

Are Oncologists' Financial Incentives Aligned With Quality Care?

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In the article that accompanies this editorial, Malin et al¹ use data from the Cancer Outcomes Research and Surveillance study (CanCORS) to measure the association between medical oncologists' compensation structure and their perception of whether their income will increase if they administer chemotherapy or growth factors. Compared with medical oncologists who were paid a fixed salary, those who were in fee-for-service (FFS) practices or who were paid a salary with a productivity incentive were more likely to anticipate greater income if they administered chemotherapy (odds ratio, 7.05 and 7.52, respectively; both $P < .001$). Similar associations were found for growth factor administration.

Several unanswered questions remain from this study. The study measures perception only; we cannot determine from these data if oncologists actually made more money by prescribing more chemotherapy or growth factors. We also do not know the structure of the oncologists' productivity incentives, the magnitude of any increased income, and what drugs or disease settings may be responsible for the largest gains. In addition, the CanCORS study included patients treated for lung or colorectal cancer between 2003 and 2005 who were either living in one of five geographic regions or received care in one of five integrated health or one of 10 Veterans' Administration Hospitals.² In addition, not all physicians responded to the survey. Therefore, it is possible that physician respondents may be not representative of contemporary practice patterns across the country.²

Despite these limitations, the findings of Malin et al¹ are potentially significant because they suggest that perceived incentives might matter. If oncologists think that they will make more money by prescribing more, perhaps they will write more prescriptions. The rational choice theory of economics assumes that individuals will act in their own interest. Oncologists are no different; the current system is set up to reward prescribing more.

To place this study in context, it is important to understand the current reimbursement policy. Before the Medicare Modernization Act (MMA) of 2003, Medicare reimbursed outpatient chemotherapy drugs at the lesser of the charge billed for the drugs or 95% of the average wholesale price. However, the acquisition cost was often much lower than the published average wholesale price, resulting in large margins for the prescribing physician. Reimbursements for paclitaxel were reported as being as high as six times the acquisition cost.³ Under the MMA, chemotherapy is now reimbursed at 1.06 times the average sales price of the previous two quarters, leading to a reduction in margins. To make up for some of this loss in revenue, additional

payments are now included to reimburse for the cost of administering drugs.

The work by Malin et al¹ complements other empirical data that suggest that oncologists respond to financial incentives. A study of luteinizing hormone-releasing hormone agonist used for prostate cancer treatment found that use decreased after the MMA, particularly among patients for whom the benefit of these agents was uncertain, such as those with low-risk disease.⁴ This finding suggests that removing financial incentives may reduce unnecessary use, which should improve outcomes while controlling costs. However, in a situation in which treatment is indicated, prescribing patterns may shift in response to incentives toward equally effective but more expensive treatments. An analysis of Medicare payments for non-small-cell lung cancer found that after the MMA, older drugs such as carboplatin and paclitaxel that experienced significant cuts in reimbursement were used less frequently. However, docetaxel, which retained a relatively high margin given its higher baseline cost, was prescribed more often.⁵

Despite the limitations of the FFS system, modern oncology care requires coordination among physicians, payors, specialty pharmacies, and home care agencies. Oncologists should be reimbursed for the cognitive services they provide, unrelated to the amount of office-administered chemotherapy they prescribe.

One major change in oncology that is not reflected in the current FFS buy-and-bill system is the introduction of oral cancer therapies. For example, there are new hormonal therapies for prostate cancer, immunomodulatory agents for myeloma, and small molecules for breast, renal cell, and lung cancers. Oral therapies are much more convenient for patients but can be much more expensive for oncologists to use. Oncologists are responsible for managing toxicities, which can be significant, such as hypertension, diarrhea, or hand-foot syndrome,⁶ but do not receive any additional reimbursement for these efforts because the treatments do not involve office-administered drugs. For many indications, intravenous alternatives to oral drugs exist for which an oncologist could recoup margin incentives, as well as additional reimbursement for drug administration. These intravenous treatments are dually less convenient for patients and more costly for our health care system.

The Affordable Care Act includes support for programs that will study alternatives to the FFS system. Two proposed models of payment reform include so-called global and bundled episode payments that provide different incentives.⁷

Under global payments, a provider is paid a fixed amount per enrollee for a fixed scope of services. Capitation models were common in the 1990s as managed care grew. They fell out of favor because of concerns about restrictions of choice⁸ and concerns about incentives to limit care.⁹ However, despite these concerns, global payments have the potential to shift care from low-value to high-value services. New models have been proposed that include health status adjustment and appropriate incentives for both quality and cost control.⁷

Another potential model is the bundled episode payment system, in which fixed payments are made for a defined episode of care, which may include a variety of providers and care settings. This system has been studied in a limited extent for 29 cardiac and orthopedic procedures and will expand under a national Affordable Care Act pilot program.¹⁰ Preliminary studies have suggested that they may reduce postsurgical hospital readmission rates. Because they are focused on a particular condition, episode-based bundled payments may be easier to administer than global payments, which can span many conditions and providers.¹¹ However, unlike the global payment system, which is directed at reducing the number of episodes, there is no incentive for providers to reduce the number of episodes under episode-based models.¹⁰

There have been several proposed models for episode-based payments for cancer. Under a pilot project at United Healthcare,¹² oncologists have chosen preferred adjuvant and palliative regimens in breast, colon, and lung cancer. The practices have committed to 85% compliance with these regimens, with exceptions allowed for clinical trials and medical contraindications. They are reimbursed for the cost of the drugs and provided payment at the beginning of each episode (for example, at the beginning of adjuvant therapy or a 4-month interval for palliative therapy). All other services are reimbursed on an FFS basis. This model removes the financial incentive for prescribing chemotherapy and encourages adherence to regimens that the practice deems high quality.

Another episode-based payment model proposed by Bach et al¹³ includes chemotherapy costs in the bundled payment. In one example, non-small-cell lung cancer chemotherapy, infusion costs, and supportive care medications are included in the bundled payment; all other services (including biologics) are paid on an FFS basis. This approach provides incentives to choose less expensive therapies from a group of equally efficacious therapies and may also have the potential to encourage manufacturers to lower prices.

There will not be one optimal payment structure for cancer care, and mixed models will need to be developed and tested. Payment reform should be accompanied by improvements in care coordination and delivery. Patient-centered medical homes and accountable care organizations have been cited as potential solutions. Patient-centered medical homes have been generally primary care based and aim to provide patient-centered, coordinated, chronic disease management.¹⁴ Accountable care organizations are groups of physicians, hospitals, and other providers who work together to assume care for a group of patients and provide incentives to control costs.⁸

How oncologists and other subspecialists who manage chronic, high-cost diseases fit into these new medical neighborhoods has not been well defined.¹⁵ Sprandio¹⁶ has reported his experience with developing an oncology-centered medical home in his community practice in Southeastern Pennsylvania. By implementing measures to aggressively prevent, detect, and treat cancer-related complications, he

has observed a decrease in hospital admissions and both emergency room and outpatient visits. However, this experience in oncology has been limited. As described in the report of the first national medical home demonstration project, the implementation of these new models requires significant organizational effort, resources, and time.¹⁷

In summary, the findings from Malin et al¹ highlight weaknesses of the FFS system that might reward oncologists for doing more, but not necessarily doing better. However, these data cannot be taken to imply that this is a widespread problem among oncologists, or that oncologists are ordering inferior treatments for financial gain. Nevertheless, under the current buy-and-bill system, an oncologist is much more generously reimbursed for administering an expensive intravenous drug than having a complicated end-of-life conversation with a patient and family. Uncoupling the relationship between prescribing patterns and income may be an important step in controlling cancer costs. Important changes are needed and should be made thoughtfully, with rigorous assessment of outcomes and reasonable time frames for adoption. The oncology community needs to work with public and private payors to determine how practices can be appropriately compensated for providing high-quality care that extends life meaningfully and reflects patient and family preferences.

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