

## Background

Chemotherapy and radiation to treat cancer can cause a wide variety of side effects from hair loss to pain, nausea, and a decrease in white blood cells leading to infections.<sup>1</sup> Patients frequently seek treatment through the emergency department, indicating an opportunity for better symptom management throughout the disease course through outpatient oncology and primary care and also during and after the emergency department visit.<sup>2</sup>

## Recommendation Framework

The workgroup's goal is to reduce potentially avoidable emergency department visits and therefore improve patient experience and care outcomes for patients undergoing cancer treatment.

- Assessment including of patient satisfaction with oncology care
- Risk stratification mechanisms to better meet patient need(s)
- Wrap-around supportive services through interdisciplinary team-based care
- Assessing and addressing caregiver need(s)
- Integrating palliative care alongside life-prolonging and/or curative care
- Addressing health disparities in appropriateness of health services utilization during oncology care

### *Examples from Shared Decision Making Report*

#### *Patients and Family Members*

- Think about your broad health and wellness-related goals (e.g., being able to attend an upcoming family wedding).
- Where different options are available, like the areas noted in this document, give your provider(s) information about your values and preferences and discuss options, tradeoffs, and implications of a decision together.
- Ask about whether a patient decision aid is available.
- Ask your care provider about the test or treatment options available, including the option of “doing nothing” or “watchful waiting.”

#### *Health Care Delivery Organizations and Systems*

##### *Providers*

- Participate in skills training. Shared decision making is a learned skill-set that is supported by patient decision aids.

##### *Health Plans and/or Professional Liability Carriers*

- Incorporate shared decision making requirements as standards for value-based models (e.g., Centers of Excellence).

##### *Employers*

- Incorporate shared decision making requirements as standards for value-based contracting (e.g., Centers of Excellence, Accountable Care Organizations).
- Talk to your health plan about the importance of shared decision making and how to report on use of shared decision making including how to ensure appropriate reimbursement.

##### *Washington State Health Care Authority*

- Encourage the patient decision aid developer community to develop patient decision aids for the ten priority areas publicly available at no cost.

## ***Examples from Shared Decision Making Report***

Options for tracking shared decision making are below including those aligning with value-based reimbursement models from the Bree Collaborative and Federal programs:

- **Shared Decision Making Process**

Steward: Massachusetts General Hospital

NQF #2962

*This measure assesses the extent to which health care providers actually involve patients in a decision-making process when there is more than one reasonable option. This proposal is to focus on patients who have undergone any one of seven common, important surgical procedures: total replacement of the knee or hip, lower back surgery for spinal stenosis of herniated disc, radical prostatectomy for prostate cancer, mastectomy for early stage breast cancer or percutaneous coronary intervention (PCI) for stable angina. Patients answer four questions (scored 0 to 4) about their interactions with providers about the decision to have the procedure, and the measure of the extent to which a provider or provider group is practicing shared decision making for a particular procedure is the average score from their responding patients who had the procedure.*

- **Informed, Patient-Centered Hip and Knee Replacement Surgery**

NQF #2958

Steward: Massachusetts General Hospital

*The measure is derived from patient responses to the Hip or Knee Decision Quality Instruments. Participants who have a passing knowledge score (60% or higher) and a clear preference for surgery are considered to have met the criteria for an informed, patient-centered decision. The target population is adult patients who had a primary hip or knee replacement surgery for treatment of hip or knee osteoarthritis.*

## Appendix C: Guideline and Systematic Review Search Results

	Year	Title	Summary
AHRQ: Research Findings and Reports	2017	<a href="#">Assessment Tools for Palliative Care</a>	We identified more than 150 assessment tools addressing most domains of palliative care, but few tools addressed the spiritual, structure and process, ethical and legal, or cultural domains, or the patient-reported experience subdomain. While some data on the psychometric properties of tools exist, the responsiveness of different tools to change has largely not been evaluated. Future research should focus on: (1) developing or testing tools in palliative care populations for domains with few or no tools, (2) evaluating responsiveness of tools for all domains, and (3) further studying the use of palliative care tools in clinical care and as quality indicators.
	2012	<a href="#">Closing the Quality Gap Series: Improving Health Care and Palliative Care for Advanced and Serious Illness</a>	We found that evidence was strongest (moderate strength of evidence) for interventions for pain, and for the targets of communication and decision making and continuity for selected outcomes. While a few high- and medium-quality, well-designed health care and palliative care interventions have been conducted to improve outcomes for patients with advanced and serious illness, this report highlights the continued presence of variable findings, quality deficiencies, vaguely defined interventions, and variable outcome measurement tools and reporting in much of this intervention literature. The evidence has a number of gaps, including few studies in the hospice setting or pediatrics.
	2010	<a href="#">A Review of Quality of Care Evaluation for the Palliation of Dyspnea</a>	Systematic reviews identified only 3 existing quality measurement sets that included quality measures for dyspnea care. The existing dyspnea quality measures reported by retrospective evaluations of care assess only 4 aspects: dyspnea assessment within 48 hours of hospital admission, use of objective scales to rate dyspnea severity, identification of management plans, and evidence of dyspnea reduction...The panel recommended that dyspnea assessment should include a measure of intensity and some inquiry into the associated bother or distress experienced by the patient. A simple question into the presence or absence of dyspnea would be unlikely to help guide therapy, as complete relief of dyspnea in advanced disease would not be anticipated.
	2010	<a href="#">A Framework for Assessing Quality Indicators for Cancer Care at the End-of-Life</a>	The framework describes five steps for developing and assessing a quality indicator for end-of-life care, defining the (1) population of focus; (2) broad quality domains; (3) specific target areas; (4) steps of the care process; and (5) evaluation criteria for quality indicators. The defined population includes seriously or terminally ill cancer patients, who are unlikely to recover or stabilize, and their families. Domains include the structure and processes of care; physical, psychiatric, psychosocial, spiritual, and cultural aspects of care; as well as the care of the imminently dying, ethical legal issues, and the delivery of care. Evaluation criteria include importance; scientific acceptability, including validity, evidence to improve outcomes, reliability, responsiveness, and variability; usability; and feasibility, including ready data sources.
	2010	<a href="#">Cancer Quality-ASSIST Supportive Oncology Quality Indicator Set:</a>	We successfully evaluated 78 indicators across the domains; results were similar in the two settings. We could not feasibly evaluate 3 indicators because of low prevalence; 22 indicators had significant interrater reliability issues, 9 had significant validity issues, and 3 had both reliability and validity issues, leaving a set of

	<a href="#">Feasibility, Reliability, and Validity Testing</a>	41 indicators most promising for further testing and use in this population, with an overall kappa score of 0.85 for specified care.
2019	<a href="#">Psychosocial interventions for informal caregivers of people living with cancer</a>	Psychosocial interventions do not impact to a clinically meaningful degree outcomes for caregivers irrespective of patient cancer stage or type. Perhaps, other outcomes (e.g. relationship quality) or other psychosocial interventions (e.g. meditation) may be more helpful for caregivers. Interventions should be subjected to better conducted trials. Intervention development should involve caregivers and pay particular attention to individual personal needs.
2017	<a href="#">Early palliative care for adults with advanced cancer</a>	This systematic review of a small number of trials indicates that early palliative care interventions may have more beneficial effects on quality of life and symptom intensity among patients with advanced cancer than among those given usual/standard cancer care alone. Although we found only small effect sizes, these may be clinically relevant at an advanced disease stage with limited prognosis, at which time further decline in quality of life is very common. At this point, effects on mortality and depression are uncertain. We have to interpret current results with caution owing to very low to low certainty of current evidence and between-study differences regarding participant populations, interventions, and methods. Additional research now under way will present a clearer picture of the effect and specific indication of early palliative care. Upcoming results from several ongoing studies (N = 20) and studies awaiting assessment (N = 10) may increase the certainty of study results and may lead to improved decision making. In perspective, early palliative care is a newly emerging field, and well-conducted studies are needed to explicitly describe the components of early palliative care and control treatments, after blinding of participants and outcome assessors, and to report on possible adverse events.
2017	<a href="#">Psychosocial interventions for fatigue during cancer treatment with palliative intent</a>	We found little evidence around the benefits of psychosocial interventions provided to reduce fatigue in adult patients with incurable cancer receiving cancer treatment with palliative intent. Additional studies with larger samples are required to assess whether psychosocial interventions are beneficial for addressing fatigue in patients with incurable cancer.
2016	<a href="#">Educational interventions for the management of cancer-related fatigue in adults</a>	The review found that education may have a small effect on reducing the intensity of fatigue, its interference in daily activities or relationships, and general (overall) fatigue. It could have a moderate effect on reducing distress from fatigue amongst people with non-advanced cancer. There may also be beneficial effects on anxiety and overall quality of life, although it is unclear whether it reduces depression. It is unknown if this result might differ between types of cancer treatment or if the education is provided during or after cancer treatment. Not enough is known about the type of education that is most effective, when it is best provided, or whether it is effective for people with advanced cancer.
2015	<a href="#">Interventions to enhance return-to-work for cancer patients</a>	Results suggest that multidisciplinary interventions involving physical, psycho-educational and/or vocational components led to more cancer patients returning to work than when they received care as usual. Quality of life was similar. When studies compared psycho-educational, physical and medical interventions with care as usual they found that similar numbers of people returned to work in all groups.

<p>Health Technology Assessment Program</p>	<p>2013</p> <p><a href="#">Effectiveness and cost-effectiveness of home palliative care services for adults with advanced illness and their caregivers</a></p>	<p>The results provide clear and reliable evidence that home palliative care increases the chance of dying at home and reduces symptom burden in particular for patients with cancer, without impacting on caregiver grief. This justifies providing home palliative care for patients who wish to die at home. More work is needed to study cost-effectiveness especially for people with non-malignant conditions, assessing place of death and appropriate outcomes that are sensitive to change and valid in these populations, and to compare different models of home palliative care, in powered studies.</p>
	<p>2011</p> <p><a href="#">Interventions for improving palliative care for older people living in nursing care homes</a></p>	<p>We found few studies, and all were in the USA. Although the results are potentially promising, high quality trials of palliative care service delivery interventions which assess outcomes for residents are needed, particularly outside the USA. These should focus on measuring standard outcomes, assessing cost-effectiveness, and reducing bias.</p>
	<p>2011</p> <p><a href="#">Non-invasive interventions for improving well-being and quality of life in patients with lung cancer</a></p>	<p>Nurse follow-up programmes and interventions to manage breathlessness may produce beneficial effects. Counselling may help patients cope more effectively with emotional symptoms, but the evidence is not conclusive. Other psychotherapeutic, psychosocial and educational interventions can play some role in improving patients' quality of life. Exercise programmes and nutritional interventions have not shown relevant and lasting improvements of quality of life. Reflexology may have some beneficial effects in the short term.</p>
<p>None</p>		
<p>Centers for Disease Control and Prevention</p>	<p>Nothing specific, 2016 Opioid Prescribing Guidelines for Chronic Pain</p>	
<p>Institute for Clinical and Economic Review</p>	<p><u>2016</u></p> <p><a href="#">Palliative Care in the Outpatient Setting</a></p>	<p>Overall, the evidence describing outpatient palliative care's benefit is stronger for QoL, resource utilization outcomes, patient satisfaction, and mood outcomes, with more limited evidence suggesting benefits on survival, symptom burden, psychosocial, and caregiver outcomes. These observations are consistent with the fact that outpatient palliative care programs are designed to increase patient social support, patient self-advocacy, and coordinated medical care; while palliative care is not focused on improved survival as an indicator of effectiveness, the survival benefit may be mediated by the other more directly influenced outcomes of interest (e.g., mood, QoL).</p>

2017

[Integrated  
Outpatient  
Palliative Care in  
Oncology](#)

With the increase in availability of clinical palliative care services, organizations have tested and implemented varying degrees and types of integration with oncology care. These can be evaluated using common instruments, like the Integrated Practice Assessment Tool based on the health care integration framework by Heath et al. Adapted from this framework, levels of integration across palliative care and oncology have recently been proposed in the Collaborative Care Continuum framework by Kaufmann et al. In addition to levels of integration, leaders have described various methods of integration of services, including co-rounding models for hospitalized patients, embedded or co-located outpatient clinical services, and standalone clinics or services. Further, organizations have had positive experiences with integrated services limited to particular disease or conditions, types of therapy (eg, investigational agents or novel immunotherapy drugs), or by embedding palliative care experts into non-patient-facing case discussions such as multidisciplinary oncology team meetings (“tumor boards”). In addition to other types of integration, much focus has been on the outpatient setting, which is where the majority of cancer care is delivered. For palliative care, the outpatient realm has been considered the “next frontier” of community-based palliative care services, and although growth is robust, many communities do not have access to non-hospital services.

2013

[Effectiveness of  
Family and  
Caregiver  
Interventions on  
Patient Outcomes  
among Adults with  
Cancer or Memory-  
Related Disorders](#)

All included studies were RCTs, with the majority being fair or poor methodological quality (9 good, 32 fair, 15 poor). Most studies reported multiple outcomes, though few reported data on most of our outcomes. The duration of the intervention and follow up periods varied. Many studies reported a large number of comparisons, including findings from multiple subscales, few of which showed significant differences between treatment groups. Some of the significant intervention effects were found in single trials, subscales from larger quality of life, depression, or symptom indices, and may be due to chance or reporting bias. The reproducibility and broader applicability should be viewed with caution.

2018

[Clinical Practice  
Guidelines for  
Quality Palliative  
Care, 4th edition](#)

The NCP Guidelines, 4th edition, are organized into 8 domains:

Domain 1: Structure and Processes of Care The composition of an interdisciplinary team is outlined, including the professional qualifications, education, training, and support needed to deliver optimal patient- and family-centered care. Domain 1 also defines the elements of the palliative care assessment and care plan, as well as systems and processes specific to palliative care.

Domain 2: Physical Aspects of Care The palliative care assessment, care planning, and treatment of physical symptoms are described, emphasizing patient- and family-directed holistic care.

Domain 3: Psychological and Psychiatric Aspects The domain focuses on the processes for systematically assessing and addressing the psychological and psychiatric aspects of care in the context of serious illness.

Domain 4: Social Aspects of Care Domain 4 outlines the palliative care approach to assessing and addressing patient and family social support needs.

Domain 5: Spiritual, Religious, and Existential Aspects of Care The spiritual, religious, and existential aspects of care are described, including the importance of screening for unmet needs.

Domain 6: Cultural Aspects of Care The domain outlines the ways in which culture influences both palliative care delivery and the experience of that care by the patient and family, from the time of diagnosis through death and bereavement.

Domain 7: Care of the Patient Nearing the End of Life This domain focuses on the symptoms and situations that are common in the final days and weeks of life.

Domain 8: Ethical and Legal Aspects of Care Content includes advance care planning, surrogate decision-making, regulatory and legal considerations, and related palliative care issues, focusing on ethical imperatives and processes to support patient autonomy.

2018

[Best Practices for  
Reducing  
Unplanned Acute  
Care for Patients  
With Cancer](#)

We identified five strategies to reduce unplanned acute care for patients with cancer: (1) identify patients at high risk for unplanned acute care; (2) enhance access and care coordination; (3) standardize clinical pathways for symptom management; (4) develop new loci for urgent cancer care; and (5) use early palliative care. We assessed each strategy on the basis of specific outcomes: reduction in emergency department visits, reduction in hospitalizations, and reduction in rehospitalizations within 30 days. For each, we define gaps in knowledge and identify areas for future effort. These five strategies can be implemented separately or, with possibly more success, as an integrated program to reduce unplanned acute care for patients with cancer. Because of the large investment required and the limited data on effectiveness, there should be further research and evaluation to identify the optimal strategies to reduce emergency department visits, hospitalizations, and rehospitalizations. Proposed reimbursement changes amplify the need for cancer programs to focus on this issue.

## References

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<sup>1</sup> Centers for Disease Control and Prevention. Side Effects of Cancer Treatment. Available: [www.cdc.gov/cancer/survivors/patients/side-effects-of-treatment.htm](http://www.cdc.gov/cancer/survivors/patients/side-effects-of-treatment.htm)

<sup>2</sup> Panattoni L, Fedorenko C, Greenwood-Hickman MA, Kreizenbeck K, Walker JR, Martins R, Eaton KD, Rieke JW, Conklin T, Smith B, Lyman G, Ramsey SD. Characterizing Potentially Preventable Cancer- and Chronic Disease–Related Emergency Department Use in the Year After Treatment Initiation: A Regional Study. *J Oncol Pract*. 2018 Mar;14(3):e176-e185.