

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. In the United States, medical expenditures of cancer are expected to increase 27 percent from 2010 to 2020.²

More than 1.6 million new cancer cases are expected to be diagnosed in the United States in 2015. The lifetime risk of developing cancer is higher in men (slightly less than one in two) than for women (a little more than one in three).¹

Cancer survivorship continues to increase, thanks to consistent advances in prevention, screening and treatment. Today, 64 percent of people with cancer were diagnosed five or more years ago and 15 percent were diagnosed 20 or more years ago.³

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. During the same time period, those age 65 and older are projected to increase more than 112 percent and those age 45 to 64 are projected to increase just under 20 percent.⁴ Cancer most commonly develops in older people; 78 percent of all cancer diagnoses are in people 55 years of age or older. People who smoke, eat an unhealthy diet, or are physically inactive also have a higher risk of cancer.¹

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 costs of diagnostic imaging have increased more than the overall costs of cancer care.⁷

More than 1.6 million new cancer cases were diagnosed in the United States in 2015.¹

Cancer caused an estimated **589,000 DEATHS** in 2015.¹

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 14.5 million Americans with a history of are alive today, and an estimated 19 million will be alive by 2014.⁵ 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. A cancer survivor's medical costs are on average two times more than someone who has never had a cancer diagnosis.¹⁰

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.⁶

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 incent 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.^{8,9}

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.

There are **14.5 MILLION** cancer survivors alive today in the United States alone. An estimated **19 million** cancer survivors are expected to be living in the United States in 2024.⁵

25% of chemotherapy events do not meet NCCN guidelines; each event costs an estimated **\$19,000**.⁷

Evidence-based chemotherapy can result in estimated savings of **\$0.42 pmpm**.⁷

Based on a commercial population of 1 million lives with average prevalence of 0.41%.

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 2,400 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.⁷

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.⁷

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 study 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 **\$1.00–\$6.00 PM** depending on the type of membership and annual cancer incidence rate.⁷

- 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.⁷

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**.⁷

A national employer with 167,000 members saw a **2.4 to 1 ROI** in 2010, through specialized cancer case management.⁷

A 200,000 member health plan saved **\$1.03 MILLION** through increased utilization of hospice, reduction in complication-related admits, and Centers of Excellence contract savings.⁷

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 e-mail 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.

Optum is a leading health services and innovation company dedicated to helping make the health system work better for everyone. With more than 94,000 people worldwide, Optum combines technology, data and expertise to improve the delivery, quality and efficiency of health care. Optum uniquely collaborates with all participants in health care, connecting them with a shared focus on creating a healthier world. Hospitals, doctors, pharmacies, employers, health plans, government agencies and life sciences companies rely on Optum services and solutions to solve their most complex challenges and meet the growing needs of the people and communities they serve.

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