Lay Opinions Regarding Capitation-Based Health Care Plans

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Capitation-based health care plans typically pay health care providers a fixed amount per enrollee per month to provide needed health care. Cited benefits of such plans include the reduction of unnecessary medical interventions, better coordination of patient care, and increased provider awareness of costs.^{1,2} Physicians in past studies have expressed concerns about capitation-based plans limiting patient access to care, reducing physician autonomy, threatening the physicianpatient relationship, and decreasing the quality of health care.1-5 To our knowledge, the depth of understanding and the beliefs of the lay population regarding the concept of capitation have not been published. Given the importance placed on capitation-based reimbursement in health care reform proposals, lay population views about the concept of capitation deserve attention.

The hypotheses tested in this study were, first, that the lay population would be largely unaware of the nature of capitation-based plans and, second, that they would hold a generally negative view of the concept of capitation.

Methods

A survey instrument (available on request) was developed from previously published questionnaires^{1,6} distributed to physicians. The instrument consisted of an introduction defining capitation-based systems and a set of closed-end questions of a modified Likert-scale construction. The introduction described elements of a typical capitation-based system: primary care physician case managers paid a predetermined amount per patient per period of time from which the cost of care would be deducted, pri-

mary care physicians coordinating care and controlling access to care and working under a financial incentive to contain costs, and specialists paid on a discount fee schedule. The questions asked respondents to indicate on a scale ranging from "strongly disagree" to "strongly agree" their level of agreement with a series of statements. These statements probed knowledge of capitationbased plans, perceptions of the effects and implications of such plans, potential conflicts of interest in fee-for-service plans and capitation-based plans, and respondents' attitudes about health care costs and access to care. Demographic information was also obtained. The instrument was distributed during a 2-week period in 1991 to a convenience sample of English-speaking patients and family members in the waiting areas of the Family Medicine Center and the Internal Medicine Clinic at a university-based medical center. Persons less than 18 years of age were excluded. One of the authors (CS) was available in the waiting rooms to answer questions. Respondents were given the option of returning the questionnaire by mail to allow more time to complete their responses. Mailed surveys were not treated differently in the data analysis.

Results

Of 200 questionnaires distributed, 146 usable questionnaires were returned, for an adjusted response rate of 71.5 percent. Of the completed surveys 77 were from the Family Medical Center, and the remaining 66 were from the Internal Medicine Clinic. The average age of the respondents was 46.6 years, and the median age was 44 years. Nearly two-thirds of the respondents (64.3 percent) were women, and 87 percent had at least some college education. Twenty percent were unemployed or retired, 8 percent were health care professionals, and 19 percent were students. The rest had a variety of occupation types. Most (67 percent) were seeing a physician whom they described as either their primary care physician or a substitute primary care physician. The remainder

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This study was conducted while Dr. Scholes was a medical student at the University of Washington.

were waiting to see physicians described by respondents as specialists or were family members waiting with patients. Twenty-four different insurers were represented among the respondent group, with a capitation-based plan (25 percent) and large fee-for-service plans (36 percent) making up the most common insurance types. The rest were uninsured or covered by other types of insurance plans.

The experience of respondents with the capitation-based plan was minimal. Only 15 percent were familiar with it, and only 16 percent reported personal experience with a capitation-based plan. Twenty-five percent of the respondents were actually insured by a capitation-based plan. Only 25 percent (9 of 36) of the capitation-based plan enrollees indicated that they were familiar with capitation-based plans before the survey; however, one-half of all respondents thought that they understood the concept of capitation at least "fairly well" after reading a definition in the questionnaire.

Respondents perceived both potential benefits and problems with capitation-based plans (Table 1). Most respondents believed that such plans increase physicians' awareness of medical costs, reduce the number of unnecessary tests and referrals, result in patients seeing fewer specialists, improve the coordination of care, and reduce the cost of medical care for society. Most also believed, however, that capitation-based plans could represent a potential conflict of interest for the

Table 1. Lay Attitudes about the Consequences of Capitation-based Plans.

Attitudes	Percent Agreeing (n=146)
Physician thinking about cost of medical care	85
Fewer unnecessary tests and referrals	84
Patients seeing fewer specialists	82
Conflict of interest for physicians	75
Fewer tests leading to missed diagnosis	72
Reduced cost of medical care for society	72
Some necessary tests not being performed	69
Improved coordination of care	66
Physicians less willing to refer to specialist	65
Easier access to care	50
Improved quality of care	43
Increased difficulty getting medical care	42

physician and might result in missed diagnoses because of omission of necessary tests. One-half believed capitation-based plans might improve access to care. A minority associated capitationbased plans with improved quality of care and with increased difficulty of obtaining care.

Response patterns to items regarding general attitudes about health care costs revealed contradictory results (Table 2). Most (71 percent) respondents agreed that cost-effectiveness should be an important factor in clinical decision making. Yet only 40 percent of respondents agreed that limitations on access to some health care services were acceptable. Fifty-five percent of respondents thought that the primary care provider should make the majority of the decisions about when a patient should be referred to specialists. More than one-half (54 percent) believed that unnecessary tests and procedures are commonly performed. A majority (57 percent) of the respondents indicated that physicians could be trusted with the incentives of a capitation-based plan, and a similar majority (53 percent) said that physicians could be trusted with the incentives of a fee-forservice plan.

Discussion

Extrapolation of these findings to the overall population would require further study. The survey was limited to a small number of lay persons, mostly patients, most highly educated, in a very specific setting (two outpatient clinic areas at a university hospital).

Despite the high level of education among respondents, the lay understanding of the capitation concept appears somewhat limited. Though the questionnaire provided a definition of capitationbased plans, respondents might not have been informed enough about the concept to evaluate the implications of capitation-based plans. More interesting, though, is that respondents who were at the time of the survey enrolled in a capitationbased plan were no more likely to claim to be familiar with or to have had personal experience with such plans. This knowledge deficit might exist in part because only rarely do plans or providers explain the financial incentives inherent in a health care plan, and marketing efforts omit any such discussion. The knowledge level of the consumer might have increased since the time of this study, given the discussion of the capitation con-

Table 2. Lay Attitudes about Health Care Costs.

Attitudes	Percent Agreeing (n=146)
Cost-effectiveness should be an important factor in clinical decision making	71
When there are financial incentives against performing tests and procedures, physicians can generally be trusted to provide adequate care	57
Primary care physician should make most decisions about when specialist referral is necessary	55
Physicians in capitation-based plans should be allowed to keep a portion of any surplus money remaining after patient care is completed	. 55
Currently unnecessary tests and pro- cedures are commonly done	54
When there are financial incentives to perform extra tests and procedures, physicians can generally be trusted to perform only those tests and procedures that are necessary	53
Limitations on access are acceptable	40

cept in the lay press articles about health care reform proposals.

Respondents seemed to support the cost-moderating and coordination-of-care functions inherent in capitation-based plans. A majority even favored letting primary care physicians keep the remaining surplus funds after spending capitation money for necessary health care. At the same time, many respondents agreed with the commonly perceived disadvantages of these plans: that the financial incentives to "do less" could create a conflict of interest for the physician balancing costs against providing comprehensive and high-quality care. In fact, whether reimbursement occurs on a fee-for-service or a capitation basis, only a small majority thought that physicians can generally be trusted to provide an appropriate level of care - suggesting that the consumer is somewhat insecure about the level of control granted to physicians to determine the intensity of care provided.

Broader concerns about health care costs were also apparent. Most respondents considered costeffectiveness an important factor in clinical decision making, but a majority also found the idea of limits on access unacceptable. Belief in controlling costs and limiting access contrasts with recent commentaries that physicians are obliged to serve in the best interest of their patients without regard to financial consideration.⁷⁻⁹

Health care delivery in the form of capitationbased plans is likely to play an important part in US health care in the future. Capitationbased plans were perceived by respondents in this study to have important positive and negative impacts on access, quality, costs, and the physician-patient relationship. This small study in a relatively highly educated population at an academic center indicates that the public might not endorse wholeheartedly the concept of capitation-based reimbursement of physicians. As the public becomes better educated about changes in the incentives in health care delivery, lay perceptions are likely to have a major effect on the rate of public acceptance of health care reform efforts if they are based on capitation-based reimbursement.

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