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The Influence of Organizational Structure on Physician Satisfaction: Findings from a National Survey

BACKGROUND. The term *managed care* encompasses a variety of organizational arrangements between physicians and health plans. At one extreme, physicians are plan employees; at the other, physicians have contracts with multiple plans. How these arrangements affect physicians' satisfaction with managed care is not well known.

OBJECTIVE. To explore the effect of organizational structure on physician satisfaction.

DESIGN. Telephone survey of 751 practicing internists. The response rate for the 15-minute survey was 64%.

SAMPLING STRATEGY. The random sample was taken from the membership of the American College of Physicians—American Society of Internal Medicine. Federal employees, retirees, physicians, and students who spent less than half of their time in patient care were excluded.

RESULTS. 689 Physicians indicated that they were affiliated with a managed care plan: 9% were salaried employees, 6% had an exclusive contract with one plan, and 85% had a variety of nonexclusive arrangements with multiple plans. Among plan employees, 32% reported they were very satisfied with the managed care organization in which they worked. The corresponding figure was 19% among physicians with an exclusive contract and 5% among those with multiple contracts. A similar pattern of responses was seen when physicians were asked about their perception of the commitment of managed care to quality. Although 64% of plan employees responded that there was a great deal of commitment, the corresponding figure was 35% among physicians with an exclusive contract and only 7% among those with multiple contracts.

CONCLUSIONS. Physicians who are salaried employees of a staff- or group-model HMO report the highest satisfaction with managed care.

Dramatic changes in the health care system in the United States over the past two decades have influenced physicians' satisfaction with the practice of medicine. Although physician satisfaction has been well described in previous studies,¹⁻⁴ less attention has been given to how it relates to specific practice arrangements. In this paper we explore the effect of various managed care arrangements on physician satisfaction.

Understanding how managed care arrangements affect physician satisfaction is important for several reasons. First, identifying the factors that bring satisfaction to medical practice, including managed care, should be helpful in designing and imple-

See related editorial on pages 92-93 and primer on page 96.

The abstract of this paper is available at ecp.acponline.org.

menting models of practice that meet the needs of physicians and patients. Compensating policies or actions can then be developed to ease the transition from a fee-for-service model to a managed care model of health care delivery. Second, physician satisfaction or dissatisfaction has implications for workforce policy. A dissatisfied physician workforce can negatively affect the future supply of physicians. For the third year in a row, the Association of American Medical Colleges has reported a decrease in applicants to medical schools and cites “the perceived loss of physician autonomy due to recent changes in the health care marketplace” as one reason for the decline.⁵

Methods

Overview

Our data were obtained from two telephone surveys conducted by the American College of Physicians–American Society of Internal Medicine (ACP–ASIM) by using a random sample of its physician membership. The first survey was conducted in March 1996 and the second in October and November 1997. Trained professional telephone interviewers gathered the survey data using a 28-item questionnaire developed specifically for this purpose. The questionnaire was modified slightly for the second survey to include additional questions on physicians’ per-

ceptions of quality. We report here on items consistent in both surveys, as well as the responses to questions related to physicians’ perceptions of the quality of care in managed care settings.

Instrument Development

A staff work group at the ACP–ASIM that was interested in learning more about the effect of managed care on the practice of internal medicine was responsible for developing the questionnaire. Working with an experienced survey research firm, the group produced several drafts of the questionnaire. The final instrument was pretested on a small number of randomly selected physicians from the ACP–ASIM membership. No changes were made to either questionnaire on the basis of the pretest. The final instrument included questions on practice arrangements, satisfaction with job, satisfaction with career, and characteristics of the participants. The second survey also included several questions related to physician perceptions of quality of care in managed care settings.

Sampling Strategy

We randomly selected 4000 physicians as potential respondents from the 90,000-member database of the ACP–ASIM. **Figure 1** outlines the sample selection

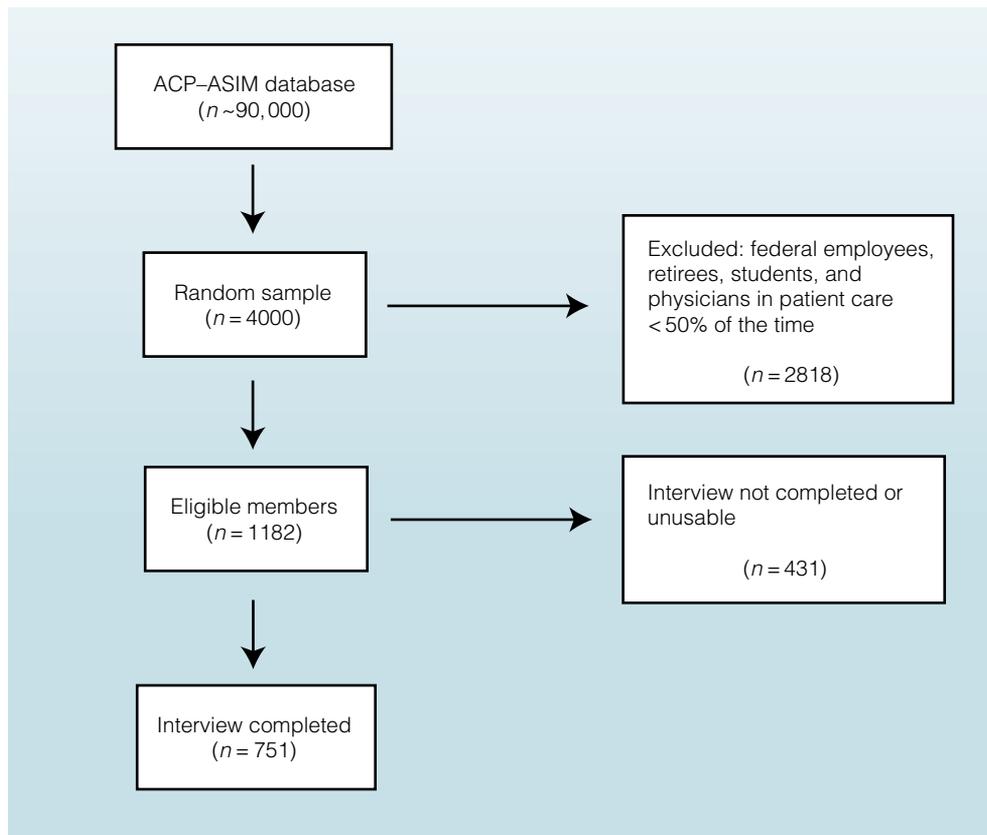


FIGURE 1. Sample selection.
ACP–ASIM = American College of Physicians–American Society of Internal Medicine.

process. We excluded members who had retired, full-time government employees, physicians who spent less than 50% of their time in patient care, and student members ($n = 2818$). All potential participants received a letter from the executive vice president of ACP-ASIM describing the purpose of the survey and requesting their cooperation. No incentive was offered for participation, but extensive response enhancement techniques were used to maximize the response rate. These techniques included advance notification, multiple telephone-call attempts until an interview was completed or a definitive response was obtained, flexible scheduling, and contact with staff at ACP-ASIM to respond to questions or concerns regarding the survey. Of the 1182 eligible respondents, 751 completed interviews (response rate, 64%).

Statistical Analysis

The margin of sampling error for this survey (at the 95% confidence level) was ± 5 percentage points for the entire sample. Cross-tabulations were run by using selected variables. Differences in proportions between respondent subgroups were tested by using two-sample tests for proportions. For some cross-tabulations, chi-square values were calculated to evaluate the independence of the two variables.

Results

Table 1 shows the demographic characteristics of the respondents. Eighty-four percent were men, and the average age was 44.5 years. Approximately one third were engaged in solo practice, another third in multi-specialty group practice, and slightly less than a third in single-specialty group practice. Fifty-four percent of the

sample were subspecialists, and the average length of time in clinical practice was about 15 years.

Ninety-two percent of respondents indicated that they were affiliated with at least one managed care organization ($n = 689$). On average, these respondents had been affiliated with one or more managed care organizations for slightly more than 6 years. They had the following organization arrangements: Nine percent were salaried employees, 6% had an exclusive contract with one plan, and 85% had a variety of nonexclusive arrangements with multiple plans. The average number of managed care contracts for physicians in this last group was 10.6.

Satisfaction with Managed Care

Figure 2 displays responses to the question: "Overall, how satisfied would you say you are with the managed care organizations with which you have contracts?" Respondents were asked to describe their overall satisfaction by using a four-point scale ranging from "very satisfied" to "not at all satisfied." Thirty-two percent of plan employees indicated that they were very satisfied with managed care organizations. By comparison, 19% of physicians with exclusive contracts and only 5% of physicians with multiple contracts considered themselves very satisfied. The latter group was also the most dissatisfied: Forty-nine percent responded that they were not satisfied or not at all satisfied. Physicians were also asked to identify the most important factor causing their dissatisfaction with managed care. The top two reasons noted were loss of autonomy (interference in the physician's ability to make decisions related to patient care) and the increased administrative burden imposed by managed care organizations.

TABLE 1
Characteristics of the 751 Physician Respondents*

CHARACTERISTIC	PLAN EMPLOYEE ($n = 60$)	RESPONDENTS WITH CON- TRACT WITH SINGLE PLAN ($n = 44$)	RESPONDENTS WITH MULTIPLE CONTRACTS ($n = 585$)	RESPONDENTS WITH NO PLAN AFFILIATION ($n = 62$)
Mean age, yr	45	43	46	46
Female	15%	11%	16%	19%
Generalists	68%	61%	43%	34%
Mean duration of practice, yr	14	12	15	15
Mean plan affiliations, n	1	1	10.6	NA
Length of plan affiliation, yr	9	5	6	NA

*NA = not applicable.

"Overall, how satisfied would you say you are with the managed care organizations with which you have contracts?"

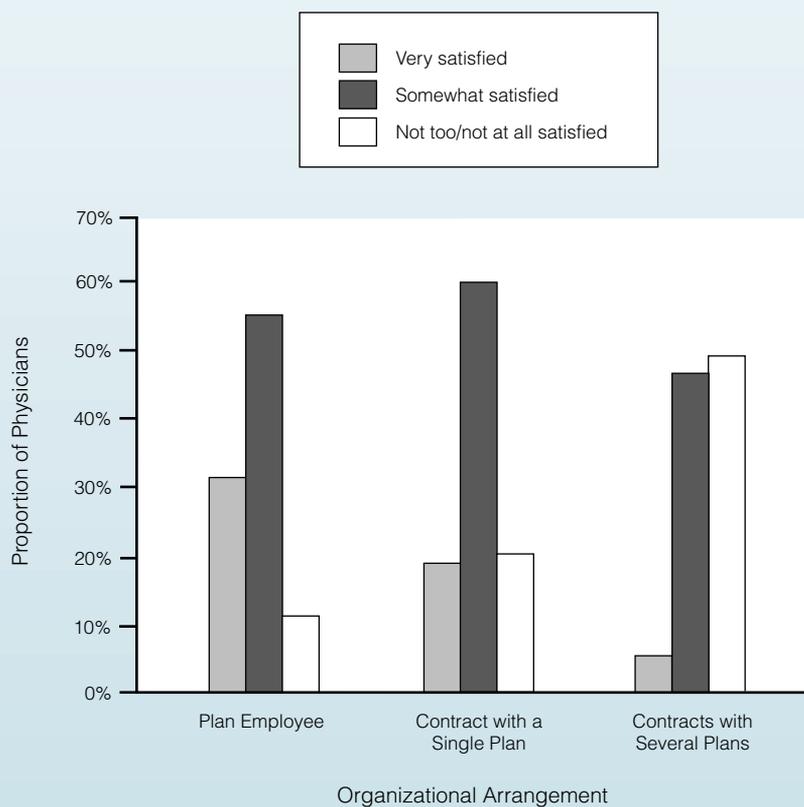


FIGURE 2. Satisfaction with managed care. Physicians who have contracts with multiple plans were less likely to respond “very satisfied” than were physicians with other financial arrangements ($P < 0.05$).

Perceived Commitment of Managed Care to Quality

In our second survey, we asked physicians to describe how committed managed care organizations are to providing high-quality patient care. Responses to this question are shown in **Figure 3**. Plan employees were the most positive: Sixty-four percent indicated that managed care organizations had “a great deal” of commitment to quality. This is in contrast to physicians managing multiple contracts, among whom only 7% believed managed care organizations had a great deal of commitment to high-quality patient care.

We also asked physicians about their perceptions of the interest of managed care organizations in improving quality; 15% believed managed care did nothing to improve quality. Another question was whether they as physicians felt they could improve quality in the managed care organizations they worked with. About half believed they could influence efforts to enhance quality and about half believed they could not.

Overall Career Satisfaction

Although respondents were overwhelmingly positive about the practice of internal medicine, the most satisfied physicians reported “no affiliation” with managed care. As shown in **Table 2**, rates of satisfaction were very high when “very” and “somewhat satisfied” responses were combined. This is true for all types of practices surveyed, ranging from 87% for plan employees to 95% for those with no managed care affiliation. Among respondents with some relationship to managed care, the highest level of career satisfaction was expressed by physicians managing multiple managed care contracts. Fifty-one percent of these respondents indicated that they were very satisfied with their careers. Plan employees were the least satisfied with their careers, with only 37% expressing that they were very satisfied. When respondents were asked to identify the aspects of practice that contribute to their satisfaction, taking care of patients and relationships with patients were cited most often.

"To what extent do you believe the managed care organizations with which you are affiliated are committed to high-quality patient care?"

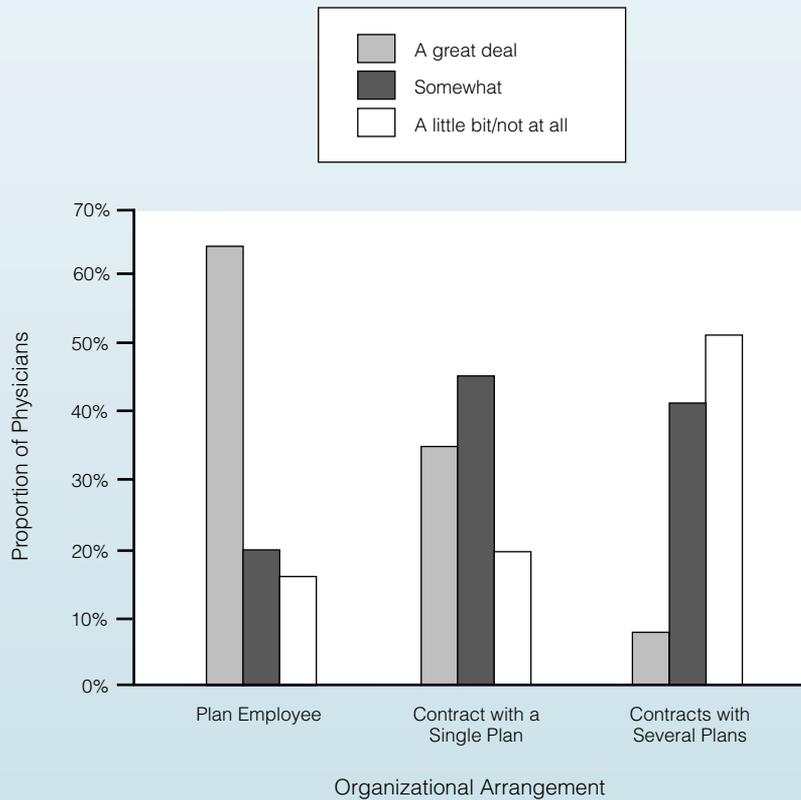


FIGURE 3. Perceived commitment of managed care to quality. Physicians who have contracts with multiple plans were less likely to respond “a great deal” than were physicians with other financial arrangements ($P < 0.01$).

Discussion

Our survey results suggest that most internists are overwhelmingly satisfied with their choice of career. The most satisfied are the small minority with no affiliation with managed care. Among the majority who have some affiliation with managed care, career satisfaction was slightly lower. Our respondents indicated that satisfaction with their career is linked to caring for patients and to their relationship with patients.

For physicians working in a managed care setting, we found that salaried employees in the most organized settings (staff- or group-model HMOs) were the most satisfied with managed care. This level of satisfaction may reflect the qualities of the organization that employs them. Accordingly, there may be a self-selection bias among physicians employed by managed care organizations and organizations that employ them. Studies indicate that physicians choose to join organizations that support their personal style of medical practice, thus fostering a sense of satisfaction from the beginning of the employment relationship.^{6,7}

We hypothesize that this satisfaction may also be related to the perceived quality of care delivered by managed care plans. When we asked respondents in the second survey: “To what extent do you believe managed care organizations with which you are affiliated are committed to quality patient care?”, plan employees expressed the most positive views about managed care quality. More than half believed that their organization was committed to high-quality patient care. In contrast, physicians with multiple managed care contracts were the least sanguine about the commitment of managed care to quality.

Of interest, whereas employed physicians expressed more satisfaction with managed care but less with their careers, our respondents who contracted with multiple plans expressed the converse: They were the least satisfied with managed care but were most satisfied with their careers. The views of these physicians about managed care quality are disconcerting. Physicians with multiple contracts in our study managed an average of 10.6 different contracts. Fewer than half of these physicians felt that managed care organizations were com-

TABLE 2

Physicians' Overall Career Satisfaction*

DEGREE OF SATISFACTION	PLAN EMPLOYEE (n = 60)	RESPONDENTS WITH CON- TRACT WITH SINGLE PLAN (n = 44)	RESPONDENTS WITH MULTIPLE CONTRACTS (n = 585)	RESPONDENTS WITH NO PLAN AFFILIATION (n = 62)
Very satisfied	37%	41%	51%	61%
Somewhat satisfied	50%	52%	38%	34%
Not too/not at all satisfied	13%	7%	12%	5%

*Data on respondents who answered "don't know" or "not applicable" or who gave no response were excluded from the table ($P = 0.06$, chi-square test).

mitted to high-quality patient care. We can speculate that loss of autonomy and subsequent difficulties arising from managing multiple contractual requirements is a major source of this dissatisfaction.

Our study has some limitations. Although response rates of approximately 60% are considered adequate when working with a physician sample, response bias was possible. Dissatisfied physicians may have simply chosen not to respond to the second survey in 1997. Another possibility is that increasing pressures in the practice environment may leave less time for interested physicians to participate in surveys of this type. In addition, the issue of managed care and the impact on practicing physicians may have become passé and respondents simply had less interest in the topic. We surveyed only internists who were members of the ACP-ASIM. Thus, the findings may not be generalizable to all internists and are not generalizable to other groups of primary care practitioners, such as pediatricians or family practitioners.

It has been widely speculated that the introduction of various forms of managed care into the health care marketplace has negatively affected physicians' views toward medicine. Findings from two consecutive surveys indicate that physicians differentiate between career satisfaction and satisfaction with the medical practice environment. Internists report high levels of career satisfaction but lower levels of satisfaction with the environment in which they practice. Loss of autonomy and control over patient care issues are most often cited as by-products of managed care arrangements that trouble physicians and contribute to their level of dissatisfaction. Also troubling for physicians is a perceived lack of commitment to quality by managed care plans, thus reinforcing a negative view of managed care.

Take-Home Points

- Many different organizational arrangements between health plans and physicians are labeled "managed care."
- To explore the effect of different arrangements on physician satisfaction, we surveyed a national sample of clinically active physicians trained in internal medicine.
- Physicians who were plan employees were more satisfied with managed care than were physicians with a single managed care contract. In turn, physicians with a single contract were more satisfied than those with multiple contracts.
- Similarly, the perceived commitment of managed care to quality was highest among plan employees, was intermediate among those with single contracts, and was lowest among those with multiple contracts.
- Physician satisfaction is related to the specific organizational arrangements of managed care.

References

1. Lichtenstein R. Measuring the job satisfaction of physicians in organized settings. *Med Care*. 1994;22:56-68.
2. Linn LS, Brook RH, Clark VA, Davies AR, Fink A, Kosecoff J. Physician and patient satisfaction as factors related to the organization on internal medicine group practices. *Med Care*. 1985;23:1171-8.
3. Donelan K, Blendon RJ, Lundberg GD, et al. The new medical marketplace: physicians' views. *Health Aff (Millwood)*. 1997;16:139-48.
4. Schulz R, Scheckler WE, Moberg DP, Johnson PR. Changing nature of physician satisfaction with health maintenance organization and fee-for-service practices. *J Fam Pract*. 1997;45:321-30.

5. Association of American Medical Colleges. AAMC Data Show Women Students Are the Majority among Entrants to 40 Medical Schools. <http://www.aamc.org/newsroom/press-rel/991026a.htm>. Accessed November 1999.
6. Baker LC, Cantor JC. Physician satisfaction under managed care. *Health Aff (Millwood)*. 1993;12:258-70.
7. Hadley J, Mitchell JM. Effects of HMO market penetration on physicians' work effort and satisfaction. *Health Aff (Milwood)*. 1997;16:99-111.

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