoking cessation; these had been ranked 13, 22, and 24 respectively by patients. The topics of acne, alcohol abuse, and constipation dropped out of the 10 most frequent choices of the clinicians. In fact, patients had rarely chosen these topics; they ranked only 31, 33, and 34 in a field of 45 topics. Overall, the second choices of the clinicians much more closely approximated choices of the members than the first rankings, but they maintained a more illness-oriented approach.

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Health Education Program

The results of this study indicate a possible difference in the perceived needs of patients and clinicians for health education. The clinicians apparently focused on the needs of the 29.5 percent of members with health problems; that is, the members they see more frequently in their practice—the more traditional disease-oriented model for a patient education program. After discussing the interests expressed in this poll of patients and members, however, the clinicians shifted their suggestions in the direction of the patients' interests. Their disease orientation was, in retrospect, not surprising since these topics, would, in fact, be most useful to them in caring for the patients whom they see in their practice.

After the modified Delphi technique was used in sharing patient and clinicians' perceptions and then reranking the topics, a consensus about topics of strong interest to members and clinicians had evolved and led to an augmented health education program.

As noted previously, anxiety/stress was the most frequently chosen topic. In addition, 44 percent of the respondents representing Federal employee subscribers reported that the government RIF (reduction in force) program "would affect" or "might affect" them. Because this threatened loss of a career appeared to be a major source of stress to members, the health plan presented a coping skills program dealing with RIFs and the uncertainty, unemployment, and anxiety resulting from these dislocations.

A resource packet on stress and anxiety for clinicians to use with patients has been developed, and additional stress management seminars have been scheduled. Augmented seminars dealing with depression as well as new programs related to nutrition, physical fitness, CPR, low back pain, and the interpretation of laboratory tests are being developed. Clinicians with specific expertise within the HMO have been more than willing to develop teaching materials now that they know of the extensive member interest.

One surprising finding in the survey was that by far the most frequently chosen method of instruction, despite the more costly alternatives listed, was "written material." Patients indicated great interest in both the quarterly newsletter and patient handouts. These choices may be partly explained by the high overall level of education of the members or the lack of familiarity with other methods, or both. The program's staff is continuing to develop education sheets on preventive care and disease for members who require medical attention. The staff is also concentrating on the newsletter as a means of providing information on preventive care. This enables the health plan to reach infrequent users who, nevertheless, have great interest in health education.

In conclusion, the survey clearly demonstrated the importance of a needs analysis of both patients and clinicians in an HMO, before embarking on a health education program. The survey led to the recognition of the extensive interest health plan members have in prevention. Six of the patients' top 10 issues would have been missed if only the clinicians had been polled. Once the health education staff knew what the members wanted, they responded with a series of seminars. A flier was mailed to all members offering separate seminars on anxiety/stress, depression, physical fitness, and CPR. These were given by HMO staff and some community resource persons. The response was so enthusiastic, with more than 600 calls, that additional seminars were scheduled for a total of 12 seminars in 6 weeks. The overall attendance rate was 60 percent of those who registered for the seminars. Patients filled out evaluation forms after each seminar. Overwhelmingly, the patients said that the seminars either met or exceeded their expectations and that they found the information useful.

This method can be applied in any HMO. The key is to find out what the members want, how they want to obtain the information, and then respond to them. The method reached healthy members as well as those with medical problems, and thus allowed all members greater participation in the HMO.