



# Helsinn Cancer Call to Action

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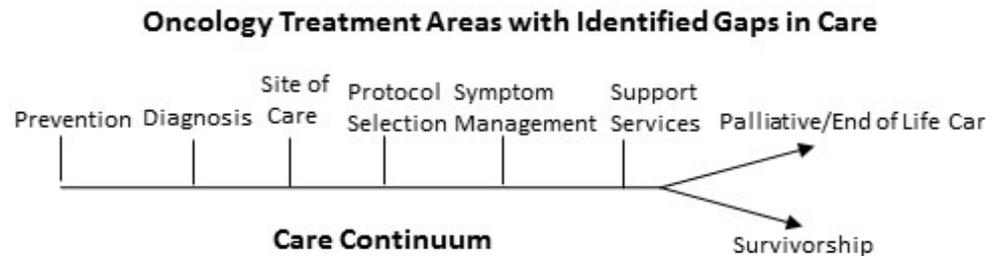
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## Welcome to the Helsinn Cancer Call to Action

The *Helsinn Cancer Call to Action* is a collaboration between Helsinn and the Hospital Quality Foundation's Employer Provider Interface Council (EPIC). EPIC unites leading medical practitioners, employers, benefit managers, and healthcare economists around current topics of concern in the management of serious, complex, or chronic diseases. This inaugural newsletter reflects the discussions at an EPIC Cancer Summit that met March 13, 2018 in Philadelphia, PA, to develop a core foundation for a novel source of multidisciplinary information. The result of this summit is the creation of a series of reports that will assist real world decision makers evaluating gaps and innovations in oncology patient care.

Each edition of The *Helsinn Cancer Call to Action* report will focus on one step in the care continuum, from prevention through diagnosis and treatment to end-of-life care or survivorship.



Each report will be driven by the EPIC Editorial Board and will highlight how economic metrics and patient outcomes are, or could be positively impacted by a cross-functional, total cost-of-care approach. Issues will be addressed from multiple perspectives, and include case studies, literature and key conference reviews. The goal of each newsletter is to deliver timely, actionable changes, and Calls to Action.

## In This Issue:

This inaugural issue of the *Helsinn Cancer Call to Action* reflects the discussions held at the first EPIC Cancer Summit and editorial board meeting, which focused on the current gaps in providing appropriately comprehensive symptom management in cancer care. After careful consideration of the identified gaps, the editorial board felt that symptom management represented an area with a high potential for impact. Pain, fever, nausea, vomiting, and fatigue are examples of symptoms that can be debilitating to patients and drive up medical costs; yet, many symptoms can be effectively managed with proactive care. The *Helsinn Cancer Call to Action* takes an action-oriented approach, emphasizing

Patients also need to be a part of the decision-making process. Playing an active role provides a sense of empowerment and control that cancer takes away, and it leads to improved self-management and symptoms control, which can help drive improved economic value. This is a clear example of how better preventative treatment is also less expensive as a total cost of care.

ways that employers and providers can work to change healthcare delivery in order to improve clinical outcomes.

This issue contains:

- Background information on the medical and economic burden of cancer symptoms, identifying current gaps in care
- A case study that illustrates key symptom management issues, followed by a discussion between an employer benefits manager and a provider.
- Calls to Action – the primary focus of this issue is identifying specific policy changes in three areas that, in the opinion of the EPIC Cancer Summit and editorial board, will provide measurable improvements in delivering value care to patients with cancer.
  1. Adopting new metrics for evaluating symptom management
  2. Promoting the use of patient care coordinators and patient-centered oncology medical homes
  3. Exploring alternative payment methods

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## Gaps in Care: Symptom Management



Pain, nausea, vomiting, anemia, bone loss, and risk of neutropenic infection are all common adverse events associated with either cancer treatment or cancer progression. Elderly patients and patients with multiple comorbidities are especially likely to develop adverse reactions. Symptoms pose significant risk to patients' health and strongly impact quality of life. However, with proper proactive management, the incidence of preventable symptoms can be sharply reduced. The EPIC Cancer Summit discussed current barriers to effective symptom management, its impact on patients, providers, and employers, and actions that can be taken to help address this issue.

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## Symptom Management

Optimizing value-based quality cancer care involves more than treating the cancer itself. It must address the symptoms that develop either as a complication of cancer treatment or as a result of disease progression.

Cancer symptoms can be distressing in themselves and may severely impact the patient's quality of life (QoL). Furthermore, they greatly increase the cost of medical care and can negatively affect treatment outcomes. Pain, dehydration, fatigue, nausea/vomiting, and fever are common reasons for patients undergoing cancer treatment to report to the emergency department (ED) and may lead to rehospitalization. A retrospective study found that cancer patients receiving chemotherapy averaged 0.93 ED visits/patient in the first year, with an average cost of \$800/visit. (Fitch 2010 Table 1) A retrospective study of Medicare and Medicaid patients discharged from a comprehensive cancer hospital found that 11% were readmitted within 30 days of discharge, and 21% of those patients were readmitted for potentially preventable causes such as

suboptimal symptom management, poor discharge planning, or medication errors. (Saunders 2015 pe178A) Another retrospective study of patients receiving cancer treatment at a network of 235 hospitals found that the most common reasons for hospital readmission during the first 30 days were infection, nausea/vomiting/dehydration, pain, and thromboembolism. (Brown 2014 p5A).

Symptoms have indirect burdens, as well. Problems that cause patients to delay or discontinue treatment may have significant impacts on disease progression. Poor symptom management also results in lost workplace productivity, a major source of the indirect cost of cancer. Improved symptom management for cancer patients is an achievable goal.

Proactive management and clear communication with patients regarding what to expect are critical. (Riley 2015) Proactive management must include the patient, family, and clinicians. For many symptoms, screening for high-risk patients and providing prophylactic therapy needs to become a routine part of clinical care. For example, all patients receiving opioid therapy for pain should be considered for constipation prophylaxis and nausea management.

Clinicians also must consider a patient's comorbidities and concerns for polypharmacy when selecting optimal therapy. Close monitoring helps clinical staff identify symptoms early, and common symptoms such as pain, insomnia, fatigue, nausea, anorexia, mouth sores, skin rashes, hand and foot syndrome and peripheral neuropathy can be prevented or minimized if there is a proactive plan. These should be assessed at every clinical visit.

Patient education, both written and verbal, is an essential part of proactive management. – patients need to know what to expect from both treatment and disease progression, preventive measures they can take, and when to call the triage line as symptoms develop. Patients also need to be a part of the decision-making process. Playing an active role provides a sense of empowerment and control that cancer takes away, and it leads to improved self-management and symptoms control, [which can help drive improved economic value](#). Building a trusting relationship, along with open communication and the ability to receive immediate counseling, are key steps in keeping patients out of the ED.

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## Case Example: Breast Cancer



The patient was a 46-year-old female office worker at a large corporation, with a family history of breast cancer. At an annual exam, her gynecologist discovered a mass suspicious for carcinoma in the left breast, and she was referred for a mammogram and biopsy. These studies identified the tumor as a Grade 2B adenocarcinoma, HER2 positive and estrogen receptor positive (ERP). Two out of 15 sentinel nodes were positive, with no other local or distant metastases. She underwent a bilateral modified radical mastectomy, followed by chemotherapy with trastuzumab, radiation therapy, and hormone therapy.

A week after her first chemotherapy treatment, the patient experienced diarrhea, resulting in dehydration. She reported to the ED with symptoms of fatigue, lack of appetite, confusion, and headache. She received

intravenous fluids and was discharged with instructions on how to maintain hydration at home and adjust her diet to reduce the diarrhea.

Several weeks later, 6 days after a chemotherapy treatment, the patient returned to the ED with a fever of 39°C that had persisted for several hours. Blood work indicated a neutrophil count of 600/ $\mu$ l; blood cultures were ultimately negative and empiric antibiotic therapy was terminated. Fortunately, the patient received treatment more than two weeks before her next scheduled chemotherapy appointment, and her neutrophil levels were high enough then that she did not need to delay it.

Patient completed therapy with complete response and was placed on aromatase inhibitor therapy for the next 5 years to decrease risk of recurrence. The patient was given a follow up plan of care for survivorship with follow up visit schedule and education regarding diet, exercise, prevention screening, long and short term side effects and recurrence.

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## What are the costs: Who pays?

The treatment in this patient's case involved direct medical and pharmacy costs, as well as indirect costs such as lost productivity, lost income, and the cost of support services provided by her company's benefits plan, such as nutritional and care navigation. For the patient, the primary financial cost was her out-of-pocket copay, to the limit of her plan. She missed periodic days of work during her treatment periods, exceeding her annual limit of paid sick days. Therefore, for the remaining days, she will have lost income, as determined by the difference between her salary and disability payments. Her spouse could also sustain days of unpaid leave to provide care.

The medical plan paid remaining costs for the mastectomy, chemotherapy, and radiation therapy. A retrospective claims benefits analysis found that the average medical costs for Stages I or II breast cancer the first year after diagnosis to be \$84,121. [Blumfen 2016] Since our patient had a bilateral modified radical mastectomy, followed by chemotherapy and radiation, her costs are above that average. In addition, the pharmacy benefit plan will pay for 5 years of tamoxifen, at an annual out-of-pocket cost based on her benefit plan. Both medical and pharmacy plans will also pay for additional management of any symptoms that arise during the course of treatment. The major indirect costs to the employer result from lost productivity – both absenteeism and presenteeism.

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## Discussion

### What do you think?

#### ***A conversation between a provider and employer benefits manager.***

**Provider:** Breast cancer is one of the most common forms of cancer and the second leading cause of cancer death in women. [ACR 3] Fortunately, due to the combined impact of frequent screening and better treatment options, survival rates have increased remarkably over the past few decades. For women like our patient, whose breast cancer is diagnosed while it is still regionally localized, five-year survival rates during the period 2004-2011 averaged 84.9%. [Blumfen 23B] And, indeed, her five-year survivorship indicates that she benefited from the combination of early detection, thorough routine screening, and selection of an

appropriate treatment regimen. However, the fact that she had two unscheduled ED visits during the first month after surgery indicates that her treatment plan may not have incorporated best practices in symptom prevention or management.

Dehydration is frequently a consequence of vomiting or diarrhea, both of which are common treatment side effects. Fortunately, if they have close communication with the clinical staff, patients can manage diarrhea at home, before dehydration becomes severe. Patients need detailed instructions on what to eat and drink, and how much to drink. They may also need medication to help control the diarrhea, if dietary change is not enough. Patients and their caregivers also need education regarding the symptoms of dehydration, so that they can contact the clinical staff during the early stages. Although patients generally receive information about dehydration at discharge, there is so much presented at once that it is overwhelming. Ideally, a patient care coordinator should contact the patient 24 hrs and 72 hrs after the first chemotherapy treatment, to discuss any symptoms that have developed.

**Employer:** This is a clear example of how better preventative treatment is also less expensive as a total cost of care. If the patient had been more closely monitored, and she knew how to manage her diarrhea and how to recognize the early symptoms of dehydration, then she would not have needed ED visit with its associated cost.

**Provider:** Yes. And managing symptoms proactively has other important clinical benefits. Patients may delay or discontinue treatment as a result of severe adverse reactions, leading to a reduced chance of survival.

**Employer:** Now let's discuss her second serious symptom – the fever. The patient developed fever 6 days after a chemotherapy treatment, and, as she had been directed, went to her local ED for immediate care.

**Provider:** Febrile neutropenia (FN) occurs in nearly 1% of chemotherapy patients. It is a major source of morbidity and mortality. Major complications, such as renal, respiratory, or heart failure, occur in 25-30% of patients, requiring hospitalization. The estimates for mortality rates of hospitalized patients range from 6.8-20%. The treatment for febrile neutropenia is expensive, as well. The average hospitalization costs for patients with FN are \$15,000-\$23,000. FN may also interfere with a patient's chemotherapy protocol, with sessions postponed or cancelled, putting the patient at additional risk of dying. [Klastersky v111A; Lyman 5555A,B; Shilling 863AB, Taplitz 1A]

**Employer:** An important question for patients who develop FN is should they be hospitalized or receive outpatient care?

**Provider:** In general, hospitalizations are associated with increased direct and indirect costs, risk of hospital-based infections, and decreased quality of life. Fortunately, studies have shown that low-risk patients with FN can be treated successfully on an outpatient basis. To be a candidate for outpatient management, patients must be free of major medical comorbidities, live within an hour's travel time from the treatment center, and have a caregiver at home and telephone access round the clock. Outpatient care is not recommended for patients infected with drug-resistant bacterial strains. [Taplitz 1A,7A]

**Employer:** Preventing the development of FN in the first place is of critical importance from both a clinical and an economic standpoint. Shouldn't patients undergoing chemotherapy follow basic hygiene strategies to reduce their risk of acquiring infections?

**Provider:** Yes. These include proper hand hygiene, avoiding crowded places, avoiding people with fevers, cold, or flu, regular bathing and teeth brushing, avoiding certain foods and high risk activities, and clean skin cuts or scrapes immediately. [ACR 2015]. Antimicrobial prophylaxis is associated with high rates of resistance; therefore, it is recommended only for high-risk patients who would be expected to have FN that lasts more than 7 days, such as patients with hematologic malignancies or allogeneic stem cell transplantation. [Freifeld ]

**Employer:** Another strategy seen more commonly now for FN prophylaxis is the use of a granulocyte colony-stimulating factor (G-CSF), such as filgrastim or pegfilgrastim. Are they effective medications either in patients with neutropenia, or, for high-risk patients, to prevent the development of FN following chemotherapy? I've seen that they are not used prophylactically for all patients, due to cost and risk of side effects.

**Provider:** Right, prophylactic use of G-CSF is a key aspect of neutropenia management in high risk patients. Since guidelines recommend G-CSF prophylaxis in patients with a high risk (>20%) of developing FN, it is important for clinicians to be able to estimate this risk accurately. Certain chemotherapy treatments are associated with a greater risk of FN, and patients receiving those treatments are automatically candidates for G-CSF prophylaxis. For other patients, although their chemotherapy regimen may only pose an intermediate risk, they may possess other risk factors that, combined with the choice of chemotherapy, put them at high risk. These risk factors include: age, certain comorbidities, persistent or prior neutropenia, prior chemotherapy or radiation therapy, and bone marrow involvement by tumor. [Freifeld pe81Ae82a; Klatersky v112B]

One key aspect of G-CSFs is that they must be administered in the right time window during a chemotherapy cycle. Filgrastim is administered as a daily injection or infusion for up to 2 weeks, starting 24 hours after chemotherapy (and at least 24 hours prior to the start of the next cycle). [Neupogen PI]. This means that outpatients should report to the cancer center daily for injections. This protocol greatly impacts compliance. This protocol is much more manageable for patients to follow, although it still requires a next day visit. If the patient finds the next-day visit difficult, there is also an option to have a delivery device taped to the patient's arm or abdomen, which injects the medication the following day.

**Employer:** As we discuss the details of prophylaxis and management for both cancer-related dehydration and neutropenia, I notice certain common threads, and they really get to the heart of what is necessary for optimal symptoms management in cancer care. For the most part, our patient received an appropriate treatment protocol, and she is now a cancer-free, five year survivor. However, she did not receive effective education, counseling, and prophylactic treatment along the way.

**Provider:** I agree. This is the case for management of both the dehydration and the neutropenia. The neutropenia might have been prevented if her doctor had better understood the risk factors and prescribed G-CSF prophylactically for each cycle. Pharmacists also play an important role in managing patients with complex diseases and polypharmacy. The hospital pharmacist should review patient discharges and notice whether patients receiving certain treatment regimens are also prescribed a G-CSF.

In some cases, patients are prescribed a G-CSF but have difficulty making the follow-up appointments. In these cases, the patient should not be discharged until the appointment is made and a care coordinator helps arrange transportation. Managing or preventing dehydration requires

frequent assessment and counseling regarding what to expect and when to contact her provider.

These examples support the key role of a cancer care coordinator, making sure the patient has been educated about and received appropriate treatment or instructions for the symptoms most likely to arise as a result of cancer treatment or disease progression.

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## Call to Action

To achieve better management of symptoms, the EPIC Cancer Summit and editorial board recommends the following three Calls to Action for care delivery and coverage policy changes from a total cost of care multidisciplinary perspective.

**Call to Action #1:** Develop actionable value metrics that incorporate up-to-date clinical data regarding efficacy, safety and patient-reported outcomes, as well as economic information.

- Provide payment incentives for the adoption of ASCO QOPI® quality measures
- Advocate for the inclusion of a core symptoms set in clinical trials.

**Call to Action #2:** Promote the utilization of patient care coordinators and oncology patient-centered medical homes, in order to educate patients, provide patients with evidence-based prophylaxis according to their risk, and counsel patients when symptoms develop.

**Call to Action #3:** Promote alternative payment methods that provide incentives for clinical practices that promote better symptoms management and patient care.

### **Call to Action: Develop Measurable & Actionable Value Care Metrics**

The EPIC Cancer Summit discussed the importance of developing value metrics for cancer treatment. In order to ensure that patients are receiving quality, cost-effective treatment, providers and payers need ways of measuring the quality of cancer care. There is currently a gap in identifying and measuring quality metrics that can be used effectively in clinical practice or by Employers. One reason for this gap is a lack of evidence on which to base the metrics, since clinical trials do not routinely include symptoms assessment. (Reeves 2014 p1A)

A key component to reducing the incidence of disease or treatment-related symptoms is providing outcomes-based quality care. But how should “quality” cancer care be defined? Currently, no universally accepted actionable metrics exist. Furthermore, the answer often varies according to the stakeholder.

- Providers may rate quality by clinical outcomes, or by the extent to which care adheres to clinical guidelines ([process](#)).
- In addition to tracking guidelines compliance, third party payers assess the quality of care based on the cost-effectiveness of the treatment, which is a driving concern for providers and patients.

One set of quality indicators that is currently available are the American Society of Clinical Oncology (ASCO) Quality Oncology Practice Initiative (QOPI®) measures.

- Patients report that in addition to survivorship and financial considerations, they value QoL issues and the ability to which they can maintain a high level of functioning.

This may be reflected in home vs hospital care, limited days missed from work, and optimal management of symptoms such as fatigue, nausea and vomiting, and pain, as well as reduction of infection risk. As we see clearly in our case study, effective symptom prophylaxis and management is essential for improving care, whether viewed from a patient, payer, or provider perspective. (Riley 2014) Nonetheless, viable outcome measure data are limited and, thus, process measures remain dominant.

### ***Outcome-based metrics***

One strategy for developing meaningful metrics is outcomes-based.

- What percent of patients report to the ED during the course of cancer treatment?
- What is the hospital readmission rate within 30 or 90 days of surgery or chemotherapy?

In 2016, the Center for Medicaid and Medicare Services (CMS) adopted two new claims-based outcome metrics that, beginning in 2020, are to be used to evaluate care and determine payment for patients receiving chemotherapy and post-surgical patients. OP-35 assesses the number of ED visits and hospital admissions for patients receiving hospital-based outpatient chemotherapy. It applies to ED visits and hospitalization for potentially preventable complications, including anemia, neutropenia, nausea, dehydration, diarrhea, pneumonia, emesis, fever, sepsis, and pain. OP-36 assesses hospitals based on the frequency of hospitalizations following outpatient surgeries. (CMS 2016 p4A, Battaglia 2018 p4A,5A)

The EPIC Cancer Summit and Editorial board encourages including these or similar outcomes measures in determining provider reimbursement. Outcome-based metrics, however, have certain limitations. Any reimbursement plan tied to outcomes-based metrics must include risk stratification. Otherwise, cancer centers will be considered to provide better care if they accept only low-risk patients. Also, an outcomes based metric may discourage providers from advising patients to seek ED care, even when appropriate. (Battaglia 2018 p4B0 .

### ***Processed-based metrics***

Metrics can also be process-based, rather than outcomes-based, reflecting how closely treatment matches evidence-based guidelines. In addition to treatment regimens, most cancer guidelines provide recommendations for preventing and/or managing common symptoms associated with disease or treatment. Guidelines may also provide recommendations for identifying patients at greatest risk for developing symptoms that may lead to serious medical complications, hospitalizations, or negative QoL. However, few sets of process-based metrics are available, and they are limited to the clinical care of breast, colorectal, and prostate cancers. (Eastman 2017 p36A)

One set of quality indicators that is currently available are the American Society of Clinical Oncology (ASCO) Quality Oncology Practice Initiative (QOPI®) measures. There are over 170 measures, covering a wide range of processes involved in cancer diagnosis and treatment, including symptom management. (ASCO p1AB,2A) The measures are mostly

Several oncology professional societies have developed value frameworks that incorporate direct costs into clinical decision-making.

stratified by cancer type. For example, there are 24 breast cancer measures, covering a wide range of processes, such as taking family history, diagnostic testing, and selecting an appropriate drug regimen. QOPI also provides certification to oncology practices that achieve a performance rating of  $\geq 75\%$  on a set of 26 practice measures. Certification indicates that the practice provides cost-effective, evidence-based care. Currently, third-party payers rarely acknowledge QOPI certification through increased financial payments, unless the employer specifically requests this. The Epic Cancer Summit and editorial board recommends that providers, employers and third party payers use applicable QOPI process measures to evaluate the appropriateness of care whenever possible, and provide financial incentives for practices to achieve QOPI certification.

### ***Cost-effectiveness metrics***

In addition to metrics that evaluate cancer care centers, there is also a need for actionable standardized metrics to measure the cost-effectiveness of different therapeutic options. One metric that would be particularly useful is a way to estimate the indirect costs to the employer of lost productivity. Numerous studies indicate that measures of health related QoL are significantly related to rates of absenteeism and presenteeism. (Bouwman 2014, Merchant 2014) However, no research has been done to develop useful tools that translate QoL or quality-adjusted life year (QALY) scores to a metric that is meaningful to employees.

Several oncology professional societies have developed value frameworks that incorporate direct costs into clinical decision-making. The American Society of Clinical Oncology (ASCO) developed a value framework which calculates net health benefit scores based primarily on efficacy (impact on progression or risk of death) and safety data from clinical trials. When available, data regarding symptom development and QoL are also incorporated into the net health benefit score. The net health benefit scores, along with anticipated costs of treatment, are designed to be used by the patient and provider to discuss the relative value of each option. (Schnipper 2016 p2925A,2926B,2927AB)

The National Comprehensive Cancer Network (NCCN) has developed a different metric for comparing the cost-effectiveness of the various treatment options. For each treatment option discussed in an NCCN guideline, there is an "evidence block" - a graphic that rates each of five different qualities on a scale from 1 to 5. These qualities are efficacy, safety, quality of evidence, consistency of evidence, and affordability. Both providers and patients can quickly scan the graphics to compare the values for different treatments, and select the therapy according to which values are most important to the patient. (NCCN 2016 p1AB)

Both of these value frameworks, and others like them, are important first steps towards providing value metrics that can be easily used in clinical practice. One of the benefits of the NCCN evidence blocks is that it allows for input regarding which qualities the patient values most. However, both value frameworks are fairly limited in the criteria used. The side effect risks and impact on QoL are not incorporated into the NCCN blocks, and they have limited impact on the ASCO net benefit score.

The ASCO task force that developed the framework acknowledged this limitation, attributing it to the lack of QoL and patient-reported symptoms data that is consistently gathered across clinical trials.

The transition to a patient-centered oncology medical home was associated with decreases in post treatment ED visits, hospitalizations, and lengths of stay.

(Schnipper 2016p2926A,2930B) Accordingly, the National Cancer Institute recently recommended the inclusion of assessment for 12 core symptoms for all cancer clinical trials that incorporate patient reported outcomes: fatigue, insomnia, pain, anorexia, dyspnea, cognitive problems (including memory or concentration impairment), anxiety (including worry), nausea, depression, sensory neuropathy, constipation, and diarrhea. (Reeves 2014 p1B,4A)

In addition to calling for the development of standardized [and measurable](#) metrics that can be meaningful, [collectable](#), and actionable, the EPIC Cancer Summit and editorial board also recognize the need for incorporating standardized patient-reported symptom and QoL outcomes in clinical trials. [Utilizing process measures linked to outcomes can move the needle on metrics in the right direction.](#)

### **Call to Action: Oncology Care Coordinators and Oncology Patient-Centered Medical Homes**

Improved symptom management, [typically linked to process measures](#), requires open communication between provider and patient. This can be facilitated by comprehensive, expectant, and repetitive patient education regarding what to expect and when to contact the 24-hour help line. It requires an assessment of the patient's (and caregiver's) health literacy, understanding the patient's values and how treatment is impacting daily activities and QoL. It also involves recognizing patients at greatest risk and preventing symptom development or providing treatment at the early stages of symptom development.

An oncology care coordinator is an oncology nurse specifically assigned to address these needs. In addition to counseling patients and facilitating interactions between patient and provider, the care coordinator is also responsible for maintaining electronic medical records, transferring records to appropriate providers, and maintaining databases for analyzing quality metrics.

Some of the best evidence supporting the effectiveness of oncology patient care coordinators comes from studies of oncology patient-centered medical homes. The concept of medical homes first developed as a way for primary care practices to coordinate care for patients with multiple comorbidities who are seeing multiple specialists. With a focus on the whole patient, a care coordinator works with the specialists and patient to coordinate care, helps the patient prioritize treatments, consults with pharmacists and prescribers regarding polypharmacy, shares electronic health records with the various providers, and counsels the patient regarding health-related QoL issues. Having a care coordinator at a central medical home can provide superior care that focuses on the outcomes of greatest value to the patient. It can also result in cost savings by eliminating duplicate testing and unnecessary treatments, thereby improving the patient's productivity and QoL.

This concept has recently expanded to the development of oncology specific medical homes. Cancer care is sufficiently complex, involving multiple professionals, that care coordination within the oncology team is also beneficial. A cancer care team may include medical, surgical, and radiation oncologists, oncology nurses, social workers, psychiatrists, rehabilitation therapists, nutritionists, home health aides, pharmacists, clergy, and patient care coordinators. (Cancercare 2016)

In addition to patient care coordinators, oncology patient-centered medical homes provide other patient centered support services as well,

Alternative payment strategies for cancer care can be a powerful mechanism for change, providing incentives for the adoption of best practices that improve patient care and decrease costs.

such as extended evening and weekend hours. This allows for convenient, onsite hydration, antibiotic infusions, and other forms of symptom management. The care coordination and features such as extended hours are designed to improve proactive symptom management and reduce the need for ED visits. The first oncology medical home certified by the National Commission on Quality Assurance was established in 2010. Since then, studies of nine different practices have found that they do achieve (Page pe85A; Patel 2015 p391AB)

### **Call to Action: Alternative Payment Methods**

The final topic addressed by the EPIC Cancer Summit and editorial board is exploring alternative payment strategies that provide financial incentives for optimal symptom management. Proactive management and extensive patient education and counseling are fundamental to managing the symptoms of cancer and cancer treatment, but these costs are not accounted for in a traditional fee-for-service system. Payers also rarely cover certain nonpharmaceutical treatments, such as nutritional supplements, although weight loss is associated with increased hospitalizations and poorer treatment prognosis.

Alternative payment strategies for cancer care can be a powerful mechanism for change, providing incentives for the adoption of best practices that improve patient care and decrease costs. Currently, some of the major drivers in this area are government-provided healthcare plans. In January 2015, the Department of Health and Human Services (HHS) announced a goal of tying 30% of Medicare payments to quality or value through alternative payment methods (APMs). One component of the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) will establish a merit-based incentive payment system, to be fully implemented by 2019. Practices must demonstrate they have met certain best practices criteria and payment restructuring to be eligible for incentive payments, or they can adopt one of several approved APMs. By promoting the development of APMs, the impact of MACRA may extend beyond cost savings for Medicare, but alter the payer environment in the private sector, as well. (Wen 2018 pe94AB)

Alternatives to the traditional fee-for-service models take many different forms. A clinical pathways model retains the basic fee-for-service structure, but provides financial incentives for following evidence-based protocols. An accountable care organization (ACO) is a network of doctors, hospitals, and other healthcare providers who, if they keep costs down while meeting quality benchmarks, share in some of the Medicare savings. With bundled payment plans, providers receive one set fee per patient at the onset of treatment, providing a strong incentive to prevent any readmissions or emergency department care due to poorly managed symptoms. Preliminary evidence indicates that each one may be effective in reducing overall costs of cancer care. (Wen 2018 pe97A)

As described earlier, oncology patient-centered medical homes, with their emphasis on care coordination and round-the-clock access to clinical staff, are particularly well designed for optimizing symptom management in cancer care. Yet, this model requires reimbursement from the payer for the infrastructure that make this strategy cost-effective overall: care coordinators, 24-hour hotlines, additional patient counseling, and electronic health records. Typical reimbursements are \$200-\$250/patient. (Patel 2015 p391A)

## Conclusions

Tremendous clinical advances have been made in cancer care over the past several decades. Since the mid-1970s, the overall 5-year survival rate for all cancers has increased 20% absolute, from 49% to 69%. (ACR 2018 p18Table7) Quality care, however, is not only defined by survival rates. Patients value maximizing quality of life and minimizing negative symptoms. All stakeholders value delivering quality care in a [direct](#) cost-effective manner, and reducing the indirect costs of cancer care by improving employee/patient well-being and productivity. It is with this goal in mind that the EPIC Cancer Summit and Editorial board developed three Calls to Action:

1. Promoting value metrics to assess the quality of cancer care. These include process-to-outcomes-based, performance-based, and cost-effectiveness metrics. In addition to promoting the use of existing value metrics, the EPIC board also promotes advocating for the routine inclusion of patient-reported symptom and QoL outcomes in clinical trials, to aid in developing improved metrics in the future.
2. Promoting the use of patient oncology care coordinators and oncology medical homes. These are critical for effective symptoms management, because clear provider-patient communication and proactive management have been shown to decrease symptoms-related ED visits and hospitalizations.
3. Explore alternative payment strategies that promote best practices.

These are designed to improve the delivery of value cancer care, benefitting all stakeholders.



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