

Strategies for Better Managing the Unpredictable and Accelerating Cost of Cancer Care

Cancer is second only to heart disease as the most common cause of death in the United States.¹ Because of advancements in prevention, screening and treatment, cancer costs have consistently remained within the top three health plan medical expense categories. The United States is projected to see a 600 percent increase in cancer spending over the next 30 years.²

Moreover, by 2030, we will see 2.3 million new cancer cases in the United States, a 45 percent increase over 2010.³ Half of all men and one in three women will develop cancer at some point in their lives.⁴

As the number of new cancer cases has increased, so too has cancer survivorship. Thanks to consistent advances in prevention, screening and treatment, 68 percent of people diagnosed with cancer today are expected to live at least five years beyond the diagnosis.¹

It is growing more difficult for groups to manage cancer care — and for care providers to deliver quality cancer treatment. Better solutions are needed to reduce costs and improve outcomes. This white paper explores prevailing cancer trends and best-practice approaches for controlling costs while meeting the care needs of cancer patients.

Trends Impacting the Cost of Cancer Care

Several trends pose challenges to controlling the rapid rise in overall cancer costs.

Population Trends Drive Higher Cancer Rates

The U.S. population is projected to reach about 365 million people by 2030², a 38 percent increase over 1990.⁶ At the same time, the average age of the population is growing significantly higher. As people age, their risk of developing cancer increases. From 2010 to 2030, the percentage of all cancers diagnosed in adults age 65 and older will increase from 61 percent to 70 percent.²

Advancing Science Increases Cancer Care Costs

Advances in cancer research and technology have brought lifesaving breakthroughs in the fight against cancer, but the rapidly evolving science has also resulted in greater cost as patients take advantage of new diagnostic tools and procedures. For example, the number of patients receiving MRI, CT and PET scans has tripled over the past decade.⁷

1.7 MILLION cases of cancer will be diagnosed in America in 2013.¹

Cancer will cause an estimated **580,000 DEATHS** in 2013.¹

There are **12 MILLION** cancer survivors alive today in the United States alone.⁵

By 2030, total cancer cases will rise **67% among older adults**, and 11% among younger adults.²

Higher Survivor Rates Extend the Treatment Cycle

More people are surviving cancer than ever before. An estimated 13.7 million Americans with a history of cancer were alive on January 1, 2012. By January 1, 2022, it is estimated that the population of cancer survivors will increase to almost 18 million.⁸ Cancer patients are living longer and many continue to undergo surveillance and treatment, making cancer care more similar to treating chronic disease. The net result is that cancer is having a longer-term cost impact on the health care system.

Cancer survivors now compose up to **4%** of the total population.⁹

Site of Care Impacts Cost

Hospitals are absorbing more private physician practices into their system, a structural shift that compounds the already high cost of cancer care. Insurers and Medicare often pay significantly more for services performed in a hospital setting than at an independent practice. Once a practice signs on with a hospital, it's not uncommon for the same physician service, even sometimes provided in the same location, to cost anywhere from 5 percent to 40 percent more.¹⁰

Providers Paid for Activity, Not Outcomes

Incentive systems that pay doctors based on services delivered are not always conducive to controlling costs. Portions of an oncologist's compensation can be derived from procuring and administering cancer drugs, and patients and their families may influence their physicians to continue expensive treatments even when desirable goals cannot be achieved. A system that compensates physicians for buying and selling drugs to their patients is one of misplaced incentives. This approach can work against the goal of providing patients the most cost-effective treatments.

Best-Practice Approaches to More Cost-Effective Cancer Care

As cancer costs reach unsustainable levels, better approaches are needed to help rein in spending. Evidence-based medicine and comprehensive care management are two strategies that can make a positive difference in both reducing cost and improving outcomes.

Optimizing Care Through Evidence-Based Medicine

Benefit designs and pay structures that adopt evidence-based approaches can incentivize both consumers and providers to pursue more effective, yet cost-conscious treatment approaches.

The National Comprehensive Cancer Network (NCCN), an alliance of 21 leading U.S. cancer centers, has created a set of evidence-based, consensus-driven guidelines for treating the malignant cancers that affect 97 percent of all cancer patients. Yet, cancer treatment protocols vary widely across providers, and nearly a third of treatments deviate from these recognized best practices.^{12, 13}

Further, cancer patients in some areas of the country spend twice as many days in the hospital during the last month of life as patients from other areas, which not only impacts not only costs but also patient quality of life.

Provider decision tools that support the use of evidence-based treatment guidelines can help payers reduce waste, control costs and improve quality of care. However, guidelines are only part of the equation.

25% of chemotherapy events do not meet NCCN guidelines; each event costs an estimated **\$19,000**.¹¹

Evidence-based chemotherapy can result in estimated savings of **\$0.42 pmpm**.¹¹

Based on a commercial population of 1 million lives with average prevalence of .41%.

Improving Outcomes Through Comprehensive Care Management

A cancer diagnosis sends patients on a long, arduous and uncertain journey. A comprehensive care management program may be necessary to address the complexity of cancer and the patients' adherence to the evidence-based treatment plan, as well as to support the other health issues typical of a cancer patient. Patients need expert help to ensure adherence to the evidence-based treatment plans and prescribed medications as they navigate the confusing landscape, myriad options and difficult decisions confronting them.

Because each patient's journey is unique, effective care management must be targeted, patient-centric and cancer-specific. Drawing on a team of experts experienced in treating cancer to support patients from initial diagnosis and education, through treatment, follow-up care and end-of-life care when necessary can deliver much value.

A comprehensive, multifaceted approach provides patients with the support they need to make informed decisions about the providers and treatments most likely to result in a positive outcome. It also helps to manage costs by integrating and addressing gaps in care.

A Best-Practice Model Focused on Improving Outcomes

A foundation for care that incorporates evidence-based medicine and targeted case management can help to reduce costs and improve quality of care. To ensure success, a care model should consider the following elements.

Treatment Decision Support Technology

Providers need ready access to the most comprehensive oncology clinical information available to make sound, evidence-based decisions at the point of diagnosis. A web-based platform can help to put the latest, most accurate library of cancer treatment protocols, clinical trial results and estimated treatment costs at providers' fingertips.

The Optum™ platform, for example, contains more than 1,700 evidence-based treatment regimens for over 120 cancer types, along with the nation's largest database of federally sponsored clinical trials. When used with payer prior authorization processes or pay-for-performance reimbursement models, web-based decision support technology can help improve compliance to evidence-based guidelines, reduce variation and cost of care, and promote quality outcomes.

Early Patient Identification and Engagement

It is crucial to identify and engage cancer patients as early as possible so they can be guided toward evidence-based treatment before they go too far down a costly path that may jeopardize outcomes. Prior authorizations, claims data, member notifications, lab test data, referrals and other sources can be mined to identify cancer patients early on.

Specialized Oncology Case Management

Managing cancer cases through specialized oncology nurses can help to improve patient engagement and reduce cancer related medical costs. With their specific knowledge and experience in cancer care, oncology nurses bring a deeper understanding of patients' concerns. They know the appropriate questions to ask and can help guide patients to evidence-based cancer treatments and providers. These nurses also have the knowledge to help manage the symptoms and side effects of cancer therapies, which if left unchecked, could lead to unnecessary inpatient admissions, readmissions or costly treatment. Expert oncology nurses can support patients and their families throughout their treatment journey and beyond, helping them prepare for the survivorship program or end-of-life planning, or access palliative care and hospice resources as needed.

Cost savings through more effective case management results in estimated **savings of \$1.01** per member per month.¹¹

Finding patients early near the date when diagnosed with cancer can save **\$16K per participant** when the patient participates in a comprehensive cancer management program.¹¹

Multidisciplinary Care Management Team

Beyond the oncology nurse case manager, it takes an interdisciplinary care management team to best meet the needs of cancer patients. Such a team should include a medical oncologist, medical social worker and other resources to ensure that patients understand their treatment choices and options.

Specialized Provider Networks

Partnering care through oncology specialists can help lower costs by ensuring that patients move immediately to the most effective, outcome-based treatment. Contracting with an exclusive network of oncology Centers of Excellence provides payers access to the top oncology providers. Furthermore, partnering with organizations that can leverage their large scale to negotiate volume discounts with these providers enables additional savings that drive cancer costs even lower.

Bill Audit Systems

Payers should consider putting bill-auditing processes in place to ensure that reimbursement aligns with approved treatments, medical policy and the member's benefit plan. Payers without sufficient in-house auditing capabilities can achieve this check and balance using one of many outside suppliers that offer such services. For additional safeguards, find a supplier that mitigates payer financial exposure by pre-negotiating high-cost treatments with providers on a per-episode basis.

Ongoing Commitment to Continuous Quality Improvement

Payers and members benefit most when cancer care models embrace a disciplined approach to continuous improvement. Collaborating with business groups, the NCCN and oncology experts represent other effective avenues for examining health care issues, trends and new cancer care protocols that can enhance best practices. As a best practice, Optum continually reviews and launches new services — such as genetic counseling education and support services for cancer survivors — as they become available. Partnering with an organization that invests in such improvements can further lower costs and improve outcomes.

Positive Outcomes From the Optum Care Model

Optum has developed a comprehensive care model based on the best-practice principles described here. Clients can expect to realize savings from the increased use of evidence-based treatment plans and comprehensive patient support from an oncology-specific team, which provides value to patients, providers and payers.

- A claims study¹¹ showed a reduction in cancer-related medical costs of \$7,000 per participant per year for surviving patients during the study period. Savings came primarily from lower inpatient hospital admissions and chemotherapy savings.
- Savings per patient per month were \$12,000 in the last three months of life for non-survivors.

These results translate to approximately **\$2.00–\$6.00 PMPM** depending on the type of membership and annual cancer incidence rate.¹¹

In addition, for payers with longer-term general case management programs, a cancer-specific case management service provides additional savings over general case management programs.

- Cancer-specific case management services provide average annual savings of \$29,000 per year per cancer patient over those cancer patients in a general-condition long-term case management program.¹¹

Additional savings can be accrued through strong facility contracts and provider decision support tools that support the use of evidence-based treatment plans.

Each shift of outpatient chemotherapy from an outpatient facility to a physician's office saves an average of **\$619**. A 10% shift yields estimated savings of **\$0.41 pmpm**.¹¹

A national employer with 167,000 members saw a **2.4 to 1 ROI** in 2010, through specialized cancer case management.¹¹

A 200,000-member health plan saved **\$1.03 MILLION** through increased utilization of hospice, reduction in complication-related admissions, and Centers of Excellence contract savings.¹¹

Contact Optum to learn more about a value study of 1.2 million claims showing **10%–20% SAVINGS** for program participants over non-participants.

Call **1-866-427-6845** or email us at **engage@optum.com**

Conclusion

Evidence-based care and integrated case management provide proven opportunities for payers and employers to reduce financial risk, improve outcomes and enhance quality of life for cancer patients. The Optum care management model has delivered proven savings by combining these best practices with its specialized cancer experience, information tools and relationships with Centers of Excellence networks.

About Optum

Optum is a health services company with more than 35,000 people dedicated to making the health system work better for everyone. Our solutions and services are used at nearly every point in the health care system, from provider selection to diagnosis and treatment, and from network management, administration and payments to the innovation of better medications, therapies and procedures.

Our clients and partners include those who promote wellness, treat patients, pay for care, conduct research and develop, manage and deliver medications. With them, Optum is helping to improve the delivery, quality and cost effectiveness of health care.

¹American Cancer Society, Cancer Facts and Figures, 2013

²Mariotto, *Journal of the National Cancer Institute*, 2011.

³American Cancer Society, March 21, 2012.

⁴Smith BD, Smith GL, Hurria A, Hortobagyi GN, Buchholz TA. Future of cancer incidence in the United States: Burdens upon a changing, aging nation. *Journal of Clinical Oncology*, June 10, 2009.

⁵Centers for Disease Control and Prevention, Press Release, March 10, 2011.

⁶U.S. Census Bureau.

⁷Optum, Patient Condition Report, 2010.

⁸American Cancer Society, Cancer Treatment & Survivorship Facts & Figures, 2012–2013.

⁹Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report 2007, March 11, 2011.

¹⁰Mathews, AW, Same doctor visit, double the cost, *Wall Street Journal*. August 27, 2012

¹¹Optum internal analytics, 2011.

¹²Harlan et al, Insurance status and the use of guideline therapy in the treatment of selected cancers. *Journal of Clinical Oncology*. 2005; 23:9079-9088.

¹³Dilts, DM. Practice Variation: The achilles heel in quality cancer care. 2005; *Journal of Clinical Oncology* 23:55881-82.

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