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Original Investigation

Value-Based Physician Payment in Oncology: Public and Private Insurer Initiatives

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Policy Points:

- Public and private insurers are implementing payment mechanisms to improve coordination and reduce the cost of drug, hospital, and ancillary services for cancer patients. Some target unnecessary hospitalization, while others create incentives for prescribing lower-cost chemotherapies and biologics.
- Physician payment methods in oncology require a balance between incentives for cost control and incentives for patient access to expensive specialty drugs.
- None of the initiatives adopt bundled methods out of concern for shifting excessive financial risk onto physicians in the context of rapid pharmaceutical innovation.

Context: High-value oncology requires physicians to monitor and coordinate all aspects of care, educate and engage their patients, and adopt cost-effective drug treatments. However, oncology practices in the United States traditionally have been reimbursed based on the number of office visits performed and through cost-plus margins from prescription of expensive drugs. Public and private payers now are experimenting with methods of payment that include monthly care management fees, annual bonuses, and incentives for conservative choice among alternative drug regimens.

Methods: This paper uses case study methods to examine oncology payment initiatives at Medicare, Anthem, Aetna, and UnitedHealthcare, the nation's largest public and private health insurance plans.

Findings: The 4 insurers supplement traditional fee-for-service payment with payment methods designed to promote coordination of care and conservative use of health care resources. Medicare, Aetna, and UnitedHealthcare reward oncology practices that reduce per-patient spending, targeting

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unnecessary patient visits to emergency departments and hospitals. Anthem offers monthly payments to practices that adhere to lower-cost drug treatment pathways; Aetna increases the percentage markup on low-cost generic chemotherapies but not on high-cost biologics; and UnitedHealthcare removes the linkage between physician payment and spending on office-infused drugs. As a condition for receiving the new payments, each of the initiatives requires participating practices to report and, in some cases, improve performance on quality metrics. None of the initiatives bundles payment for oncology drugs together with payment for other oncology services, out of concern for shifting financial risk onto physicians and creating access barriers for patients.

Conclusions: The emerging "value-based" methods of oncology payment supplement fee-for-service and cost-based reimbursements with per-month and per-episode payments, but none of the payers bundle spending on cancer drugs with payments for other services. Payers recognize that bundled payment could create access barriers for patients and undermine innovation in effective but expensive new pharmaceuticals.

Keywords: value-based payment, episode-of-care payment, oncology medical home, clinical pathways.

PUBLIC AND PRIVATE INITIATIVES THAT SHIFT PHYSICIAN payment toward "value-based" methods are expanding from their initial focus on primary care to encompass less common but more expensive specialty conditions and treatments. Oncology is a principal target, given the high and variable costs for drug, radiation, and hospital treatments.[1-4] Payers are structuring their payment initiatives around 2 principal goals: (1) to compensate physician practices for managing the full course of the patient's care, rather than merely the services delivered personally; and (2) to reward physicians for selecting cost-effective drug regimens from among the set of therapeutically equivalent alternatives.

High-value oncology care includes the development of formal treatment plans, patient education and monitoring, administration of infused and oral drugs, coordination with family and community supports, obtaining insurer authorization for tests and treatments, and numerous other services that benefit from 24-hour clinician availability, an electronic medical record, and highly trained nonphysician caregivers. Pilot projects featuring extensive care management,

designated as "oncology medical homes," report cost savings from the reduction of unscheduled visits to the emergency department and admissions to the hospital, even as they require greater investments in office staff and practice infrastructure.[5-7] High-value oncology also requires that physicians prescribe cancer drugs with an eye on the financial costs as well as the clinical effectiveness of alternative regimens.

This paper uses case study methods to analyze the oncology payment initiatives at Medicare and the 3 largest private health insurers in the United States: Anthem, Aetna, and UnitedHealthcare. Close consideration of the public and private initiatives yields insights into the applicability and limitations of value-based payment in clinical contexts subject to cost-increasing technological innovation.

The Status Quo in Oncology Payment

The payment status quo in oncology comprises fee-for-service reimbursement for physician services, cost-plus reimbursement for office-infused chemotherapies and biologics, and a mix of prospective and cost-based reimbursement for the many ancillary services provided to cancer patients.

Physician Services: Fee-for-Service

Medicare and most private insurers pay oncology practices on a fee-for-service basis for patient visits and for the preparation, administration, and supervision of in-office chemotherapeutic treatment. Fees for office visits are expected to cover the practice's expenditures on many services that fall outside the patient's visit, including telephonic patient counseling; advice concerning out-of-pocket cost sharing; coordination with caregivers in emergency departments, ambulatory clinics, and hospitals; prescription authorization with insurers and adjudication with pharmacies; and collaboration with community-based patient support and financial services providers. While some policy analysts have suggested eliminating fee-for-service in favor of bundled or capitation payment, all the proposed reforms leave this fee-for-service dimension of payment in place.

Office-Administered Drugs: Cost-Plus Reimbursement

Oncology practices purchase biopharmaceuticals, chemotherapies, and supportive medications that are administered to cancer patients in the course of an office visit. Medicare and private insurers then reimburse physicians for these expenditures based on some measure of average cost, plus a markup to cover costs of inventory (eg, storage, waste, breakage, mixing). Medicare pays practices the average sales price (ASP) plus 4.3%, while private insurers with less bargaining power pay ASP plus 10%-15%.[8] ASP does not represent the acquisition cost incurred by any particular oncology practice, but is an average of the prices paid (after taking account of discounts and rebates). Hence, large practices that obtain volume-based discounts from drug wholesalers may pay less than ASP while small practices without access to these discounts may pay more than ASP. Both, however, receive the same reimbursement based on the ASP.

Cost-plus reimbursement creates incentives for physicians to use expensive drugs, since the dollar value of a percentage markup is much higher for expensive, branded biopharmaceuticals than for cheap, generic chemotherapies. This incentive to overprescribe is counterbalanced, however, by the financial risks facing practices that "buy and bill" expensive drugs. Health insurers may refuse to reimburse a drug deemed to be inappropriate, and patients may be unable or unwilling to pay their coinsurance—in both cases leaving the oncology practice to foot the bill itself. Some oncology practices are relinquishing buy-and-bill altogether, allowing the insurer to purchase the infused chemotherapies from drug distributors and to then deliver them to the practices (referred to as "white-bagging"). This is similar to the manner by which insurers and pharmacy benefit managers pay for oral cancer drugs that are prescribed in the office but self-administered by the patient at home.

Ancillary and Downstream Services: A Payment Mix

Cancer patients receive *in vitro* tests and imaging studies in freestanding laboratory and imaging centers, hospital outpatient departments, or the physician's office, each reimbursed based on a different fee schedule. They

undergo radiation therapy and surgical procedures in freestanding or hospital-based outpatient facilities, which are reimbursed using fee-for-service or ambulatory case rates. Patients obtain oral cancer drugs from specialty pharmacies; insurers reimburse these based on the prices paid to the distributors by the pharmacies. Patient care received at hospital emergency departments, inpatient hospital units, or skilled nursing facilities are typically reimbursed through institutional case rates.

Payment Initiatives at 4 Major Payers

The oncology initiatives at Medicare and the 3 major private insurers shift physician revenues toward a blend of per-service and per-patient payments that are supplemented in several cases by a bonus if spending falls below expenditure targets. This paper uses case study methods to analyze the 4 initiatives, including interviews with the individuals in charge of the initiatives and a review of relevant documents from the insurers themselves, outside analysts, and the peer-reviewed literature. Table 1 summarizes the 4 initiatives in terms of payment structure, criteria for participation, breadth of physician participation, and organizational goals.

The Medicare Initiative

Medicare recently launched a 5-year Oncology Care Model with approximately 200 large physician practices, supplementing fee-for-service and cost-plus drug reimbursement with monthly payments to support care management and a performance-based bonus for improvements in efficiency and quality.[9-12] Laboratory tests, diagnostic imaging, radiation therapy, surgery, emergency department visits, hospital admissions, and use of postacute facilities continue to be paid using traditional fee schedules and case rates.

A $160 per-patient-per-month payment is initiated for the practice when the patient begins infused or oral cancer drug therapy. Practices receive the additional payment regardless of cancer type or stage of disease. The monthly payment is intended to finance investments in practice capabilities that permit better coordination of care, and, in principle, lower costs and improve quality. The new payments continue for 6 months, Medicare's estimate of the average duration of chemotherapy, rather than being linked to the actual course of care for each

Table 1. Comparison of New Physician Payment Initiatives for Oncology

Initiative Characteristics	Medicare	Anthem	Aetna	UnitedHealthcare
New payment for physician services	$160 per month for 6 months	$350 per month for as long as patient undergoes chemotherapy, if MD adheres to preferred drug pathways	None	Each practice receives payment equivalent to erstwhile drug price markups
Change in payment for cancer drugs	CMS has proposed separate drug payment reform initiative	Increased payment for some generic chemotherapies	Increased payment for generic chemotherapies used in office	Elimination of price markup for new drugs used in office; older drugs continue to receive markups
Performance-based payment bonus	Practice shares savings from reduction in total spending on cancer patients	Per-patient-per-month supplement constitutes a bonus linked to adherence to preferred pathway	Practice shares savings from reduction in spending on drugs, ED visits, hospitalization	Practice shares savings from reduction in total spending on cancer patients
Criteria for participation	Care planning, EMR use, evening and weekend telephone access, patient navigation	Submit patient clinical data; adhere to drug pathways	Demonstrate capabilities for care management, adhere to drug pathways	Share process innovations with other participating practices

Continued

Table 1. *Continued*

Initiative Characteristics	Medicare	Anthem	Aetna	UnitedHealthcare
Financial focus of initiative	Reduce ED and hospital spending	Reduce spending on drugs and, indirectly, on ED and hospital use	Reduce ED and hospital use due to toxicity	Reduce overuse of biopharmaceuticals; reduce ED and hospital spending
Organizational focus of initiative	Support growth of large practices, including those owned by hospitals	Support community-based practices, delay hospital-centered consolidation	Support community-based practices, delay hospital-centered consolidation	Support community-based practices, delay hospital-centered consolidation
Reach of payment initiative	Approximately 200 large oncology practices	All in-network oncology practices	18 large oncology practices	10 large oncology practices and networks
Bundled episode-of-care payment for physician, drug, ancillary services	No	No	No	No

Abbreviations: CMS, Centers for Medicare & Medicaid Services; ED, emergency department; EMR, electronic medical record; MD, medical doctor.

patient. Patients who continue receiving chemotherapy after 6 months trigger another 6-month series of payments. The Medicare initiative can be interpreted as supplementing fee-for-service for individual tests and treatments with a 6-month episode-of-care payment (per-patient fee plus potential shared savings) to be paid if the practice reduces costs and improves quality.

In order to qualify for the new monthly payment, physician practices must develop a care management plan for each patient, help patients navigate complex ancillary services, offer evening and weekend telephone access to a clinician, maintain advanced information technology capabilities, adhere to nationally recognized clinical guidelines, and have a data-based quality improvement strategy.

The Medicare initiative offers a performance-based payment to practices that achieve reductions in costs and improvements in quality.[13] Actual and expected expenditures—and hence the savings available for distribution—are calculated based on all oncology services (eg, drugs, radiology, surgery, hospital admissions) and not merely those directly provided by the participating practices. Nononcology services provided to patients with cancer also are included in the expenditure targets. Each physician practice has its own spending target based on past expenditures. Spending targets are not adjusted for the principal indicators of disease severity (eg, stage of illness, line of therapy, genetic biomarker results) due to data limitations, but high-cost outlier cases are trimmed to avoid extreme values. Targets are adjusted for patient age, gender, comorbidities, and use of radiation, surgery, or bone marrow transplant services. Eligibility for savings requires that practices perform well on 12 quality metrics.

In the first year of the initiative, participating practices are eligible to receive a portion of the savings (expected minus actual expenditures), which is conditional on fulfilling the program requirements. They do not face any obligation to refund to Medicare any portion of losses, if actual expenditures exceed expected expenditures. In subsequent years, practices can switch to a 2-sided performance payment, earning a greater portion of any savings (compared to that earned under the 1-sided model) but also refunding to Medicare a portion of any losses. It is hoped that during the initial years the practices will gain experience

with the Medicare spending targets and with the changes in practice patterns that keep actual spending below those targets. In both the 1-sided and 2-sided versions, the $160 monthly payments are deducted from savings before they are shared with the practices. In this sense, the monthly payments function as an interest-free loan by Medicare to finance care management capabilities at the participating practices, though the "loan" need not be repaid if the practice fails to generate savings.

The principal goal of the Medicare payment initiative is to encourage practices to invest in the capabilities that allow them to serve as oncology medical homes. It hopes to recoup the costs of the initiative through reductions in unplanned emergency department visits and hospital admissions. It does not directly target drug expenditures, and none of the program documents suggest that practices will reap shared savings by reducing drug spending. As a practical matter, however, the inclusion of drugs in the expenditure targets creates an incentive to select lower-cost regimens and partially offsets buy-and-bill incentives to prescribe expensive regimens. Medicare believes that further changes in prescription incentives are necessary and has launched an additional initiative that replaces its traditional drug reimbursement formula with a flat-dollar administration fee plus a much-reduced percentage markup.[14]

The Anthem Initiative

The Anthem Cancer Care Quality Program, which was rolled out nationally over the past 2 years, is similar to Medicare's initiative in that it builds on, rather than replaces, fee-for-service reimbursement for office visits, cost-plus reimbursement for office-administered drugs, and separate payment for ancillary services (Jennifer Malin, MD, Vice President Clinical Strategy, Anthem Inc, oral communication, January 29, 2016).[15] Anthem supplements existing funding streams for participating practices with a new monthly payment of $350 for each Anthem patient undergoing active chemotherapy and who is being treated according to the requirements of the new initiative.[16] The monthly fee begins with the initiation of chemotherapy and ends when chemotherapy treatments cease. It is not intended to finance the development of care coordination capabilities, as is the case with the Medicare initiative, but to serve as an incentive for physicians to submit clinical data and adopt Anthem-approved drug pathways.

In order to qualify for the $350 monthly supplement, oncology practices must be willing to perform 2 key functions. First, the physicians must register their cancer patients at the Anthem oncology website and input clinical data of the type not available to the insurer from claims data, including demographics, biomarker test results, tumor type, and stage of disease. This new information will permit Anthem to develop risk-adjusted quality metrics that can be reported back to participating practices and eventually be used for performance-based payment. Patient registration solves the attribution problem plaguing provider payment initiatives, including Medicare's, which rely on claims data to link patients to practices. Data submitted to the Anthem web portal will support and automate the insurer's process of pharmaceutical prior authorization, an often time-consuming and frustrating process for the physician practices.[17]

The second key requirement is that the practice adhere to Anthem-approved pathways in its choice among drug treatment regimens, except in cases where patient-specific factors require off-pathway selections. Physicians who use nonapproved pathways will continue to receive traditional fee-for-service payment for office visits and drug administration and, in addition, will continue to be reimbursed for the drugs themselves on the cost-plus ASP basis. They will not, however, receive the new $350 per-patient monthly fee.

In recent years, professional societies and academic medical centers have developed a large number of drug treatment guidelines for patients.[18,19] For example, the National Comprehensive Cancer Network (NCCN) lists 64 guidelines for non–small cell lung cancer.[20] The challenge, from an insurer's point of view, is that different guidelines for the same cancer indication can incur widely differing costs, depending on the mix of branded and generic chemotherapies, biopharmaceuticals, and supportive medications. For example, the non–small cell lung cancer guidelines range in cost from $450 to $64,000 per course of care. In collaboration with oncologists drawn from leading cancer centers and the insurer's provider network, the Anthem medical staff selected a subset of lower-cost pathways from within the set of clinically equivalent regimens. For example, Anthem approved 8 pathways for non–small cell lung cancer and 23 pathways for all forms of lung cancer. These are published on the company's website.[21] Clinical pathways cover

patient self-administered oral drugs as well as office-administered infused drugs.

The Anthem initiative targets the choice of drug regimen for each patient, the aspect of cancer care most directly under the control of the oncology practice. It does not bundle payment for drugs with payment for professional services. Biopharmaceuticals and chemotherapies continue to be reimbursed retrospectively based on average sales price plus a percentage markup. This reflects a concern by the insurer to not create an incentive for the underuse of expensive drugs. A continuing concern is whether the $350 monthly per-patient supplement will adequately compensate physicians who previously were prescribing high-cost drug regimens (and hence receiving high cost-plus ASP markups). If so, the program will reduce overall spending. If not, Anthem might find itself paying additional revenues to physicians who already were using low-cost regimens without obtaining reductions in spending from physicians who were using high-cost regimens.

Anthem does not include a payment bonus to physician practices based on their ability to reduce spending. Anthem notes that most oncology practices do not include radiation therapists and surgeons, and hence do not control directly the use of those nondrug treatment modalities. The Anthem initiative does not place the physician practices at financial risk for laboratory tests, imaging procedures, emergency department visits, and hospital admissions, since Anthem feels that many practices have only limited ability to manage downstream services. Anthem will report to oncology practices their patterns of hospitalization and emergency department utilization compared to network benchmarks, and may offer quality improvement incentives in the future.

The Aetna Initiative

Aetna's Oncology Solutions initiative does not create a new monthly payment for physicians but, instead, changes the method of reimbursement for cancer drugs and offers a performance-based bonus to practices that successfully manage costs. The initiative includes 18 large medical practices and will add some of the practices that participate in the Medicare initiative, as these are likely to possess the managerial capabilities to serve as an "oncology medical home" for affiliated patients.[22]

Aetna's new payment method increases the percentage markup applied to generic chemotherapies administered in the physician's office as a means of increasing overall practice revenues without creating incentives to prescribe expensive branded biopharmaceuticals. In order to qualify for the enhanced reimbursement, oncology practices must possess sophisticated managerial capabilities, use an advanced electronic medical record, and adhere to clinical pathways. Aetna does not develop its own clinical pathways but requires that participating practices select from among those developed by independent pathway firms. Practices cannot merely use NCCN drug guidelines (which do not consider cost) or develop their own pathways (which codify existing processes). The enhanced reimbursement is conceptualized as an incentive to use low-cost generic drugs when appropriate, to adhere to evidence-based pathways, and to invest in the capabilities needed to serve as a medical home for cancer patients.

Aetna supplements enhanced chemotherapy reimbursement with a payment bonus available to practices that manage 3 important categories of oncology-related expenditures: office-infused drugs, emergency department visits, and hospital admissions. In contrast with the Medicare initiative, the Aetna bonus payment is not linked to managing the cost of oral cancer drugs, laboratory and imaging tests, radiation therapy, surgery, or the nononcology services provided to cancer patients. Aetna does not bundle drugs with professional services in a single prospective payment. It believes that payment bundling would expose participating practices to financial risks posed by new drug launches and from attracting patients who need expensive drugs based on their genetic profile (Michael Kolodziej, MD, National Medical Director, Oncology Solutions, Aetna Inc., oral communication, April 22, 2016).

The UnitedHealthcare Initiative

UnitedHealthcare implemented an oncology payment program that supplements fee-for-service with a lump-sum payment plus a performance-based bonus linked to trends in the cost of cancer services (Lee Newcomer MD, Senior VP for Oncology, Genetics, and Women's Health, UnitedHealthcare, oral communication, April 22, 2016).[23] The initiative was piloted in 5 large oncology practices and was subsequently expanded to 4 additional practices and 1 network of practices.

UnitedHealthcare's lump-sum payment to participating practices is based on the revenues previously earned by each oncologist from buying and billing office-infused drugs. In its new payment model, United-Healthcare reimburses each drug based on average sales price but without any markup. It then pays each practice a lump sum equal to the revenues it formerly would have earned from the markups, but without the need to prescribe expensive drugs.

UnitedHealthcare supplements the lump-sum payment with a bonus based on the savings, if any, that each practice achieves through its care management program. Savings are calculated by comparing trends in spending on cancer treatments—including office visits, laboratory and imaging tests, office-infused drugs, emergency room visits, and hospital admissions, but excluding oral cancer drugs—with trends incurred by nonparticipating practices. It does not compare each group's spending with its own past expenditures, as that would make it difficult for an efficient practice to continue receiving performance bonuses year after year.[24]

The practices participating in the UnitedHealthcare pilot are required to submit clinical data on their patients (eg, histology, cancer indication, genetic test results, stage of disease, curative or palliative treatment intent) and share with the other participating practices any process innovations they have developed. In its first 3 years, the oncology initiative led to substantial reductions in expenditures, and participating practices received large performance bonuses.[23] Contrary to expectations, however, spending on drugs increased rather than decreased. The savings in total costs of care per patient derived from reduced spending on hospital and ancillary services.

Distinguishing Bundled From Episode-of-Care Payment

Prominent contributors to the policy literature recommend that payers adopt bundled episode-of-care payment for the services provided to cancer patients.[1,2,4] None of the 4 payment initiatives analyzed in this study adopts such an approach, despite often using the language of episodes and bundles. Each takes steps away from fee-for-service and cost-based reimbursement, adding per-month and per-episode payment streams. In this sense they move incrementally toward episode-of-care payment

(some components of payment are based on the entire episode, while others on individual components) but not toward bundled payment (the number of different payments is increased, not decreased). This divergence between policy proposals and real-world initiatives contains potentially important lessons for the design of value-based payment.

Bundled, episode-of-care payment works well where the course of treatment has a clear beginning and end, where the products and services used within the treatment evolve in a predictable manner, and where a single organizational entity controls the resources used for the treatment. If the course of treatment has a well-defined beginning and end, then episode payments may work well. However, if the products used within the episode evolve in unpredictable ways (due to innovation) and if multiple independent organizations provide the services, then bundling the entire treatment episode into a single payment will not work well. The distinction between episode-of-care payment and bundled payment is often not stated clearly in the policy literature, leading many observers implicitly to assume each implies the other.

One form of care that may lend itself well to bundled, episode-of-care payment is orthopedic joint replacement, pioneered in several pilot projects and now mandated for one-third of US hospitals as part of the Medicare orthopedics initiative.[25] Joint replacement surgery has a well-defined beginning (the patient is admitted to a facility for the procedure), a reasonably well-defined end (30 or 90 days postdischarge), only modest differences among patients with comorbidities (most patients receive the same treatment regardless of diagnosis), and a stable technological trajectory (eg, the use and price for implantable prostheses is predictable).[26] Its principal historical challenge, from the perspective of bundled payment, is that the services comprised by the treatment are provided by organizationally independent surgeons, hospitals, and postacute facilities. The Medicare joint replacement initiative allocates the bundled payment to the hospital, which is the largest and financially strongest contributor, and allows the hospital to coordinate tasks and payments with the other participants. Private insurers have been more cautious in developing bundled payment for joint replacement, out of concern for the potential impetus it might provide for further consolidation of surgeon practices into hospital systems.

Cancer care has some features favorable to episode-of-care payment but lacks many favorable to bundled payment. A cancer episode may have any of several quite different beginnings (eg, initial diagnosis, initiation

of chemotherapy, change in chemotherapy, metastasis) and its end is poorly defined (eg, remission, shift to palliative care, death). The current initiatives use initiation of chemotherapy as the start of the payment episode and either the termination of chemotherapy (private insurers) or 6 months after initiation (Medicare) as its end. Oncology requires choices among alternative therapeutic regimens (eg, drugs, radiation, surgery), involves numerous physician and nonphysician caregivers, and takes place in multiple settings that do not share a chain of command. The current initiatives do not bundle the components of cancer care into one payment to avoid shifting financial risk from the insurers to the providers and to reduce the already-strong incentives for hospitals to acquire oncology practices and thereby gain bargaining leverage.

The principal challenge facing episode-of-care payment for cancer care is how to create appropriate incentives in the light of cost-increasing pharmaceutical innovation, which is a very important feature of medical oncology. Anthem, Aetna, and UnitedHealthcare avoid bundling drugs with nondrug expenditures for this reason, though the latter includes drugs in the spending targets that underlie shared savings opportunities. The Medicare initiative includes drug spending in its spending targets and therefore exposes the oncology practices to the risk of attracting patients needing especially expensive drugs. Better data and methods of risk adjustment hopefully will emerge as practices submit more clinical data to the insurer. The shared savings payment method also exposes practices to the risk that new drugs will not be captured in past expenditure levels and hence in future expenditure targets. Medicare has proposed several adjustments to protect physicians from the cost of innovation, which represent significant departures from past payment adjustments for technological innovation.

First, Medicare will adjust the spending targets in its oncology payment initiative to account for the use of any newly approved cancer drugs, but only if the drugs are used according to the indication approved by the Food and Drug Administration (FDA).[13] Second, if a participating practice uses a new drug at a rate that is higher than the rates used in nonparticipating practices, the spending adjustment can be reduced. Third, future spending adjustments may take into consideration the clinical effectiveness of the drugs, with less generous adjustments offered for less effective drugs. It should be noted that these adjustments attenuate the risks posed by the Medicare shared-savings initiative to patient access and physician financial stability, but only at the cost of further

reducing the initiative's link to the principles of value-based payment. Each adjustment moves the initiative a step back toward retrospective, fee-for-service reimbursement and away from prospective, episode-of-care payment.

The oncology payment adjustments are much stricter than criteria used by Medicare in other contexts where prospective payment is adjusted for technological innovation, such as the New Technology Add-on Payment (NTAP) initiative for hospitals.[27] NTAP does not require novel drugs and devices to be used for their FDA-approved indication, and payments are not reduced in instances of apparent overutilization.

The avoidance of bundled payment by private insurers reflects their concern that further financial pressures may drive community-based oncology practices into the arms of hospital systems, which charge high prices and sometimes favor more expensive drug regimens compared to community-based practices.[28] Hospital-owned practices eligible for the federal 340B Drug Pricing Program can purchase cancer drugs at a 23%-50% discount, which permits them to pay oncologists higher salaries than those paid by physician-owned practices and thereby attract more oncologists into employment.[29] Hospital systems with a strong market position are able to extract higher professional fees and higher markups on office-infused drugs than are smaller and less integrated delivery systems. The concern over provider consolidation is greater for private payers such as Anthem, Aetna, and UnitedHealthcare than for Medicare, since the private plans must negotiate payment levels while the public alternative is able to set them administratively.

Conclusion

The economic literature on incentive design argues that the optimal form of reimbursement in contexts involving multiple tasks does not involve a single method but, rather, a blend of prospective and retrospective payments.[30] The best payment for one form of care may create undesirable incentives with respect to others, and so it often is optimal to combine multiple methods rather than use a single alternative. The new oncology initiatives discussed in this paper do not combine professional, drug, hospital, and ancillary services into a single, bundled payment. They retain fee schedules for office visits, cost-based reimbursement for office-infused drugs, and a mix of fee schedules and case rates for

ancillary and facility services. The new monthly fees and performance bonuses supplement rather than substitute for these traditional forms of payment.

The contemporary experimentation with physician payment methods highlights the comparative underdevelopment in the United States of initiatives to affect the cost of cancer care directly, such as through drug price negotiations. In contrast, many European nations require that drug manufacturers present evidence of comparative clinical and economic performance as a condition for insurance coverage.[31] Some use evidence from these assessments as part of price negotiations. To the extent that these centralized mechanisms succeed in their stated goals of promoting cost-effective cancer therapies, they reduce the need to shift financial responsibility from insurers to physicians. They also reduce the need to shift risk from insurers to patients in the form of out-of-pocket cost sharing.[32]

The long-term attractiveness of the new oncology payment mechanisms will depend on their impact on research and innovation. Medicare and the private insurers are shifting from payment methods that encourage the use of new drugs, regardless of cost, to methods that encourage attention to cost as well as outcomes. In economic language, they implicitly strive for a balance between the virtues of static efficiency and those of dynamic efficiency.[33] The pursuit of static efficiency often involves a shift in financial responsibility from the insurer to the provider, so as to encourage the latter to use technology in the most cost-effective manner possible. In contrast, the pursuit of dynamic efficiency often requires that financial responsibility remain with the insurer so as to enable providers to adopt new technologies even if those initially increase the cost of care. The most valuable of the "value-based" methods of physician payment in cancer care will moderate spending on today's treatments while promoting the development of tomorrow's.

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