Effects of Managed Care on Physician-Patient Relationships, Quality of Care, and the Ethical Practice of Medicine

A Physician Survey

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Background: Survey studies have shown that physicians believe managed care is having significant impact on many of their professional obligations.

Methods: Primary care physicians were asked about the impact of managed care on: (1) physician-patient relationships, (2) the ability of physicians to carry out their professional ethical obligations, and (3) quality of patient care. In 1996 we surveyed 1011 primary care physicians in Pennsylvania. The survey group's responses were graded on a Likert scale. Space was provided for respondents to include written comments. The SPSS statistical software (SPSS Inc, Chicago, Ill) was used to analyze the data.

Results: The response rate was 55%. Most respondents indicated that under managed care physicians are less able to avoid conflicts of interest and less able to place the best interests of patients first. The majority responded that quality of health care is compromised by limitations in location of diagnostic tests, length of hospital stay, and choice of specialists. A significant minority (27%-49%) noted a decrease in the physician's ability to carry out ethical obligations, to respect patient autonomy, and to respect confidentiality in physician-patient communication. Most physicians expressed that managed care made no impact on ability to obtain informed consent or to provide information. There were small but statistically significant sex differences, with female physicians more negative toward managed care.

Conclusions: Many physicians surveyed believe managed care has significant negative effects on the physician-patient relationship, the ability to carry out ethical obligations, and on quality of patient care. These results have implications for health care system reform efforts.

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Managed care has emerged as the dominant method of health care provision in the United States. Managed care systems, in assuming responsibility for both the financing and provision of health care, present new problems for health care practitioners. The primary care practitioner, in particular, has been put in the position of gatekeeper, whose responsibilities include cost containment as well as patient care. Some commentators have suggested that the new organization of medicine threatens the role of physicians as professionals. Others have called for new models of the physician-patient relationship to accommodate the changes in health care financing.

Our understanding of the impact of managed care on medical practice is evolving. Clinicians, medical ethicists, lawyers, and other observers have raised concerns in the areas of the physician-patient relationship, the physician's ethical obligations, and the quality of medical care. Physicians have written personal accounts of their experiences with managed care addressing these same concerns. Professional societies such as the American Medical Association, Chicago, III, have issued guidelines on responding to the challenges managed care poses to the practicing physician. Studies have addressed the effects of managed care on physician satisfaction, patient satisfaction, and patient outcomes. Survey studies have looked at specific aspects of managed care, such as gatekeeping and capitation, to assess physicians' views. Some state medical societies have surveyed their memberships regarding their general views on managed care. Most of this literature points to new potential conflicts of interest in patient care, as well as challenges for physicians in respecting patient autonomy and choice, and in promoting patient trust. Although many of the studies cited earlier include questions on the impact of some aspect of managed care on the physician-
METHODS

We developed a questionnaire based on a literature survey and input from many of our colleagues. We revised the questionnaire after pilot testing in our group practice of 10 physicians. Respondents were provided with a broad definition of managed care from the literature and were asked to consider managed care to be

any health care system which integrates the financing and delivery of medical services, whose aim is to control costs and improve quality, and uses methods which control choices traditionally made exclusively within the patient-physician relationship, eg, HMO’s [health maintenance organizations], PPO’s [preferred provider organizations], IPA’s [independent practice associations].

The survey consisted of a series of questions for which responses were graded on a Likert scale and demographic information. Open comments were solicited after the survey question detailing the effect of managed care on the ability of the physician to carry out ethical obligations, and after the question detailing the impact of managed care on the quality of patient care. Respondents were also invited to make general comments on the back of the survey. The written comments, regardless of where they appeared on the survey, were pooled into 1 group and evaluated by 2 of us (D.S.F. and E.G.) as being either negative toward managed care, positive toward managed care, neutral toward managed care, containing mixed negative and positive views, or unclassifiable. Disagreements between the 2 authors were discussed until agreement could be reached (20% of the comments).

Our mailing list of primary care physicians was compiled from the entries under the primary care provider sections in the provider network handbooks issued by 4 Delaware Valley managed care organizations. Two of the managed care networks accounted for 70% of the area’s managed care enrollees. Primary care physicians included those who identified themselves as general practitioners, family practitioners, internists, and pediatricians. Surveys were mailed to all physicians on the mailing list, and those that were returned with unknown addresses were deleted from the mailing list (1011 surveys were considered as having been received). We sent out 2 mailings, resulting in a total return rate of 57%. Despite our attempts to send surveys to primary care physicians, some of the respondents identified themselves as specialists (2%). The self-identified specialists’ results were not analyzed for this article, reducing our usable surveys to 559 (55%). Because of a typographical error made on the first mailing of the survey, the usable responses to the question displayed in a figure of the results are smaller than the number of survey respondents. Only limited information (specialty and sex) about the nonrespondents was available to us. We used SPSS statistical software (SPSS Inc, Chicago, Ill) to analyze data. The surveys were first mailed in February 1996. The study was closed in September 1996.

RESULTS

The primary care physicians who responded to the survey were highly experienced with managed care. As a group, they had spent an average of 9.4 years caring for patients under managed care systems. Only 13% stated that their practice was composed of 25% or fewer managed care patients, with 53% noting that managed care composed more than 50% of their practice. Most (53%) had been in practice for more than 15 years, while 43% had been in practice 5 to 15 years. Thirty-six percent identified themselves as family practitioners or generalists, 36% were internists, and 27% were pediatricians. The respondents’ average age was 48.9 years, and 77% of the respondents were men. Twenty-seven percent maintained a solo practice, 39% were in a small group practice, and 22% were part of a hospital medical practice. Only 3% worked for staff model health maintenance organizations (HMOs). The majority of the group reported being involved with independent practice associations and preferred provider organizations.

Nonrespondents showed similar characteristics in distribution of primary care specialties (family practitioners, 38%; internists, 32%; and pediatricians, 28%), and in sex (male, 68%; female, 24%; and sex unknown, 8%).

Figure 1 through Figure 5 contain the major results of the study. The attitude items in the survey were 5-point Likert scales. For the purpose of summarizing, these results are collapsed into 3 levels. Those that ranged from strongly agree to strongly disagree are discussed as agree (response 4 or 5), neutral (response 3), and disagree (responses 1 and 2). Scales from very negative to very positive are handled similarly, with “positive” and “negative” used as descriptors. Although the scales rated from “very infrequently” to “very frequently” do not have a neutral

Figure 1. What effect does managed care have on each of the following aspects of the primary care physician-patient relationship?
midpoint, we report the 2 highest responses as frequent and the 2 lowest as infrequent. The number of responses to each question varied, ranging from 541 to 555 (Figures 1 through 4) and from 419 to 426 (Figure 5).

Figures are representative of our findings. In Figure 1 (the impact of managed care on primary care physician–patient relationships) and Figure 3 (on quality of care), negative responses were much more frequent than positive ones on every item. On Figure 2 (impact on ethical obligations) the pattern was similar, with 1 or 2 exceptions and with several items for which a neutral impact was the overwhelming perception. Figure 4 (the impact of managed care on patients) also shows a preponderance of negative perceptions, with 1 exception. Only in Figure 5 (on the realization of the goals of managed care) is there a true mix of positive and negative perceptions.

**IMPACT OF DEMOGRAPHIC CHARACTERISTICS ON PHYSICIAN RESPONSES**

Men exhibited an overall more positive attitude toward managed care in this survey than did women. In particular, on 5 of the 7 scales in Figure 2, men had significantly more positive attitudes about the effect of managed care (all 5, \( P < .05 \) and 4 of them, \( P < .006 \)). In addition, men felt better about the effect of managed care on patient choices (\( P = .01 \)) and disagreed more strongly than women with statements that managed care reduces the time available to spend with patients and gives patients higher expectations of the physicians (\( P = .01 \)). There was not a single scale on which women were statistically more positive about managed care than men.

The sex differences, while often highly significant, were of small to modest magnitude. On our Likert scales, with a range of 1 to 5, none of the significant differences listed above exceeded a mean difference of 0.35. The average difference in this set was 0.25 (smallest, 0.15). Calculated as Spearman correlations with sex, none of the correlations exceeded an absolute value of 0.20. Given the small magnitude of the associations and the non-normally distributed scale data, attempting to adjust for possible confounding by such factors as age and time in practice is probably not appropriate. Suffice it to say that these sex differences are essentially descriptive.

**OPEN COMMENTS OF THE PHYSICIANS**

About one quarter of the physicians (\( n = 137 \)) chose to write in comments about the issues raised in the survey. Five of the comments were not classifiable. Of the remaining 132, 61% were interpreted as being negative toward managed care, 29% were interpreted as being neutral toward managed care, 5% were interpreted as being positive toward managed care, and 6% contained mixed positive and negative views (the sum of these is \( n > 100\% \) because of rounding off to the nearest whole number).
The physicians' statements ranged from simple opinions to emotion-laden commentary. We present representative comments from each category.

Several positive comments applauded the better provision of preventive services:
- "Managed care serves families with children very well. The cost of immunizations is productive and the emphasis on prevention has always been what pediatricians do."
- "The amount of time, effort and phone calls required to obtain services for patients makes the issue of confidentiality basically non-existent."
- "In many ways I provide better care for HMO patients, no concern for costs or med/capitated tests, better preventive care, more likely to see in office after hours, more likely to see back frequently to avoid disease progression, etc."

The neutral comments mainly focused on statements of respondents' principles:
- "I do not let the insurance my patient carries interfere with any of my ethical obligations."
- "The success and outcome of patient care is more dependent on the type and attitude of the physician than it is on the type of insurance."

The many negative comments related to the ethics of managed care and its effects on physician-patient relationships and quality of care:
- [There are two conflicting ethical systems. Managed care seems to feel most obligated to run efficiently and be responsible to stockholders, [and to] make medical decision base on population-based norm. [The] doctor's whole training [is] geared to putting the individual patient's needs first."
- "Both physician and the patients have contracts with [the] insurance company, but not with each other."
- "Although I attempt to place patients' interests first, I realize that there exists a financial disincentive to do the right thing at times."
- "Effect of managed care on doctors' ethical obligations: A good doctor is a good doctor under managed or non-managed care. A bad one is much worse under managed care."
- "The amount of time, effort and phone calls required by myself and my associates and support staff in order to obtain services for patients makes the issue of confidentiality basically non-existent."

On physician-patient relationship and quality of care the comments included the following:
- "Managed care frequently puts physicians in an adversarial position with their patients, ie, gatekeeper."
- "The amount of time I need to explain and discuss issues with my families relating to coordinating referral appointments and insurance is more of my time with them each year. I mean a 15-minute appointment may take 10 re: insurance issues."
- "Managed care creates an incentive not to care for sick complicated patients. I used to take the challenge to put the time in to help a 'sick person.' It is very hard now. HMO's do not provide for that time, care and the 'excitement' is gone."

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The physician respondents to our survey have significant concerns about the effects of managed care on their relationships with patients, their abilities to carry out their ethical obligations to patients, and their capabilities to provide high-quality care. While respondents indicated that managed care was having positive effects in the areas of prevention and reduction of expenditures, and some acknowledged the potential of managed care, most respondents expressed negative views overall. The negative feedback offered by the physicians in this study closely follows predictions that commentators in the field have made about possible negative effects of managed care. This feedback may be helpful in highlighting areas that need improvement in current health care delivery systems.

PHYSICIAN-PATIENT RELATIONSHIPS

Positive physician–patient relationships are essential for effective medical care. About two thirds of survey respondents indicated that managed care has a negative impact on physician–patient relationships. Respondents' choices on other survey questions may indicate some of the likely causes.

Most respondents indicated that they have less time for their patients because of emphasis on increased productivity under managed care. Any health care reform that is aimed at reducing costs is likely to result in productivity pressures. Physicians, to maintain their incomes, may be seeing more patients. If the perceptions of this physician group are accurate, many patients may have diminished roles in making medical decisions under managed care, since patients' levels of participation in decision making is related to length of office visits and duration of their relationships with physicians. In a separate question, most respondents indicated that man-
managed care had adverse effects on patient choice in medical decision making.

Most respondents noted that patients perceive them as adversaries because of their gatekeeper roles. At its best gatekeeping can be a positive activity, in which physicians use their knowledge of the medical system to shepherd patients through most effectively and protect patients from overtreatment and unnecessary tests. Gatekeeping becomes problematic if financial incentives are linked to restricting medical care. Providers may underuse appropriate services and treatments. A Boston-area survey examined the attitudes of physicians who served both as primary care gatekeepers for a managed care health plan and as providers for patients with traditional indemnity insurance, and found that many believed gatekeeping had negative effects on the physician-patient relationship, freedom in clinical decisions, time spent with patients, and ease of ordering expensive tests or procedures.

An essential attribute of the physician-patient relationship is mutual trust. Most respondents indicated that patient trust in the physician is diminished under managed care. This survey result is in agreement with other published surveys. Nearly half of the respondents indicated that the physician’s ability to put the patients’ interests first was compromised under managed care. Perhaps patients worry about this as well, and have become more wary of their physicians. Patients’ concerns are likely heightened by the many articles about managed care in the lay press that echo concerns about expanded physician responsibilities to other groups, including contractual obligations to managed care plans, and about how the need to conserve costs could challenge physicians’ abilities to maintain loyalty to patients. Because of the changing role of physicians within a managed care system, some authors have raised the concern that physicians may come to see themselves more as economic commodities and less as professionals with obligations to uphold. Such a diminished sense of obligation to professional mores could eventually undermine physician-patient trust.

Some authors have predicted that managed care could result in problems in communication between physicians and patients because of shorter office visits due to demands for increased productivity, and by inflated patient expectations from advertising. Although most respondents agreed with the former and almost half agreed with the latter, only 37% of respondents indicated that there was a negative effect on physician-patient communication. Our questionnaire did not ask physicians to identify other factors that might have favorably impacted on communication.

**ETHICAL OBLIGATIONS**

Ethical conflicts that could arise for physicians operating in managed care health systems have been well documented. Most primary care physicians in the survey group believe that managed care diminishes the ability of the physician to place the patient’s interest first and to avoid conflicts of interest between patients and physicians’ financial incentives. Forty-nine percent indicated negative effects on their abilities to respect patients’ autonomy. These findings, coupled with the concerns expressed by respondents that under managed care cost cutting takes priority over quality of patient care, indicate that managed care results in troubling conflicts of interest for physicians, and that patient care may be compromised under these systems. In fact, in the open comments, the survey respondents were often passionate about the conflicts of interest and decreased services to patients. Since only 15% of the total survey group responded with such negative open comments, we do not know if those strong views represent a vocal minority or are more widely shared.

Fewer physicians cited negative effects on other ethical obligations. Most physicians in the survey group do not find the informed consent or information-giving processes to be impaired under managed care. We cannot explain how the physicians weighed the demands of increased productivity and shorter visits on the ability to provide information and engage in the informed consent process with patients. Other authors have commented that the informed consent process may be compromised by subtle choice limitations dictated by economic concerns, either at the level of the physician or at the level of benefits negotiated by health care purchasers. Despite the observations of our survey group that patient choice is limited under managed care, most did not indicate that informed consent was being significantly affected.

One third of respondents indicated that physicians are less able to respect patient confidentiality under managed care. Although managed care often uses quality assurance techniques such as individual patient chart reviews and computerized data banks for utilization and quality reviews, many physicians may not view this access to patient information as a meaningful violation of patient confidentiality.

The continuity of the physician-patient relationship is a central obligation for practitioners of clinical medicine. More than half of the respondents believe that continuity of the primary care physician–patient relationship has been negatively affected by managed care. Changes in managed care plans offered by employers, and insurance changes due to job changes, have affected continuity of care. In a recent survey, physicians self-reported that they had lost an average of 9% of their patients due to insurance plan changes. A 2-year longitudinal study using patient questionnaires found continuity to be higher in fee-for-service systems than in prepaid health care systems.

It is likely that our respondents were comparing managed care with fee-for-service, a system that has the potential to cause ethical conflicts for physicians. The fee-for-service system encourages overutilization of resources, which may result in the provision of unnecessary and possibly detrimental services. Still, our data appear to raise new concerns in the areas of respect for autonomy, conflict of interest, and continuity of care.

**QUALITY OF CARE**

Most of our physicians identified decreased patient choice in medical decisions as having a negative impact on the phy-
Physician-patient relationship, which could adversely affect care as well. Most also identified limitations in choice of specialist, in frequency of specialist visits, in sites of diagnostic testing and procedures, and in length of hospital stay as having a negative impact on the overall quality of patient care. Limiting options for care is one of the main methods that managed care systems use to control health care utilization. While limiting options is not necessarily bad for the quality of patient care, most physicians responding to our survey believe that at least some limitations in health care are detrimental. Federal and state legislatures have begun to respond to concerns regarding choice, with the passage of direct-access laws that would allow patients to see specialists without a referral from the primary care providers. Limiting choices in medical care is only one way that quality of care can be affected. Most respondents believed that managed care frequently provides better preventive services, and the largest group believed that managed care frequently decreases expense. Physicians in other survey studies have expressed similar opinions about cost cutting and preventive care. While physicians' attitudes on quality of care do not substitute for more objective evidence, they identify areas for further investigation when designing quality evaluations.

SEX DIFFERENCES

Women physicians were significantly more likely to report negative effects of managed care in areas of physician-patient relationship, effect of limitations on quality of care, and on the effects of managed care on time available to spend with patients. Sex differences in practice style between male and female physicians have been documented, and may have a role in the sex differences found in this study. The effect of sex on attitudes toward managed care needs to be explored in greater detail.

Most other surveys about physicians' attitudes toward managed care have generally been part of larger surveys designed to elicit a wide variety of views from physicians. The 1996 American Medical Association survey found even greater negative physician sentiment toward managed care. Eighty-one percent of the physician respondents viewed the impact of managed care on the physician-patient relationship as negative. Seventy-one percent saw managed care as having a negative impact on quality of care. This group was significantly less involved with managed care, with 43% noting that less than 20% of their patients were covered by a managed care plan. A survey conducted by the Texas Medical Association found that half of the physician respondents believed that managed care has an adverse impact on patient care. Another survey, looking at the attitudes of primary care physicians toward capitated reimbursement, a common feature of managed care, found that physicians believe that capitation is having a negative impact on the physician-patient relationship and on the appropriate use of referrals and services. These previously published surveys support the concerns of the physician respondents in our survey. Our survey extends the findings of these survey studies by providing physicians' views on specific aspects of the physician-patient relationship, and ethical obligations under managed care overall.

It is still an open question as to whether physicians' attitudes on these issues reflect decrements in quality care or patient outcomes. Studies on outcomes and quality-of-care issues in managed care systems have shown both positive and negative changes. Patients may be more positive about managed care. The Health Tracking Initiative and the Community Snapshots study surveyed 300 health care consumers in 15 communities in 1995. The findings of this study show the users of health care to be positive toward managed care, with 59% regarding the shift toward managed care as being beneficial. That survey did not report on the patients' views on the impact of managed care on the physician-patient relationship, or on medical ethics, but revealed that most respondents believed that managed care would have a positive impact on health care.

The design of our survey has several potential limitations. A broad definition of managed care was offered to the physician respondents, because we were aiming to elicit their general perceptions about practice under managed care. However, physicians' views are likely influenced by the specific managed care contracts that they are participating in. There may be subgroups of physicians whose views are either more positive or more negative because of the specific terms of their contracts. The findings of our study make such investigation more imperative. The Delaware Valley region had a distinct health care profile at the time of the study. The area had been highly penetrated by managed care, particularly of the HMO and independent practice association model and point of service enrollment. In 1996, Singer and Company research group reported that the combined penetration rate of HMOs, preferred provider organizations, and point of service enrollment in the region was 67%. As of 1995, reimbursements in this region were 50% by capitation, 25% by fee-for-service, and 25% by other arrangements. Our findings may not be replicable in other geographic regions in which other models are more prevalent. Although our response rate was a respectable 55%, we have limited information about nonrespondents. Specialty and sex distribution were similar between the respondents and nonrespondents, and nonrespondents participated in the same managed care organizations since the mailing list was derived from 4 provider handbooks, but we cannot generalize to the entire sample. Survey questions were written in the third person, asking about the profession in general and not about personal experiences. However, many respondents' written comments reflected personal experiences, substantiating their responses to questions. Many respondents appear angry at their loss of control, autonomy, and income. It is likely that this anger affects some physicians' appraisals of the deleterious effects of managed care.

Since our survey was completed, managed care has already begun to assume new configurations, partially in response to public backlash against managed care. Some managed care organizations have made changes that expand patient choice by permitting patients to bypass the primary care physician in seeking out specialist care. Other plans allow patients to seek care from providers outside of the health plan for an increased fee. Whether changes like these will improve the perceptions of physicians that managed care is having profound effects on the physician...
patient relationship, quality of care, and on their ability to carry out their ethical obligations remains to be seen. A wider variety of physicians must be surveyed on the issues raised herein. More detailed questions on the relative weight of the different aspects of the physician-patient relationship need to be asked to better understand the reasoning behind physicians’ attitudes on these topics. Structured interviews conducted with physicians working in a variety of reimbursement systems would help to further elucidate the effects of managed care on the ethical foundations of medical practice and on quality of care. Some respondents commented that managed care has had an especially negative impact on mental health care, which is consistent with some emerging literature. Questions about the impact of managed care on mental health care should be included in future surveys. In addition, although a complex task, it is important to try to correlate the views of patients on these issues with those of the physicians. Such information would be valuable in guiding further health care reforms, including the many legislative efforts to regulate managed care now taking place, as well as more innovative suggestions to establish nongovernmental standard-setting bodies for managed health care.

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