A
though patients with cancer represent only 1% of commercially insured patients, 10% of commercial health insurance expenditures is spent on this patient population.1 Throughout 2012, the conversation about mounting business pressures on oncology practices to address this discrepancy has been dominated by 3 topics—the viability of accountable care organizations (ACOs), patient-centered medical homes (PCMHs) in oncology, and oncology pathways, as well as new payment models, such as bundled payments or pay-for-performance contracts.

**Objective:** Our survey sought to determine which payment models and care delivery models payers view as the most viable and the most potentially impactful in managing and reducing the cost of cancer care.

**Methods:** We conducted an online national survey of 49 payers, including 19 medical directors and 30 pharmacy directors, representing more than 100 million covered lives within national and regional plans, using a validated instrument comprised of approximately 120 questions. The survey was administered using the SurveyGizmo website. It was initiated on July 10, 2012, and completed on July 25, 2012. The survey included open- and closed-ended questions and probed payers about models of care that they, in collaboration with providers, are implementing or supporting to improve the quality of cancer care and to reduce the associated costs.

**Results:** Payers are rapidly moving to implement new reimbursement models to support new care delivery models, including ACOs and PCMHs. Based on the results of this survey, a minority of payers are experimenting with new oncology payment models, but most payers are evaluating various models, including bundled payments, capitation, shared savings, and pay for performance. Of the payers in this survey, 39% have already implemented oncology pathways, and 59% who have not already done so are planning to implement pathways in 2 years. Input from local oncology experts is an important resource for pathway development, and a substantial majority (95%) of payers will use pathways to address earlier initiation of palliative care discussions where appropriate.

**Conclusion:** Payers anticipate that there will be a rapid expansion of the use of innovative approaches to oncology cost management over the next 2 years. As payers and their network providers gain more experience in collaborative care delivery, it is expected that demonstration of cost-savings will become more robust and convincing, and a variety of approaches will become more widely adopted.

Ms Greenapple is President and Founder, Reimbursement Intelligence, Madison, NJ.

Stakeholder Perspective, page 256

www.AHDBonline.com

Disclosures are at end of text
A UnitedHealthcare bundled payment pilot program brought together 5 physician groups to evaluate varied treatments and associated costs, to reduce variations, and to implement a bundled payment structure. Outcomes from these programs point to drug cost evaluation, provider involvement, and coordination of care as critical success factors.¹

Payer efforts to standardize care through the implementation of oncology clinical pathways require physician participation and acceptance to achieve measurable success. Publication of the preliminary success of a statewide collaborative clinical pathway program, which detailed the integral role of oncology providers in the provider network, offered a framework for avoiding the potential pitfalls of externally imposed standardization of care.² Data from Cardinal Health presented at the 2013 annual meeting of the American Society of Clinical Oncology (ASCO) revealed an overall cost reduction of 15% for patients with breast, colon, or lung cancer in a clinical pathways pilot program launched in 2008.³

Our organization set out to learn how payers are seeking to initiate or to expand on the development of some of these potentially game-changing new business models for the delivery of more cost-effective, higher-quality oncology care. Reaching out to executive-level decision makers within our database of payers, we conducted an in-depth survey of payers representing more than 100 million US covered lives to gain firsthand insights about how payers are seeking to bend the currently unsustainable oncology cost curve. This article summarizes our findings and suggests the potential implications of these payer-led initiatives for the oncology providers in their networks.

### Methods

**Survey Content and Development**

We developed our survey on the basis of a detailed review of the published literature about payer cost-management strategies for oncology care, as well as in consultation with an expert focus group panel of senior medical directors and other executive-level decision makers with leading regional integrated delivery systems and regional and national payer organizations. The survey was field tested with a sample group of medical and pharmacy directors who responded, and was revised based on feedback received from the test group regarding the usability of the survey and the clarity of the questions. The final survey consisted of a 120-item questionnaire divided into 3 major sections—the adoption of clinical pathways, the implementation of new oncology payment models, and the creation of new oncology care delivery models, such as an ACO or an oncology medical home model. The survey included open- and closed-ended questions and incorporated separate but parallel questionnaire tracks based on whether payers had adopted oncology clinical pathways.

---

**KEY POINTS**

- Oncology practices are transitioning to new care delivery models (eg, ACOs, oncology medical home, and pathways) to control the escalating cost of cancer care.
- This article presents responses from a recent survey of 19 medical directors and 30 pharmacy directors regarding which of these models healthcare payers view as most viable.
- Results show that payers are adopting clinical pathways as a first step toward implementing the principles of healthcare reform to the real-life management of oncology care.
- Payers value payer–provider collaboration and recognize the need to change incentives and reimbursement structures in oncology.
- The cost-savings expected from an oncology ACO are seen as inherently linked to the use of clinical pathways: 39% of plans surveyed have already implemented oncology pathways, and 59% of plans are planning to do so in 2 years.
- Payers believe that pathways can reduce clinical variation in care, improve care quality, and reduce costs, mainly by reducing end-of-life costs.
- Payers anticipate a rapid expansion of the use of innovative approaches to cost management and reimbursement in oncology over the next 2 years.
Survey Sample and Administration
The survey was administered online using the SurveyGizmo website (www.surveygizmo.com). Our sample was culled from US payer organizations within our proprietary database of qualified payer organization members who have responded to previous surveys conducted by our organization. The survey was initiated on July 10, 2012, and data collection was completed on July 25, 2012. Respondents received an honorarium for participation in the survey.

Results
Respondent and Organizational Characteristics
An initial invitation to participate in the electronic survey was sent to the payer organization members who are responsible for implementation of oncology therapy evaluation and management, stipulating that participation was limited to the first 50 respondents; 49 invitees completed the survey. The respondents included 19 (39%) medical directors and 30 (61%) pharmacy directors (Table). The sample included 19 (39%) smaller plans (with <750,000 covered lives), 14 (28%) medium-sized plans (with 750,000-2.5 million covered lives), and 16 (33%) large plans (with >2.5 million covered lives). In aggregate, the respondents represent more than 100 million covered lives, including commercial (63%), Medicaid (20%), and Medicare (7%) participants. A majority (67%) of the respondents represent regional plans and 33% represent national payer organizations.

Rapid Uptake of New Delivery Models in Oncology
Our survey confirms that health plans are moving rapidly to implement new care delivery models, including ACOs and patient-centered medical homes (PCMHs). Payers generally agreed that the ACO and PCMH models offered structures and processes that would facilitate the delivery of coordinated oncology care, which they believe would improve care quality and reduce wasteful or duplicated care. Among the surveyed plans, 21% currently have an ACO and 56% anticipate having an ACO in 2 years. Of the payers who have formed a Medicare ACO, approximately 66% plan to expand it to include commercial plans. Of plans with an ACO, 75% of the respondents said they are forming legal partnerships with providers. Of the total plans surveyed, 38% currently have a PCMH and 35% anticipate that they will have a PCMH in 2 years.

When asked about the potential sources for cost-savings in an oncology ACO, the respondents rated “better coordination of care” as the strongest potential contributor to savings, followed by “earlier institution of palliative care where appropriate” and “reduce inappropriate uses of therapies” (Figure 1). Reductions in hospitalizations, emergency department visits, and the use of diagnostic imaging and other tests also were rated as important areas for potential savings.

This suggests that health plans will focus their initial oncology cost-reduction efforts on the elimination of wasteful and inappropriate care, particularly by improving the management of transitional care. Respondents anticipate that savings will start slowly and will accrue over time as payers and providers gain more experience in collaborative care delivery. The majority (70%) of the responding payers anticipate savings between 6% and 15% at 3 years after the formation of an ACO.

The payers agreed that community oncology practices are a core resource for inclusion in an ACO, in addition to hospitals, physician–hospital organizations, and long-
term care facilities. Practices with complete electronic medical records (EMRs) were identified by payers as the types of oncology practices that have joined or are likely to join an ACO. Other practice characteristics that payers cited as relevant for ACO participation are being part of an integrated delivery network and participation in an integrated oncology network.

Our survey also confirms that payers view cost-savings from an oncology-focused ACO as being inherently intertwined with the adoption of oncology pathways. Although ACOs will drive better coordination of care, thereby eliminating duplicate testing and unnecessary care, oncology pathways will be one of the primary means that will support standardization of care across the provider network within these new models.

**Adoption of Oncology Clinical Pathways**

Payers view clinical pathways as an important tool for managing cancer drug costs, especially in tumor types that can carry high treatment costs, including breast, lung, prostate, and colorectal cancers, as well as multiple myeloma. However, only 39% of payers reported having implemented a pathways program in oncology at the time of the survey. A disproportionate number of health plans using pathways are commercial plans (48%) rather than Medicare (30%) or Medicaid (22%).

Among plans that did not yet have pathways in place, 31% are planning to implement oncology pathways within 1 to 2 years, and 28% are planning to implement pathways in ≥2 years. This finding suggests that by 2014, approximately 60% of payers will be using oncology clinical pathways to help them manage oncology care costs. One recent study estimates that by 2015, oncology pathways could expand to include 25% of all covered lives in the United States.9

The 2 main drivers of payers’ adoption of oncology pathways are the desire to reduce clinical variation in care across their provider network and to improve quality of care. Regardless of the payer size or the plan type, reducing costs associated with end-of-life care is also an important consideration for establishing clinical pathways in oncology.

These findings have important implications for oncology practices and providers. Most important, they suggest that there is a window of opportunity of perhaps 12 months to 24 months for providers within an oncology practice to conduct an internal process audit to determine their level of “pathway readiness.” The goal of such an audit would be to assess differences in what individual physicians within the practice are doing with specific patients, and to evaluate the extent to which care processes and treatment algorithms are aligned with evidence-based clinical guidelines. The recently published results of a collaborative statewide oncology pathway initiative in Michigan suggest that prepathway physician practices closely followed pathway guidelines, and that, regardless of the number of different therapy combinations that were on pathway for breast, colon, and lung cancer (the 3 tumor types selected by the program steering committee), the vast majority of patients were treated with 1 of 30 regimens.7

A second important finding for oncology providers is that payers universally perceive provider input on oncology clinical pathways as a vital element of successful pathway implementation. Although evidence-based resources, such as national guidelines and the medical literature, were identified by payers as important resources for pathway development, input from local oncology experts was identified by 68% of the surveyed payers as a resource for pathway development (Figure 2).

Of note, only a small minority (11%) of payers identified outside vendors as a resource, suggesting that despite the widespread availability of prepackaged oncology clinical pathways, payers recognize the value of a collaborative development process that gives network providers a clear and prominent voice. Similarly, responding payers identified local oncology experts as the major stakeholders involved in guiding adjustments to clinical pathways, based on new therapeutic or diagnostic options, as well as the regular meeting of the pathway steering committee to review emerging clinical data and new studies.
A third key finding for oncology providers is that payers have realistic expectations for provider adherence to pathways, with 75% of payers reporting a provider adherence target of 80% or 90%, which is aligned with the real-world experience of organizations such as Blue Cross Blue Shield of Michigan, which has implemented pathway programs.1 The payers identified the 3 tools that are their most effective mechanisms for maintaining pathway adherence as (1) traditional management tools (eg, prior authorization and step-edits), (2) technology-based management via electronic order entry, and (3) the use of EMRs.

Overall, surveyed payers expressed modest expectations of the actual cost-savings that can be achieved with clinical pathways, with the majority of payers (50%-75%, depending on tumor type) anticipating savings in the 6% to 20% range for most tumor types. A notable exception is metastatic melanoma, for which 35% of payers anticipate a potential drug savings of >30%. Overall, payers anticipate the greatest potential drug-saving savings in breast cancer, with 75% of surveyed payers expecting a savings of ≥11%.

One of the key ways in which payers anticipate that clinical pathways will help manage oncology care costs is by reducing the costs at end of life. This will be accomplished by providing concrete direction for providers within pathways regarding palliative care, and by potentially limiting the use of third-line therapy and later lines of therapy where appropriate. Among plans that have implemented oncology clinical pathways, nearly all (95%) indicated that palliative care is being addressed in pathways (Figure 3).

Responding payers were split regarding how strongly pathways would emphasize palliative care, but 47% said that palliative care would be recommended by their plan as a course of action. Payers anticipate that their plan’s role will be to educate providers through evidence-based clinical pathways that advocate for the appropriate initiation of palliative care discussions.

A slight majority (55%) of payers stated that oncology pathways will limit the use of third-line therapies, with executives at large payer organizations and Medicare-focused payers seeing the greatest potential for pathways to limit the use of later lines of therapy. For providers, this suggests that payers will focus on restricting the use of high-cost drugs that offer little benefit in terms of extended overall survival to treat advanced disease.

By providing a rational, evidence-based framework for reducing variation in clinical practice among network providers, oncology clinical pathways are viewed by payers as essential building blocks for driving change in provider behavior. Because of the difficulty in measuring cost-savings that are directly attributable to pathway implementation, some experts suggest that sustained reductions in clinical variation are, in themselves, a surrogate measure for cost-savings.2 As more provider groups embark on pathway-based practices, payers will become more skilled at gathering and analyzing data gleaned from EMRs and electronic decision-support systems; furthermore, payers will be able to provide more accurate assessment of the financial cost-savings achievable through a more standardized approach to cancer care.
On the Horizon: Payers View New Oncology Payment Models

A minority (16%) of payers are experimenting with new oncology payment models that move reimbursement away from traditional fee for service, and most of this exploration is taking place in Medicare-focused plans. Based on this survey, among health plans that have not implemented new payment models, 73% are considering various models, including bundled payments for defined episodes of care (41%), capitation (32%), shared savings (29%), and pay for performance (29%), as shown in Figure 4.

The time frame for implementation of new payment models varies. Overall, 41% of payers anticipate that they will be piloting new oncology payment models within the next 1 to 2 years, with 45% of large plans considering implementation within this time frame.

There has been much discussion of how provider quality metrics will be integrated into new payment models. Our survey showed that payers rate hospitalization statistics and adherence to pathways as the most relevant quality metrics. Slightly less important are the use of supporting therapies, outcome metrics, emergency department visits, and process measurements, such as the use of EMRs. Payer emphasis on measuring provider adherence to oncology pathways highlights the intrinsic link between the demonstration of quality care and the adoption of evidence-based standards for practice. Pathways provide ongoing standards, guidance, and a tool for ongoing evaluation of a practice’s delivery of quality care.

Discussion

As payers, in collaboration with providers, continue to experiment on how to improve oncology care, contain costs, and redistribute incentives, novel oncology care delivery and payment models are continuing to emerge. Although the traditional fee-for-service model remains relatively intact, payers recognize that they need to continue to work with providers to change incentives and compensation so practices and providers are less dependent on margins from the drugs that are administered and are being appropriately compensated for managing patient care.

Providers also are beginning to rethink their approaches to care management, and are evaluating operational changes that will allow them to more actively participate in the reduction of emergency department visits and of potentially avoidable hospitalizations. These changes include triage programs; mandatory chemotherapy patient education; and around-the-clock, 7-days-a-week access to oncology nurse practitioners for the management of side effects and other chemotherapy-related complications.

Although our survey suggests that payers recognize the vital role that oncology providers play in advancing the timing of conversations about palliative care and in limiting futile late-line treatment, it is unclear how payers will revamp their payment models to ensure that oncology providers are fairly compensated for the additional care they will need to deliver. The 2010 ASCO guidance statement on advanced cancer notes that the transition from curative care to palliative care occurs too late in the treatment process, and that a better understanding of palliative care can produce higher-quality care while reducing costs. The payment model needs to change to engage providers in the process of transforming the delivery of care within their own practices.

Oncology pathways, medical homes, and ACOs are interlocking pieces of the oncology cost-savings puzzle. Oncology clinical pathways, together with EMRs and electronic decision-support systems, are proved methods of gaining provider agreement on the standardization of clinical care, as well as practical methods of monitoring real-life clinical practice and identifying and adjudicating exceptions. However, clinical pathways are inherently non–patient-centric, and in this regard, oncology medical homes are a better model for the delivery of integrated and collaborative care.

Consultants in Medical Oncology and Hematology, a 9-physician oncology practice near Philadelphia, PA, that became the first oncology practice to be recognized by the National Committee for Quality Assurance as a level III PCMH, has demonstrated the effectiveness of the oncology PCMH model in minimizing the use of...
unnecessary resources.\textsuperscript{12} Since Consultants in Medical Oncology and Hematology launched its oncology PCMH, it has reported a 68\% reduction in emergency department visits, a 51\% reduction in hospital admissions per patient receiving chemotherapy, and a 21\% reduction in length of stay for admitted patients.\textsuperscript{12}

ACOs and reengineered oncology payment models will provide the mechanisms for new and more rational alignment of incentives among all stakeholders in cancer care delivery.\textsuperscript{10} The eventual integration of these principles into the oncology practice model is inevitable, because the current fee-for-service approach is creating an unsustainable business environment for community-based oncology practices and is driving ongoing consolidation and shifting of care to the institutional setting. In an editorial on the value of the oncology PCMH, Dr John D. Sprandio noted, “Community-based physicians have not led the response to the current economic challenges confronting their practices,” suggesting that the primary beneficiaries of the early wave of change in oncology care have been third-party vendors of pathway programs and institutional-based cancer programs.\textsuperscript{12}

Our survey confirms that payers are turning to the adoption of clinical pathways as a first step in their efforts to bring the principles of healthcare reform to the real-life management of oncology care. Payers are engaging in thoughtful, active collaborations with their network of oncology providers to ensure engagement and support adherence, and are building pathways with sufficient flexibility to empower the personalization of care based on provider and individual patient decisions.

However, payers also recognize that oncology pathways alone are not the solution, and are starting to evaluate and experiment with alternative oncology care delivery models—including ACOs and oncology PCMHs—as a means to put more responsibility and accountability in the hands of their providers.

The development and implementation of reformed oncology payment models—whether a bundled episode of care or a further evolution of modified fee for service—is clearly on the horizon, although payers responding to our survey recognize that they are only starting down that road. As the results of the United-Healthcare bundled payment experiment are reported, and as other oncology payment pilot initiatives are put to the test, payers will begin reaching out to initiate a dialogue with their network providers about redefining how they can collaborate to deliver the best possible care without breaking the healthcare system’s fragile financial equilibrium.

**Limitations**

In general, survey research poses certain limitations. Survey data rely on responders and, therefore, potential bias is inherent in all survey-based research.

In addition, because the sample size in this study was subdivided between medical and pharmacy directors and between 3 plan sizes (Table), the generalizability of insights and decision-making to a broader scope of plans is limited. Although our proprietary database of qualified payer organizations allows for timely access to member

**Our survey confirms that payers are turning to the adoption of clinical pathways as a first step in their efforts to bring the principles of healthcare reform to the real-life management of oncology care.**

**Conclusion**

Although fee for service continues to be the base model for providers and health plans, payers recognize the need for provider collaboration to change incentives and compensation structures. Similarly, this evolving dynamic encourages providers to actively participate in operational changes that could greatly impact cost. Given the evolving environment and collaborative responsiveness between payers and providers, rapid uptake of new care delivery models will likely continue; cost-savings are anticipated to become more robust with subsequent adoption of a wide range of approaches to oncology care.

**Author Disclosure Statement**

Ms Greenapple has reported no conflicts of interest.

**References**

New Oncology Care Delivery Payment Models to Enhance Care Efficiency

By Gary M. Owens, MD
President, Gary Owens Associates, Glen Mills, PA

More than 13 million people are living with cancer in the United States today. 1 That number will continue to grow as advances in the detection, treatment, and follow-up of cancer continue to improve. The American Cancer Society estimates that >1.6 million cases of cancer will be newly diagnosed in 2013, and that >580,000 people in the United States will die of cancer this year. 2 The estimated economic burden of cancer is >$201 billion, and of this >$77 billion is direct medical costs. 3 Finally, the National Cancer Institute projects that by 2020 there will be >18 million cancer survivors in the country, with direct medical cost that is likely to exceed $157 billion. 4

MEDICAL/PHARMACY DIRECTORS: Therefore, the treatment of cancer and its associated costs is of major importance for health plans. Plan leaders are aware of the multiple inefficiencies in the current system, and they are looking for innovative solutions for them. An illustrative example of system inefficiencies was published in June. 5 This analysis of treatments for prostate cancer in >50,000 men showed that the use of advanced technologies for low-risk disease rose from 32% in 2004 to 44% in 2009; moreover, among men at high risk for death from noncancer causes within 10 years, the use of these technologies increased from 36% to 57%. 6 Overall, advanced technologies rose from 13% to 24%, with no evidence that these newer, more expensive technologies improved outcomes. 7 It is in this setting that plans are looking for alternate systems of care and payment methodologies for cancer care.

The article by Ms Greenapple outlines the results of a survey of 49 payers, representing >100 million covered lives. In that survey, “Payers generally agreed that the ACO [accountable care organization] and PCMH [patient-centered medical home] models offered structures and processes that would facilitate the delivery of coordinated oncology care, which they believe would improve care quality and reduce wasteful or duplicated care.” Payers anticipate that newer payment methods will help reduce inefficient care and, at times, the wasteful use of resources. Although most payers are still reimbursing cancer care using the traditional fee-for-service model, the majority of payers are willing to explore alternative payment methods, according to this survey, and their uptake is likely to be adopted rapidly.

With the economic burden of cancer care growing at a rapid rate, it is essential that payers and providers work collaboratively to develop and to ultimately adopt systems of care that can meet the triple aim of improving the patient experience of care for patients with cancer (including quality and satisfaction), improving the net health of patients with cancer, and reducing or moderating the trend of the cost of care.

The next few years are likely to see the adoption of alternate delivery and payment models for cancer care. Not all of these will be successful, and there will likely be many modifications of these systems as we search for better solutions to our current inefficient and costly healthcare system. Payers and providers should be encouraged to work collaboratively to develop these new models of care, because without such initiatives the burden of cancer care will continue to grow at an unsustainable rate.