

# Physician Knowledge and Attitudes About Health Insurance After the Introduction of Capitated Health Care Plans

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*A two-part closed-end survey similar to a survey done in 1980 was given to 25 family physicians at an academic family medical center to assess physician knowledge about five insurance programs covering most of the patients seeking care in the center, and to assess physician attitudes about the capitated insurance plan with which the clinic was affiliated.*

*Results did not differ significantly from those obtained in a similar survey four years earlier at the same center. Physicians correctly identified benefits offered by insurance programs only about one half of the time and many did not ascertain patient insurance coverage at all. Physicians considered the most important advantages of capitated health care to be the patient protection from fees for services obtained, the coverage for health care maintenance, and the potential for controlling health care costs. Physician-perceived disadvantages included difficulties controlling costs generated by other specialists, dealing with after-the-fact authorization requests, controlling access to services, and obtaining information about costs within the capitated system.*

Research on physician knowledge and attitudes about health insurance coverage is sparse. Broida and Lerner<sup>1</sup> studied salaried physicians in group practice in Marshfield, Wisconsin, as part of a study of utilization in a clinic where 36 percent of the patients were enrolled in prepaid plans. Using a structured interview technique, they found that physicians identified the correct insurance status for only 17 percent of patients seen, though they correctly identified insurance coverage for 80 percent of the prepaid patients. Schneeweiss et al<sup>2</sup> described physician knowledge of insurance status in the Family Medical Center (FMC) at the University of Washington. At that time the center was affiliated with United Healthcare, a capitation-based network model health maintenance organization (HMO) with 517 enrolled patients. This 1980 study administered a closed-end questionnaire to residents and faculty and showed that physicians were correct 59 percent

of the time, on the average, about insurance coverage for four commonly used services, and that most physicians did not note insurance coverage when caring for patients. United Healthcare dissolved later for predominantly financial reasons. In 1982 the FMC affiliated with a new capitated plan, HealthPlus, a subsidiary of Blue Cross of Washington and Alaska.

As physicians become familiar with capitated plans, experiencing the financial consequences of their patient care decisions, it might be expected that physicians would know more about their patients' insurance status.

Because of the change in the health care market and the presumed increased awareness of physicians about health care costs during the past few years, a questionnaire similar to that used by Schneeweiss et al was distributed to residents and faculty at the University of Washington Family Medical Center in 1984. At the time of this study, during one six-month period in 1984, HealthPlus enrollees accounted for 11 percent of the FMC patients seen, 10 percent of the services ordered in the FMC, and 6 percent of the charges generated from within the FMC.

The purpose of the study was to examine several issues at two points in time soon after the introduction of new prepaid plans into an academic family medical center.

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TABLE 1. PERCENTAGE OF PHYSICIANS CORRECTLY IDENTIFYING COVERAGE OF SELECTED SERVICES BY FIVE INSURANCE PLANS, 1984 AND 1980 (n = 25 in 1984; n = 22 in 1980)

Insurance	Services							
	Well-Child Care		Counseling		Medications		Outpatient Pregnancy Termination	
	1984	1980	1984	1980	1984	1980	1984	1980
Fee-for-service, Plan A	68	68	68	68	36	91*	36	45**
Fee-for-service, Plan B	56	36	52	41	24	55*	36	50**
Prepaid plan***	80	95	64	95*	40	91*	48	73
Medicare		NA	36	45	36	32**		NA
Medicaid	36	41	44	27	72	68	24	45
All plans	61		53		43		32	

\* Significant difference between 1980 and 1984 respondents using two-tailed Z test for difference of proportions,  $P < .05$   
 \*\* Significant difference between faculty and residents using Z test for difference of proportions,  $P < .05$   
 \*\*\* United Healthcare in 1980, Health Plus in 1984

Specifically the study was designed to (1) assess the level of physician knowledge about various insurance plans in a university-based family medicine teaching clinic and compare these responses with those of a similar group of physicians studied in 1980, (2) assess physician attitudes about the advantages and disadvantages of a prepaid, capitated insurance plan, and (3) compare the differences among faculty and residents on several knowledge and attitude variables.

**METHODS**

In July 1984 a two-page closed-end questionnaire, similar to that used by Schneeweiss et al in 1980, was distributed to the 13 faculty (7 in 1980) and 12 residents (15 in 1980) involved in patient care in the University of Washington FMC. This questionnaire assessed physician knowledge of coverage by HealthPlus and four other insurance plans for well-child care, counseling, outpatient medication, and termination of pregnancy. It also assessed by self-report how often the physicians ascertained patient insurance status. An additional two-page list of questions was generated by the investigators, asking physicians about their perceptions of the advantages and disadvantages of capitated health care systems (this information was not elicited in the 1980 study). A score was computed based on the percentage of faculty and residents responding to each category for questionnaire items. A Z score for differences between two independent sample proportions was used to compare responses regarding insurance coverage in 1980 and 1984 and to compare resident and faculty responses to all questions.

**RESULTS**

The response rate in 1984 was 75 percent (12 of 16 residents available at the time) and 100 percent for faculty

(13 of 13). The percentage of correct responses to the question dealing with coverage of four common services is shown in Table 1. Respondents were more likely to be correct on questions about well-child care and counseling than about outpatient medications or pregnancy terminations. They were better informed about covered benefits under the capitated health plan, HealthPlus, and about one fee-for-service plan than about other programs. Residents and faculty differed significantly on questions dealing with pregnancy terminations (where faculty were more likely to be correct) and with Medicare coverage for outpatient medications (where residents were more likely to be correct).

Responses in 1984 to questions dealing with covered benefits under different insurance plans resembled responses to similar questions in 1980, with few exceptions. In 1980 physicians were more informed about the capitated health care plan, United Healthcare, than were physicians about the similar capitated plan, HealthPlus, in 1984.

Respondents in both 1980 and 1984 were least informed about covered benefits under Medicare and Medicaid compared with other plans.

One third (35 percent) of physicians in 1984 indicated that they rarely or never ascertained patient insurance status, compared with 19 percent in 1980, a statistically insignificant difference. On the other hand, 43 percent of the respondents in both years usually or always ascertained patient insurance status. There were no significant differences between faculty or residents on this item.

The 1984 survey elicited physician perceptions of the advantages and disadvantages of capitated health care systems compared with traditional fee-for-service systems. Physicians perceived the following advantages of such systems, in decreasing order of importance: patient protection from having to deal with fees, coverage for health maintenance, and potential for controlling health care costs (Table 2). The main disadvantages perceived by physicians, in

**TABLE 2. PHYSICIAN RATING OF THE SIGNIFICANCE OF ADVANTAGES OF A CAPITATED SYSTEM (HEALTHPLUS) COMPARED WITH TRADITIONAL FEE-FOR-SERVICE MEDICAL INSURANCE (n = 25)**

Advantages*	Mean Score**
The patient is largely protected from having to deal with fees for services obtained	2.5
Coverage for health maintenance	2.5
Potential for controlling health care costs	2.3
Low cost of premiums	2.1
Educational value with regard to health care costs	2.0
Flexibility	1.6

\* Respondents rated the potential advantages proposed by the investigators and listed on the questionnaire  
 \*\* 1 = not important, 2 = somewhat important, 3 = very important  
 Note: Two-tailed t tests comparing mean scores for residents and faculty were not significantly different

decreasing order of importance, were difficulties controlling health care costs generated by other specialists, dealing with after-the-fact authorization requests, controlling patient access to medical services, and obtaining information about benefits coverage and costs generated (Table 3).

**DISCUSSION**

As in previous studies, results of this study show that physicians lack knowledge about their patients' medical insurance coverage, and that they often do not inquire about such coverage. Physician knowledge of selected services covered by insurance plans actually decreased between 1980 and 1984 in the family practice center studied. With the exception of five respondents, the population responding in 1980 was composed of different individuals than the population studied in 1984. Physician knowledge of insurance status might be expected to increase in recent years, as economic issues have assumed greater importance and as the Family Practice Center has gained more experience with capitated plans. Perhaps the novelty of the capitated plan in 1980 increased the FMC physicians' awareness of benefits covered.

Figures based on clinic utilization data indicate that about 40 percent of FMC clinic encounters for HealthPlus patients are handled by residents, and some residents are, in effect, primary care physicians for prepaid patients. Residents differed significantly from faculty in only three of 20 items dealing with knowledge or coverage and four of 14 items dealing with attitudes about capitated systems. Residents were more positive than faculty about their

**TABLE 3. PHYSICIAN RATING OF THE SIGNIFICANCE OF DISADVANTAGES OF A CAPITATED SYSTEM (HEALTHPLUS) (n = 25)**

Disadvantages*	Mean Score**
Difficulty in controlling health care costs generated by other specialists	2.8***
Requests for approving specialist services after the fact	2.6
Responsibility for controlling patient access to medical services	2.6
Lack of information about coverage	2.4
Delayed feedback about costs	2.4
Excessive financial risk for physicians	2.2
Large number of services needed by patients covered	2.2
Amount of paper work involved	2.1***
Limitation of the number of consultants available	2.1
Strain on the physician-patient relationship	2.0
Lower quality of care	1.6
Risk of medical malpractice	1.6***
Delays in obtaining consultations	1.4***
Insufficient financial risk for physicians	1.0

\* Respondents rated potential disadvantages listed by the investigators  
 \*\* 1 = not significant, 2 = somewhat significant, 3 = very significant  
 \*\*\* Significant difference between means for residents and faculty on two-tailed t test, P < .05

ability to control specialist-generated health care costs under capitated plans, but had a more negative view than faculty about the large amount of paper work, the liability risk, and the delay in obtaining consultations. The resident-faculty differences may have arisen from the inclusion of a large number of first-year resident respondents, who tended to "hear" about the capitated system, largely unfamiliar to them until their second or third year of training.

This study, repeated four years after a similar study, indicates considerable effort is needed to educate physicians about insurance coverage. Despite the increasing number of ties between managed health care plans and this Family Medical Center, many physicians in this training program remained uninformed about patients' insurance coverage. Prospective studies of larger groups with a longitudinal design would be helpful in further describing physician adaptation to changes in health care delivery.

**References**

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