The Impact of Managed Care on Oncology Practice

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by
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Results from a 1996 survey of oncologists show that managed care is adversely affecting patients' access to care and practice costs. In general, oncologists report managed care policies affect their clinical decisions and lead them to hesitate to prescribe expensive forms of chemotherapy, hospitalize patients, provide bone marrow transplantation or terminal and follow-up care, or enroll patients on clinical trials. Oncologists also report they must add office staff to deal with the increased administrative hassles that come when working with managed care plans.

Much of the published literature suggests that although managed care usually influences resource utilization, it has no adverse impact on the quality of outcomes of patient care compared with traditional indemnity insurance.[1,2] Some studies, however, have noted problems with subsets of patients.[3] No studies to date have probed physician perceptions of how the source of payment affects their patients, therapeutic options, and their practices. Further, no studies have measured how physician financial dependence on managed care affects the way care is provided. While most published studies contrast the two extremes of insurance—capitation versus fee for service—most physicians today rely on a mixture of payment arrangements ranging from pure capitation, including the cost of physician-provided drugs, to fee-for-service payments based on usual and customary fees. In the real world where physicians depend increasingly on managed care for patients and revenues, it is important to track how the changing nature of insurance affects access to and provision of care for patients faced with a life-threatening illness such as cancer.

Anecdotal reports are common today about physicians' growing inability to deliver quality care under managed care. Physicians often cite administrative hassles, frequent payment denials, and delayed approval for recommended services.

We devised this study to determine the perceived level and types of "hassle factors," payment problems, and therapeutic limitations that medical oncologists may encounter and the impact of managed care on their ability to deliver quality care. Specifically, we wanted to determine whether denied payment affects the clinical judgment of oncologists and whether managed care affects the availability of some types of treatment or in other ways limits physicians' treatment options. We also focused on determining the level of administrative and coordination problems that are emerging for this subspecialty area, which requires significant coordination among a number of specialists and primary care physicians.

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DATA AND METHODS

Survey sample. From a nationwide mailing list of about 5,000 medical oncologists, a stratified random sample was constructed based on the state in which the oncologists

practice. Approximately two of every five oncologists were randomly selected from each state. If a state listing showed only one oncologist, that one physician was selected. The mailing list was obtained from the Association of Community Cancer Centers (ACCC).

In 1996 the survey instrument was mailed twice to the approximately 2,000 oncologists chosen for the study. By the time the survey was terminated, 329 complete responses were received. Of these responses, seven lacked a state identifier; because state of practice was the only stratification variable, these responses were dropped from the analysis. Response rates varied by state and by region. The Pacific and West North Central regions had the highest response rates, and the southern Atlantic states the lowest.*

The final analysis was based on responses from 322 medical oncologists. Each response from a state was weighted to reflect both the number of individuals on the underlying ACCC list of oncologists in that state and in the sample response rate of the state. These descriptive projections were carried out using SAS, Release 6.1. All responses reported here are weighted. Further, only national responses are reported because of a lack of statistical power to compare responses across regions.

To determine whether the percent of practice revenues from managed care contracts altered the responses of oncologists, we developed a median-based classification of respondents' financial dependence on managed care. A second classification included the four quartiles of managed care financial dependence. Responses to key questions were correlated with these measures of managed care financial dependence. In these inferential analyses, the statistical package SUDAAN was used to suitably adjust standard errors.

*The nine census regions include: Northeast (Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut); Middle Atlantic (New York, New Jersey, Pennsylvania); East North Central (Ohio, Indiana, Illinois, Michigan, Wisconsin); West North Central (Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas); South Atlantic (Delaware, Maryland, Washington, D.C., Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida); East South Central (Kentucky, Tennessee, Alabama, Mississippi); West South Central (Arkansas, Louisiana, Oklahoma, Texas); Mountain (Montana, Idaho, Wyoming, Arizona, Colorado, New Mexico, Utah, Nevada); Pacific (Washington, Oregon, California, Alaska, Hawaii). Of 322 responses received, 30 were from the Northeast, 46 from the Middle Atlantic; 47 from the East North Central; 13 from the West North Central; 58 from the South Atlantic; 28 from the East South Central; 32 from the West South Central; 6 from the Mountain; 62 from the Pacific.

RESULTS

Practice organization and payment arrangements. Almost 40 percent of surveyed respondents represented oncology group partnerships, while about 18 percent were part of a multispecialty group. Another 18 percent were in solo practice. On average, responding oncologists had been in practice about seventeen years.

About 72 percent of respondents indicated that they had active managed care contracts in 1995. There were an average of twelve managed care contracts per practice, more than half of which were discounted fee-for-service contracts with separate drug reimbursement. Overall, there were relatively few contracts with capitated payments; however, this form of contractual managed care relationship was found more often in the Pacific region. The reported median managed care (capitated contract, Medicare managed care, and managed care with discounted fee schedule) share of total revenue was 23.5 percent (mean = 24.9 percent). One-fourth of respondents reported managed care contributed less than 12 percent total revenues, and one-fourth reported this share to be greater than 35 percent.

Approximately two-thirds of managed care contracts were reported to require patient referral by a gatekeeper, and more than 80 percent required prior authorization for services.

Patient access to oncology services. Many oncologists have expressed significant concern that delays in referral can impact the outcome of therapy in the first or subsequent courses of cancer care. Twenty-nine percent of respondents indicated they are experiencing delayed referrals from primary care gatekeeepers on a regular or frequent basis. This finding does not vary with degree of financial dependence on managed care.

Managed care contracts are also associated with greater discontinuities in patient care. About 29 percent of responses indicated that patients are regularly or frequently required to switch oncologists due either to managed care contract changes or a switch in the plan itself. Since patients do not often know that switching plans will cause them to change oncologists or that the therapy they are receiving may not be approved under their new plan, this switching causes an additional administrative burden on physicians' practices. At every patient visit, physicians have to check to assure that the patient is still covered by the plan that previously had authorized treatment, or they are required to seek a new approval for the patient's existing treatment plan. Unless providers check on each patient at each visit, they risk providing treatment and chemotherapeutic drugs without reimbursement.

About one-third of physicians reported that patients must regularly or frequently travel long distances or to multiple care locations due to the nature of some managed care contracts. Such travel may add to the complexity of cancer patient management, given the intense nature of testing, followed by alterations in chemotherapy and the need for interdisciplinary coordination of care with surgeons and radiation oncologists. With separate managed care contracts for testing at one facility, chemotherapy at a second, and radiation therapy at

perhaps a third, patient convenience and coordination of multidisciplinary care diminish. For example, managed care often requires an oncologist, who must test patients before adjusting a dosage of chemotherapy, to use a regional laboratory rather than perform the testing in his or her own office. This requirement means the patient must be tested the previous afternoon or evening at a regional laboratory. Then, the office nurse must call the primary care physician, who must in turn call the regional laboratory for results, and then call the office nurse with the results before the dosage can be adjusted.

Clinical trials and therapeutic options. Reimbursement of cancer clinical trials has been a concern for more than a decade.[4] Recent reports highlight the difficulties that academic medical centers[5] and oncologists[6] are experiencing when enrolling patients covered by managed care on research trials.

In this survey, oncologists reported significant difficulties in obtaining coverage for patients' participation in clinical research trials. About 37 percent of respondents reported insurer denial of approval for participation in a clinical trial for at least one of the physician's patients, and 38 percent indicated that they anticipated placing at least one additional patient on a clinical trial if the insurer were to cover the cost.

The allowed number of chemotherapy or radiation treatments do not meet the required standard of practice on a regular or frequent basis in the view of 8.6 percent of the respondents. This perception is not associated with the degree of managed care practice revenues.

There is no statistically significant association between oncologists' financial dependence on managed care contracts and the reported delay by managed care of approvals for studies and referrals on a regular or frequent basis (reported by about 40 percent of respondents); regular or frequent denial of bone marrow transplantation (31 percent of respondents); or the regular or frequent denial of terminal or follow-up care (22 per-

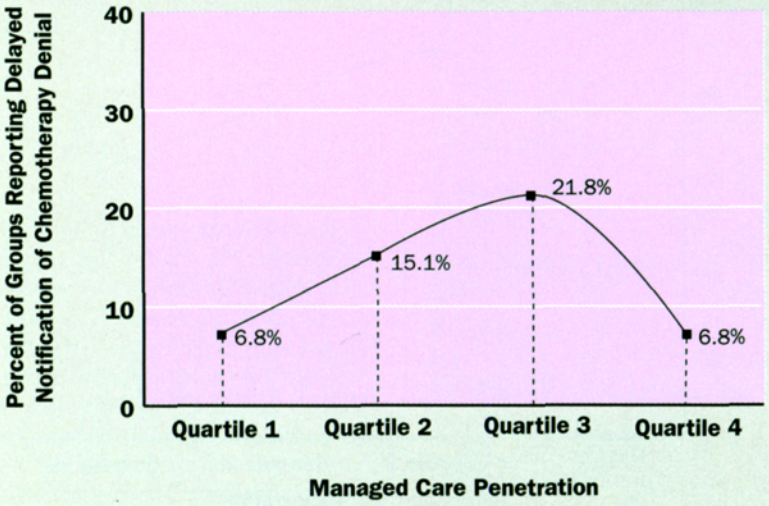
Table 1. Percent of Respondents Who Hesitated to Prescribe a Therapy Because of Previous Coverage Denial by Insurer or Managed Care Plan. Association with Managed Care Financial Dependence.

	Distribution of responses (Population-weighted number of responses = 4,842)	Association with managed care financial dependence	
		Below-median managed care dependence (less than 23.5 percent managed care share in practice revenues)	Above-median managed care dependence (23.5 percent or greater managed care share in practice revenues)
Hesitated for any type of therapy due to previous denial?	Yes = 41.8% No = 58.2%	1.00	1.43 (0.60 – 3.41)
If yes, which services?			
Clinical trial	Yes =24.9% No = 75.1%	1.00	2.11 (1.07 – 4.15)*
Hospitalization	Yes = 26.6% No = 73.4 %	1.00	1.97 (1.01 – 3.85)*
Bone marrow transplantation	Yes = 27.6% No = 72.4%	1.00	1.85 (0.95 – 3.61)
Chemotherapy with expensive drugs	Yes = 27.5% No = 72.5%	1.00	1.21 (0.60 – 2.41)
Radiation oncology	Yes = 4.7% No = 95.3%	1.00	1.21 (0.60 – 2.41)
Terminal or follow-up care	Yes = 13.2% No = 86.8%	1.00	0.90 (0.35 – 2.33)

Note: Association measured as odds ratio (95% CI) using the logit estimator.

*Statistically significant association at the 95% confidence level, based on the Wald chi-square test.

Figure 1. Non-Linear Association Between Delayed Notification of Chemotherapy Denial and Managed Care Penetration.



Notes: Each quartile contains about 40 responses.
Quartile 1 contained the lowest 25% of groups in terms of managed care penetration (revenue share), i.e., percent of the group's gross revenue from capitated contracts, managed care contracts with fee schedule and discount, and Medicare managed care had groups with 0 to 11.9% of managed care revenue share.
Quartile 2 contained all groups with 12.0% to 23.4% of managed care revenue share.
Quartile 3 contained all groups with 23.5 to 34.9% of managed care revenue share.
Quartile 4 contained all groups with 35.0% or greater managed care revenue share.

cent of respondents). These findings suggest that oncologists are encountering these barriers to care by managed care plans regardless of the number of such contracts in their practices or their degree of reliance on managed care revenues.

Payment denials and delays. We asked oncologists about their experiences with payment/coverage denials from the managed care plan. Only about 7 percent of respondents indicated that denial of prior approval for chemotherapy is a problem regularly or very often. Yet, more than 55 percent reported that chemotherapy is not fully reimbursed on a regular or frequent basis. Practices with above-median financial dependence on managed care are more than twice as likely to *not* be fully reimbursed for chemotherapy when compared to those practices with below-median financial dependence.

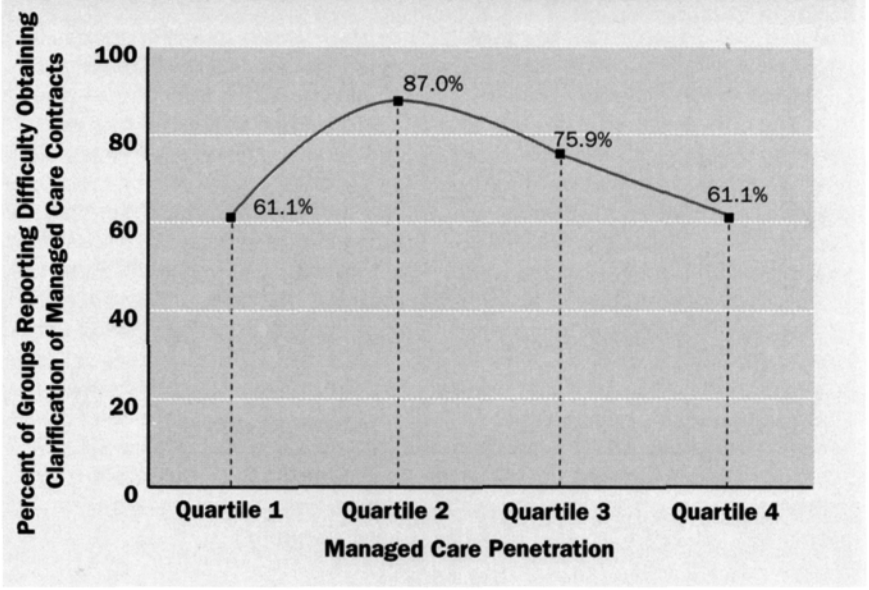
Oncologists were also asked to what degree they encounter delayed notification of chemotherapy denial by managed care plans. About 12 percent reported delayed notification to be the case on a regular or frequent basis, and those in the third quartile of managed care financial dependence are almost four times more likely to report this problem than others. This greater likelihood declines to statistical insignificance as managed care practice revenues increase into the fourth quartile (more than 35 percent managed care share of practice revenues). This inverted U-shape (Figure 1) may reflect managed care market forces in these areas where plans have significant impact on practice patterns through denials, followed by an adjustment in oncologist practice habits, which eventually minimizes subsequent and unexpected chemotherapy reimbursement denials.

Thus, as oncologists adjust to managed care denials through hesitation, staffing changes, increased physician time in pursuing denials, and other measures, they are less frequently surprised by a retrospective denial of a chemotherapeutic agent. They may also adjust their therapeutic approach to fit reimburseable drugs and therapeutic approaches allowed by insurers, rather than the approach they prefer and consider the most likely to benefit the patient. This behavior is consistent with our experience in the field, where oncologists report that they want to be certain that a new drug is covered for an indication prior to prescribing its use, a significant variation from their prior practice of prescribing FDA-approved drugs for on-label and off-label uses supported by the burgeoning literature on new indications for use as soon as they were made available.

Coping strategies with increased denials from managed care contracts. Oncology practices reported managed care contracts account for a median 23.5 percent of practice revenue, and managed care is the fastest growing source of payment for physicians in the U.S. health care system. Thus, it is likely that oncologists attempt to minimize their risk by a number of different strategies. We asked about several risk avoidance strategies.

1) **Hesitation to prescribe treatment.** As many as 42 percent of the respondents stated that they have hesitated to prescribe a treatment because of previous denials of coverage by an insurer or managed care plan (Table 1). Approximately 28 percent of all respondents indicated that they have hesitated to prescribe chemotherapy with "expensive drugs." While respondents were not asked to define "expensive drugs," the term may be synonymous with new therapies. Within the oncology community, new drugs with significant therapeutic or symptom relief advantage tend to be priced above older, less efficacious drugs. Thus, survey findings suggest that some

Figure 2. Non-Linear Association Between Difficulty Obtaining Clarification of Managed Care Contracts and Managed Care Penetration.



oncologists are prescribing older, less efficacious therapies, which they perceive are less likely to be denied by insurers.

In addition, 13 percent reported hesitation in providing terminal or follow-up care. The association between degree of financial dependence on managed care and reported hesitation to prescribe specific therapies is shown in Table 1. Table 2 shows the payers for which respondents have hesitated to prescribe specific therapies. Note that in every case, hesitation is greatest for patients covered by managed care contracts.

2) Additional hassles in dealing with managed care plans. Physician attempts to mitigate risk of denied payment may add to hassle factors in dealing with managed care plans. For example, 56 percent of respondents stated that they have added office staff specifically to handle increased paperwork and phone calls for managed care patients. We sought to determine what form the hassles take and their correlation with managed financial dependence. About 71 percent of respondents indicated that they have encountered regular or frequent difficulty in obtaining clarification of coverage policies; those in the second quartile of financial dependence on managed care have about a five-times greater

Table 2. Percent of Oncologists Hesitating to Prescribe Treatments Based on Patient Insurance.

	Bone marrow transplantation (1,335)	Chemotherapy with expensive drugs (1,335)	Hospitalization (1,287)	Clinical trial (1,206)	Terminal or follow-up care (680)	Radiation oncology (227)
Capitated contract	38.5%	28.9%	31.5%	33.9%	43.7%	49.3%
Managed care	87.4%	53.7%	92.2%	77.3%	76.9%	86.5%
Medicare managed care	33.5%	26.9%	30.0%	36.1%	29.9%	40.4%
Medicare	39.5%	18.0%	26.3%	41.8%	20.3%	10.0%
Medicaid	49.6%	25.9%	22.1%	36.5%	22.8%	0.0%
Commercial insurance or Blue Cross/Blue Shield	41.5%	12.9%	27.6%	32.2%	12.4%	3.3%

Note: 1) Numbers in parentheses are valid number of population-weighted responses to specific questions from among those who hesitated for at least one treatment/payer. 2) All reported percentages are based on the population-weighted distribution of responses from those who reported hesitation for the treatment. 3) Reported percentages may exceed 100%, because respondents checked all that applied.

Table 3. Payment Claims Initially Denied and Subsequently Paid on Persistent Appeal. By Source of Payment.

Source of Payment	Population-weighted number of responses	Reported percent of claims initially denied	Reported percent of claims paid after appeal
Capitated contract	989	6.3%	13.0%
Managed care contract	2,027	10.3%	30.3%
Medicare managed care	1,288	6.4%	24.1%
Medicare	2,116	7.9%	38.8%
Medicaid	1,802	17.1%	23.0%
Commercial insurance, including Blue Cross/Blue Shield	2,160	8.4%	28.7%

chance of reporting this difficulty compared to others. The inverted U-shape in reported difficulty (Figure 2) is consistent with the notion that oncologists may initially resist the additional staffing changes required by higher denials and paperwork requirements of managed care contracts. As staff are added and practices become more familiar with the higher administrative requirements of supporting these types of contracts, the perceived or actual level of difficulty may be reduced.

Other difficulties do not appear to be dependent on the share of managed care practice revenues. For example, more than 55 percent of respondents indicated that they have experienced difficulties in reaching managed care plans on a regular or frequent basis, but this finding is only marginally correlated with the degree of managed care financial dependence.

3) **Appeals of denied claims.** In addition to risk-avoidance strategies, oncologists may respond after the fact to payment denials. One strategy is to appeal payment denials. As many as 43 percent of respondents stated that the physicians are themselves involved in handling of appeals. Table 3 describes physician success with claims denied initially but paid subsequently on appeal by each major type of payer.

SUMMARY AND CONCLUSION

Managed care plans are affecting the practice patterns of oncologists and the care offered to patients. High rates of claim denials coupled with perceived low rates of payment after repeated appeals are likely to make oncologists wary of prescribing any treatment or course of therapy that adds to their financial risk. Methods by which risk might be reduced are also frustrated by managed care, with oncologists reporting difficulty in even reaching the plans and in obtaining clarification of coverage. A high proportion of the physicians reported they are directly involved in the appeals process and have also added staff to deal with the complexities of managed care approvals and payment.

A substantial proportion of oncologists reported that previous denials have caused them to hesitate to prescribe hospitalizations, expensive chemotherapy, bone marrow transplants, a number of supportive care measures, and clinical trials. Regardless of the type of therapy, respondents are two to five times more likely to report they hesitated to prescribe these therapies when the patient is in a managed care plan than in a commercial insurance plan. This finding suggests that there are a number of obstacles to the provision of quality care. The data also suggest that oncologists may react in a variety of ways, including hesitation to prescribe, resistance to managed care restrictions, alteration of patterns of care, and finally changes in their habits to match managed care policies. Given that 8 percent of oncologists reported managed care does not allow the provision of the current standards of care to patients on a regular or frequent basis, the findings may be a harbinger of difficult times ahead.

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