Transforming Oncology Care: Payment and Delivery Reform for Person-Centered Care

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Fee-for-service (FFS) remains the predominant payment mechanism in oncology despite ongoing efforts to implement alternative approaches. This form of reimbursement, which reflects the broader healthcare system, promotes high-volume, high-cost procedural services and often undervalues or fails to reimburse evidence-based, low-cost, high-impact services such as patient education, prevention, and care management. Americans with cancer have clearly benefited from increasingly personalized treatments that prolong and improve quality of life. However, many novel care transformations are not adequately supported by payment reforms that encourage high-value care and minimize unnecessary utilization. The lack of support for many aspects of less costly, personalized care may be slowing improvements in cancer outcomes.

Due in part to technological advances and an aging population, cancer care will likely continue to be a primary driver of increasing health spending. A recent study projects total cancer spending to be approximately $157 billion in 2020—a 27% increase from 2010.[1] The distribution of total cancer care costs is 32% for chemotherapy drugs, administration, and radiation; 33% for inpatient and physician surgical claims; and 12% for other physician services. The remaining 22% is composed of evaluation and management, hospice, laboratory tests, imaging services, and inpatient stays without surgery.[2]

Growing cost pressures, cost variations across sites of service, and cost of care components such as chemotherapeutics may also reduce access to high-quality care. One major concern tied to this trend is that many higher-cost services are not demonstrably related to evidence or better outcomes. Additionally, costs of care are higher in outpatient or inpatient hospital settings than in the community setting. These differentials have created an incentive for community practice consolidation, potentially raising costs and threatening access, with fewer community providers available to treat people with cancer.[3-5]

Alongside these challenges, there are many opportunities to realize the goal of a high-quality, high-value healthcare system. Key stakeholders recognize that payment reform in oncology is needed. Many have begun to realign provider payments with care transformations that encourage cost-effective standardization of care and symptom management. Some efforts alter financial incentives for discrete areas of interest, such as end-of-life care or drug procurement, and others take a more comprehensive approach.[6] Notably, these changes focus payments around the individual rather than the services provided, making oncology care increasingly person-centered and accountable.

Alternative payment models (APMs) may be viewed along a spectrum through greater bundling across either providers or payments (**Figure**). To varying degrees, all APMs transition from volume- to case-based payments, reduce or limit the FFS component, and use performance measures to hold providers accountable. Providers gain flexibility by decoupling provider payments from the volume and intensity of specific services, but they also face greater accountability for lowering costs, and depending on the performance measures that affect payment, for better quality care and better results. The APMs differ in the extent and type of flexibility and accountability, but share common barriers to implementation. Performance and outcome measures that are meaningful to patients and clinicians are needed to help ensure that greater net revenues are tied to better care. The impact of an APM on care also depends on investments and support, such as the timely collection and analysis of data through the creation of meaningful feedback loops and upgraded health information technology (IT) systems. Moreover, the success of more substantial APM reforms—including oncology patient-centered medical homes (PCMHs) and oncology accountable care organizations (ACOs)—will

potentially require greater investments in human resources, work flow changes, provider buy-in to transform care, and other aspects of practice transformation, in addition to potentially imposing heavier administrative burdens than clinical pathways or bundled payment models.

In this paper, we use 4 distinct APMs—clinical pathways, oncology PCMHs, bundled payments, and oncology ACOs—to illustrate this continuum of payment incentives that can influence the extent to which care delivery changes limit or reduce costs. We selected these APMs because they can support incremental to comprehensive clinical transformations, thereby accounting for the breadth and size of all oncology practices, populations served, and payer types. We consider these models person-centered, as they fundamentally shift away from FFS payments, realigning the focus of care toward the beneficiary and away from the number of services the physician provides. A greater investment in patient-focused care ultimately aims to improve patient outcomes and satisfaction rates, while simultaneously delivering appropriate care and reducing unnecessary healthcare utilization.[7] We suggest that these reforms, summarized in the Table,[8-18] should be viewed as building blocks along the spectrum of payment reforms.

Take-Away Points

Oncology is a specialty ripe for payment and delivery reform.

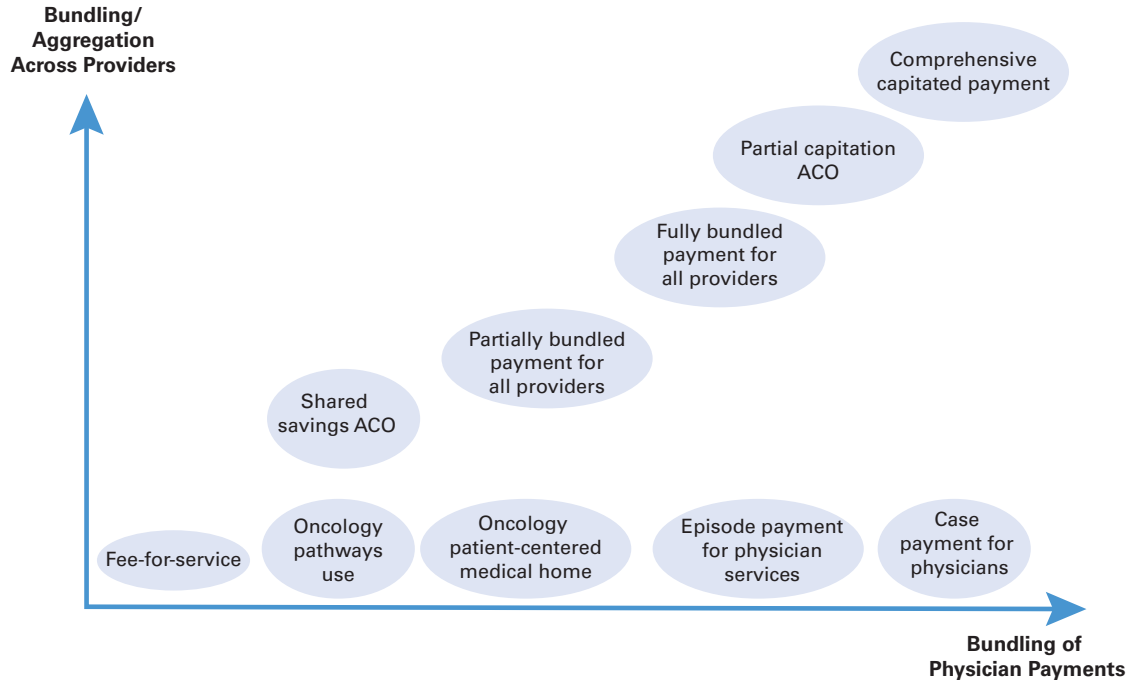
- Many problems facing oncology care today mirror the effects of a system based on fee-for-service, which promotes the use of higher-cost services that may not be related to evidence or better health outcomes.
- Ranging from incremental to comprehensive reform, alternative payment models (APMs) that are more outcomes- and population-based provide an opportunity to support innovative approaches to oncology care.
- Preliminary experience with such APMs suggests that these novel models can be adopted by all payer and provider types, and that they offer distinct benefits compared with the baseline model of fee-for-service.

APPROACHES TO ALTERNATIVE PAYMENT IN ONCOLOGY

Building Block 1: Clinical Pathways

Clinical pathways are standardized, evidence-based, cost-effective protocols for the treatment of cancer that require limited structural changes or provider risk.[19] This model uses a revenue-neutral supplemental pay-

Figure. Continuum of Payment Models Based on Bundling/Aggregation Across Providers and Bundling of Physician Payments



ACO indicates accountable care organization.
Source: The Brookings Institution, 2014.

■ **Table.** Comparison of Model Approaches by Delivery Structure, Payment Structure, and Quality Measure Inclusion

Model Features		Clinical Pathways	Oncology PCMH	Bundled Payment Model	Oncology ACO
Delivery structure	Use of evidence-based pathways	Yes	Yes	Yes	Yes
	Degree of person-centered focus	Limited	High	Limited	High
	Care coordination focus	No	Yes	Yes	Yes
	Major practice transformation required	No	Yes	No	Yes
	Potential to include other specialties/areas	No	Yes	Yes	Yes
Payment structure	Case-based payment component	Revenue neutral supplemental payment for adhering to specific cancer treatment guidelines	PMPM case management fee, between $200 and $250, when achieving performance and outcomes benchmarks[8]	One-time prospective or retrospective payment for a predetermined set of cancer services	Partial capitation
	Type of transition from volume-based payments to case-based payments	Add-on	Add-on	Shift	Shift
	Potential for global payment	No	No	Can include inpatient and post acute care; ED visits; DME; imaging services; and care coordination[8]	Potential for a fully capitated model
	Payment tied to quality and cost	No	No	Yes	Yes
Quality measure inclusion	Incentives for continuous quality improvement activities	No	Yes	Yes	Yes
	Quality and performance guidelines used for oncology	Community Oncology Alliance (COA) quality measures; National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology; American Society of Clinical Oncology Quality Oncology Practice Initiatives[9]			
Pilot programs		Alabama Health Improvement Initiative, Oncology Clinical Pathways Pilot,[10] The WellPoint Cancer Care Quality Program[11]	New Mexico Cancer Center,[12] Wilshire Oncology Medical Group,[13] Cancer & Hematology Centers of Western Michigan[13]	UnitedHealthcare pilot program,[14] Mobile Surgery International and BCBS of Florida,[15] Humana and 21st Century Oncology[16]	Florida Blue and Moffitt Cancer Center,[17] Baptist Health South Florida, Florida Blue and Advanced Medical Specialties[18]

ACO indicates accountable care organization; DME, durable medical equipment; ED, emergency department; PCMH, patient-centered medical home; PMPM, per member per month.

ment to compensate providers for pathway adherence and reaching quality benchmarks, which are necessary to prevent undertreatment or medically contraindicated prescriptions. Providers may receive a per member per month (PMPM) case management fee, typically between $250 and $300 in private insurance plans, for adhering to evidence-based, cost-effective chemotherapy regimens, promoting the use of lower-cost options of equal clinical effectiveness.[8] This differs from the current buy-and-bill model for chemotherapeutics. Providers are reimbursed based on the average sales price for the drug itself—6% for Medicare and a variable percentage for commercial payers—and derive revenue margins, similar to a fixed administration fee, based on drug costs. Consequently, expensive chemotherapeutics translate into greater net revenues for a practice.

Early results show that pathways programs can potentially blunt cost growth through less use of aggressive treatments that are not supported by clinical guidelines.[20,21] Studies to date demonstrate that pathways can reduce variation in chemotherapy use, thereby lowering costs while maintaining overall survival rates.[14,22] However, these reforms alone may not have a big impact on care coordination or other aspects of personalized care.

Building Block 2: Oncology Patient-Centered Medical Home

Building on clinical pathways, the oncology PCMH is a practice-level approach that promotes care coordination and improvement through payments that are more extensively aligned with practice features expected to improve patient outcomes and patient-level performance measures. Providers receive a PMPM case management fee between $200 and $250 upon achieving certain performance and outcomes benchmarks.[8] Providers can use the PMPM fee in an oncology PCMH to support services that have traditionally not been reimbursed (eg, access through expanded office hours, telephone triage, team-based care models, and advanced health IT) to encourage better patient education and care coordination and management.[23] Although these services require upfront investment, collectively they facilitate care transformation that centers on the needs of patients, families, and caregivers. Furthermore, improved collaboration among an interdisciplinary care team removes barriers to care and removes clinically irrelevant work from the duties of a clinician.

The combination of better care coordination and more support for cost-effective services in the oncology PCMH model potentially reduces hospitalizations and emergency department (ED) visits, prevents overutilization of unnecessary high-cost drugs and services, and improves symptom management beyond the hospital setting.[23,24] Early results from 1 oncology PCMH showed reductions in ED visits (68%), hospital admissions per patient treated with chemotherapy (51%), length of stay for admitted patients (21%), overall outpatient visits (22%), and outpatient visits in the chemotherapy population (12%).[23,25] Although the cost of increasing care management services may offset some of the savings, successful oncology PCMH models have reported significant net cost reductions via reduced ED visits and hospitalizations. One oncology PCMH reported aggregated savings of approximately $1 million per physician per year.[26] Another program also saw substantial cost reductions from lower utilization of hospital admissions (34%), hospital days (44%), and ED visits (48%).[24] However, these savings have not been reproduced in all cases, and evidence is limited on the specific details of the payment and delivery reforms that may influence success.

Building Block 3: Bundled Payment

Both within and outside an oncology PCMH-style delivery approach, a more comprehensive bundled payment methodology is possible. Providers are compensated with a 1-time prospective or retrospective payment for a specific set of cancer services over a predetermined treatment period.[14] To the extent a broader range of services are bundled, providers can gain even more flexibility to redirect resources to cost-effective patient-centered activities that FFS does not reimburse, and the greater accountability means more pressure to reduce costs of care.[27,28] Recent results from 1 bundled payment pilot show a 34% reduction in total cost of care.[29]

The scope of a bundled payment in oncology can vary greatly depending on the components that compose the bundle. Most early pilots include limited bundles for the administration of chemotherapy and supportive-care drugs.[28,30-32] Some more comprehensive, but still partial, bundles may cover the drug acquisition costs; bundled payments may also provide more support for redesigning management by including other expensive cancer care components such as imaging services and radiation therapy. Additionally, bundled payments in radiation oncology present an opportunity to manage high-cost treatments and post treatment side effects.[33] As with other APMs, a bundled payment must be carefully tied to performance benchmarks to deter adverse effects on access to and quality of care. However, the greater potential for patient cost variation that accompanies larger bundles means that providers face more uncertainty about their net revenues—and this may be why more comprehensive bundles have not been widely adopted.

Building Block 4: Oncology Accountable Care Organization With Clinical and Financial Risk

The oncology ACO model partially ties payments to overall costs and quality of care for patients with cancer; it amounts to an ACO focused on patients with cancer and is intended to support providers who commit to implementing more person-centered care. A "shared savings" oncology ACO would provide an additional payment beyond the usual FFS payments to the oncology practice, based on whether total spending for the affected patients is below a benchmark level and quality measure thresholds are achieved. Because providers are explicitly held accountable for the cost, quality, and overall care for a popula-

tion in exchange for the opportunity to share savings, the ACO payment encourages overall cost-effectiveness and efficiencies in delivering care. In other words, managing total cost of care is directly incorporated in this model.

Given the specialized, high-cost, high-intensity nature of oncology care, traditional ACOs have had difficulty focusing on oncology-specific reforms. Nevertheless, there are nascent pilots of oncology-specific ACO arrangements and oncology-focused arrangements within population-wide ACOs that closely tie reimbursement to robust performance metrics and data flows (Table).[8] Such oncology ACOs may also be partially or fully capitated, with some or all of the FFS payments related to oncology shifted into a fixed, risk-adjusted payment per patient that is contingent on meeting performance benchmarks. The extent to which an oncology ACO model resembles a global payment depends on the size and scope of the shift from FFS to a fully bundled capitation payment and whether other specialties are included. The oncology ACOs have not yet achieved capitation, or even partial capitation, but they are on a path of increasing clinical and financial risk.[17,34]

CONCLUSIONS

Substantive payment reform in oncology is timely because there is great opportunity to align payments with the triple aim of better health and better care at a lower cost. The models described above represent potential ways to address deficiencies in the current FFS system, such as high and variable spending, fragmented and uncoordinated care, and insufficient reimbursement for services that often make a difference for patients and their families. These APMs vary in the size, scope, and degree to which they shift away from or add to FFS, but they increase provider accountability and support for innovative care delivery components.

Preliminary experience indicates savings can be achieved by payment reforms that support increased care coordination and the greater use of physician-led care teams; both can reduce hospital readmissions, complications, and unnecessary imaging. Specific results vary and some policy implications remain elusive, such as how clinical pathways might encourage care coordination, but these payment reforms are based on value, not volume, making them more person-centered compared with the baseline model of FFS. Experience to date also indicates that oncology payment reform will be an iterative process, and reformed payments may eventually contain pieces of each of the illustrative APMs.

There are several limitations to this work. First, while unprecedented payment reform activity is taking place in oncology, results are limited and more evidence is needed to fully understand the implications of each APM. Second, to date, there are anecdotal examples from pilots around the country, but widespread adoption of new APMs by multiple payers is essential to build the evidence in support of a model. Lastly, APMs described above generally cover only medical oncology. Cancer care is far more interdisciplinary, and the most promising APMs must aim to incorporate the totality of care for the cancer patient. Therefore, a critical policy priority is to develop further evidence of how new payment systems in oncology can better align physician reimbursement with care transformations to improve care coordination, quality of care, population health, and patient experience. More experimentation with APMs across a variety of provider and payer types will provide the opportunity to evaluate APMs, address barriers more effectively, and increase the evidence base to better understand policy implications.

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