Table of Contents

Executive Summary

Cancer is common, with almost 40% of people diagnosed in their lifetime. Treatment for cancer is either localized, such as with surgery and radiation therapy, or introduced through the bloodstream and therefore systemic, such as with chemotherapy or immunotherapy. Goals of treatment include both improved quality of life and to prolong life. 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.

While the majority of oncology care is planned and provided through out- or in-patient services, patients also frequently seek treatment for urgent and emergent issues, often from side effects of treatment through emergency departments, indicating an opportunity for better symptom management throughout the disease course.

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. To achieve this, the workgroup developed four focus areas to spread evidence-informed clinical best practices as a community standard for all Washingtonians:

- Assessment of a person's risk of using inpatient care and stratifying using a registry with clinical information and patient-reported outcomes.
- Person-centered care including education, goals of care conversations and care that is accessible 24/7
- Care management including standard protocols based on individual patient risk for post-treatment outreach for high and lower risk people along with standard symptom management and triage pathways for common side effects
- Availability of integrated palliative care

These recommendations include checklists to support the above recommendations for people receiving oncology care, for oncology practices, for health plans, and for employer groups as purchasers.

Dr. Robert Bree Collaborative Background

The Dr. Robert Bree Collaborative was established in 2011 by Washington State House Bill 1311 "…to provide a mechanism through which public and private health care stakeholders can work together to improve quality, health outcomes, and cost effectiveness of care in Washington State." The Bree Collaborative was named in memory of Dr. Robert Bree, a leader in the imaging field and a key member of previous health care quality improvement collaborative projects.

Members are appointed by the Washington State Governor and include public health care purchasers for Washington State, private health care purchasers (employers and union trusts), health plans, physicians and other health care providers, hospitals, and quality improvement organizations. The Bree Collaborative is charged with identifying health care services annually with substantial variation in practice patterns, high utilization trends in Washington State, or patient safety issues. For each health care service, the Bree Collaborative identifies and recommends best-practice, evidence-based approaches that build upon existing efforts and quality improvement activities to decrease variation. In the bill, the legislature does not authorize agreements among competing health care providers or health carriers as to the price or specific level of reimbursement for health care services. Furthermore, it is not the intent of the legislature to mandate payment or coverage decisions by private health care purchasers or carriers.

See **Appendix A** for a list of current Bree Collaborative members.

Recommendations are sent to the Washington State Health Care Authority for review and approval. The Health Care Authority (HCA) oversees Washington State's largest health care purchasers, Medicaid and the Public Employees Benefits Board Program, as well as other programs. The HCA uses the recommendations to guide state purchasing for these programs. The Bree Collaborative also strives to develop recommendations to improve patient health, health care service quality, and the affordability of health care for the private sector but does not have the authority to mandate implementation of recommendations.

For more information about the Bree Collaborative, please visit: www.breecollaborative.org.

Bree Collaborative members identified the use of emergency inpatient care by those undergoing active cancer treatment as a priority improvement area and convened a workgroup to develop evidence-based standards. The workgroup met from January to November 2020.

See **Appendix B** for the Oncology Care Workgroup Charter and a list of members.

See **Appendix C** for results of the guideline and systematic review search.

Background

Every year an estimated 1.7 million new cases of cancer will be diagnosed; 439.2 per 100,000 people.[1] Approximately 39.3% of people will be diagnosed with cancer in their lifetime with a median age at diagnosis of 66 years.[2] Mortality rates vary based on type of cancer and patient characteristics.[2] The five most common types of cancer by new cases in 2019 are 1) breast at 268,600 cases, 2) lung and bronchus at 228,150 cases, 3) prostate at 174,650, 4) colorectal at 145,600, and 5) melanoma and skin cancer at 96,480 cases.[2] In Washington State, the age-adjusted cancer rate is 451/100,000 people with a mortality rate of 156.7/100,000 people.[3,4]

Incidence and mortality rates show disparities based on race and ethnicity as well as socioeconomic status. Black Americans have a higher likelihood of dying from cancer.[5] For Black Americans, cancer is often diagnosed at a later stage when more widespread through the body. Issues with access to health care contribute greatly to these disparities. Those living in more socially disadvantaged areas show higher cancer incidence and mortality as well.[5] Socioecoomic differences are due in part to differences in exposures and lifestyle choices such as smoking and those living in poorer neighborhoods being more likely to have cancer diagnosed at a later stage when cancer is more widespread in the body.[5,6] Further, these disparities have increased over the past 60 years.[5] Survival also varies based on insurance status, with those receiving care through Medicaid and those who are uninsured being more likely to die from cancer after a diagnosis than those receiving private insurance.[7] These disparities show opportunities for interventions to advance health equity through better screening or case finding and potentially through parity in treatment and supportive care.

Cancer Treatment

Advances in earlier identification of cancer and in treatment have led to increases in life expectancy and quality of life, although disparities remain as noted above. Overall, approximately 67.1% of people diagnosed with cancer survive for at least five years.[2] In the United States there are over 16.9 million cancer survivors.[8]

Treatment for cancer is either localized, such as with surgery and radiation therapy, or introduced through the bloodstream and therefore systemic, such as with chemotherapy or immunotherapy.[4] Goals of treatment include both improved quality of life and to prolong life. 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.[9]

While the majority of oncology care is planned and provided through out- or in-patient services, patients also frequently seek treatment for urgent and emergent issues, often from side effects of treatment through emergency departments, indicating an opportunity for better symptom management throughout the disease course.[10] Studies show that people with bladder, ovarian and liver cancer have higher acute care admissions when compared to other cancer types.[11] Having other comorbidities or diagnoses alongside the cancer diagnosis, being of advanced age, having more advanced or widespread disease, and having a longer initial stay in the hospital are significant predictors of using inpatient care.[11] Patients most commonly present to the emergency department with pain, fatigue, dyspnea, fever, and gastrointestinal problems.[12]

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.

Recommendation Framework

Interventions

Systematic reviews show five strategies for reducing unplanned acute care use among oncology patients including: identifying patients at high risk for unplanned acute care, enhancing access and care coordination, standardizing clinical pathways for symptom management, developing new loci for urgent cancer care, and using early palliative care.[13]

This workgroup developed the following focus areas to spread these best practices identified in the literature and through surveys and report-outs from Washington state-based facilities:

	Minimum Standard
Assessment and Risk Stratification	• Develop a standard process to assess a patient's risk of inpatient care use (i.e., at least low/high) that determines intensity of care management • Dedicated function of maintaining a registry of patients based on risk including age, comorbidities, type and stage of cancer, treatment intensity, depression, distress • Assess for social determinants of health including housing, food security, patient ability to care for self or presence of a caregiver
Person-Centered Care	• Early conversations on patient goals of care including around inpatient care use and medical interventions • Education on symptom management and how to access care team • Person and caregivers understand signs, symptoms, and complications that may necessitate urgent or emergency care • Access care (e.g., care team, nurse triage) is available 24/7 who has access to the patient's medical record • Telehealth standards built into care pathways

Care Management	• Standard protocol for management based on risk based on internal clinic resources including at a minimum:
	  ○ Post-treatment outreach to those identified as higher risk
	  ○ Post-treatment provider follow-up appointments
	  ○ Post-discharge outreach to those who have accessed inpatient care
	• Standard symptom management and triage pathways for common side effects (e.g., Canadian developed triage management system COSTaRS)

Availability of Integrated Palliative Care	• For patients who are higher-risk and/or higher-need with need for symptom management, consider referral to interdisciplinary specialty palliative care as outlined in the 2019 Bree Collaborative Palliative Care recommendations

Stakeholder Checklists

These recommendations not intended to be used in lieu of medical advice.

Patients and Family Members

- ☐ Make sure that you understand your diagnosis (what type of cancer you have and how far the cancer has spread in your body, often called stage), for example: American Cancer Society
- ☐ When deciding on a care team or oncologist, ask if they offer:
  - ☐ An online patient portal
  - ☐ 24/7 access to care who has access to your medical record
  - ☐ Palliative care
- ☐ Know who your care team is and how to reach them especially with urgent issues
- ☐ Talk about how well your needs and symptoms are being addressed by your provider(s) and whether specialty palliative care may be better able to address your needs
- ☐ Talk about your goals of care with your provider or care team. Your goals of care are typically the aspects of your life that are most important to you.
- ☐ Have conversations early on in disease progression about your wishes for hospital visits and medical intervention
- ☐ Be sure that you and your family or other caregivers understand red flags or warning signs that may mean you need to go to the hospital and under what conditions you may not want to receive care in the hospital setting
- ☐ Talk about the potential need for a higher level of care (e.g., more help at home) if care needs are greater than can be safely managed. Conversations can include financial as well as medical concerns.
- ☐ Connect to community resources or state resources that can help plan for future and increasing care needs including respite care.
- ☐ **For Caregivers**. Caregiving can be stressful. Talk to your or your partner/family member's provider about your needs as a caregiver. Resources for caregiving are available here (www.aarp.org/caregiving/local/info-2017/important-resources-for-caregivers.html).

Oncology Care Practices

- ☐ Review the literature on risk stratification outlined on page 9 of these recommendations
- ☐ Use an onsite registry of patients that includes the following data, using a validated instrument for any patient-reported outcomes:
  - ☐ Age
  - ☐ Comorbidities
  - ☐ Cancer type
  - ☐ Cancer stage
  - ☐ Treatment intensity
  - ☐ Depression (e.g., Patient Health Questionnaire 9)
  - ☐ Distress (e.g., Distress Thermometer, Psychosocial Screen for Cancer (PSCAN)
  - ☐ Housing security (e.g., PRAPARE assessment tool)
  - ☐ Food security (e.g., PRAPARE assessment tool, Hunger Vital Sign LOINC® 88121-9)
  - ☐ Patient ability to care for self or presence of a caregiver
- ☐ Develop a standard process from the registry or work with a vendor to develop a mechanism to assess a person's risk of inpatient care use that at least identifies a person as high or low risk or uses more granulated categories of risk
- ☐ Assess the patient's goals of care including around:
  - ☐ Inpatient care use
  - ☐ Medical interventions
- ☐ Use a standard process to educate the person and their caregivers on:
  - ☐ Symptom management
  - ☐ Process to access care team
  - ☐ Signs, symptoms, and complications that may necessitate urgent or emergency care
- ☐ Access to care directly to a member of the care team or other workflow such as offsite nurse triage is available 24/7 and includes access to the patient's medical record
- ☐ Build telehealth standards into care pathways using HIPAA compliant technology
- ☐ Standard process is in place that includes
  - ☐ Post-treatment outreach to patients identified as higher risk within 24 hours through telephone or other mechanism
  - ☐ Post-treatment follow-up appointments (in-person or telehealth) within seven days
  - ☐ Post-discharge outreach to patients who have accessed emergency room or other inpatient care within 24 hours
- ☐ Standard symptom management and triage pathways for common side effects
- ☐ For patients who are higher-risk and/or higher-need with need for symptom management, consider referral to interdisciplinary specialty palliative care as outlined in the 2019 Bree Collaborative Palliative Care recommendations

Health Plans

- ☐ Ask for self-attestation that oncology practices within your network have:
  - ☐ A standard process to assess an oncology patient's individual risk of seeking inpatient care
  - ☐ Comprehensive educational process in place
  - ☐ Standard protocols for risk management
  - ☐ Nurse care management protocols
- ☐ Ensure that telehealth services are reimbursed at the same level as in-person visits, where appropriate
- ☐ Monitor available data on oncology care utilization for evidence of disparities in care based on zip code (as a proxy for race)
- ☐ Monitor claims data for risk-adjusted proportion of patients with all-cause hospital admissions or all-cause ED visits or observation stays that did not result in a hospital admission

Employers

- ☐ Cancer is a costly and complex condition needing dedicated coordination of care. For most people, this is incredibly stressful episode of care and is often overwhelming, leading to or exacerbating anxiety and/or depression and other issues. Employer groups can design benefits or talk with benefits vendors to seek out benefits that include the components recommended in this document that lead to lower inpatient care use and higher quality of life including:
  - ☐ A standard process to assess a person's risk of seeking inpatient care
  - ☐ Comprehensive education
  - ☐ Standard protocols for risk management
  - ☐ Nurse care management protocols
- ☐ Ensure that telehealth services are reimbursed at the same level as in-person visits, where appropriate
- ☐ Ensure that your population has access to regular, appropriate cancer screenings and other cancer prevention activities (e.g., smoking cessation, HPV vaccination)
- ☐ Consider designing a cancer-specific online portal to review health benefits relevant to oncology care and any relevant policies

Assessment and Risk Stratification

Stratifying patients by risk for inpatient care use allows for scarce clinical resources to be directed to those who would most benefit. Research into risk stratification is still early, and while no well-accepted standard exists, common risk factors include: the person's age, presence of comorbidities, type and stage of cancer, treatment intensity, and social determinants of health (e.g., having social support, access to transportation, access to computer and/or phone).

Chemotherapy toxicity can be used as a proxy for inpatient healthcare utilization and models predicting toxicity have been developed, predominantly for older populations (e.g., >65, >70 years old). [14,15] Many risk stratification protocols use a mix of administrative, claims, and clinical data (e.g., lab values, patient patient-reported outcomes, health care utilization).

Patient-Reported Outcomes

Patient-reported assessments include around general health, see MD Anderson's Symptom Inventory (MDASI) Core Items. More detailed assessment of common symptoms include on fatigue, see the PROMIS short form fatigue or the brief fatigue inventory; pain, see PROMIS pain intensity or pain interference or the brief pain inventory; sleep quality, see PROMIS short form sleep quality or the insomnia severity index. Assessment of common mental health issues that can exacerbate symptom severity include anxiety, see the Generalized Anxiety Disorder (GAD) 7-item or the PROMIS short form anxiety and depression, see the Patient Health Questionnaire (PHQ) 2, 3, or 9 item screener.

Social Determinants of Health

Social support is especially important for people undergoing high-intensity medical interventions such as treatment for cancer. Patient surveys report people undergoing cancer treatment wanting empathy above all but also support at home.[16] Literature shows cancer progression to be inversely related to social support, showing how necessary social support is to health and wellbeing.[17,18]

Social support is a social determinant of health, the conditions in which people are "*born, grow, live, work and age.*" [19] This broad category was developed to show the importance of taking into account the totality of factors that contribute to a person's health. Our wellbeing and longevity are determined not only by our access to quality medical care, but also by structural factors like access to education, employment, and a person's experience of racism, and others.[20,21] The impact of shared social experiences among demographic groups such as genocide, slavery, segregation impact differences in health outcomes and access to resources (e.g., redlining) that separately impact health outcomes.

To broadly assess social determinants, a variety of tools currently exist from one to 20+ questions (e.g., Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences (PRAPARE), Franklin County Public Health in Ohio Core 5 questions, OneCare Vermont: Self-Sufficiency Outcomes Matrix, Oregon Family Wellbeing Assessment).

The literature showing an association between patient-specific factors and unanticipated health services use is summarized in Table 1.

Table 1: Factors Associated with Inpatient Care Utilization

	Population Studied	Predictors	Process	Outcome
Daly R. 2020[22]	Antineoplastic therapy included receipt of any intravenous or oral cytotoxic, immunotherapeutic, or biologic agent	• Malignancy and treatment characteristics (77 features) • Medications (101 features) • Laboratory values (45 features	Machine learning from medical record data	Acute care visit for pre-defined list of preventable symptoms (e.g., nausea) within 6 months of start
Brooks GA. 2015[23]	Patients with Advanced solid-tumor cancer Palliative-intent chemotherapy	• Age • Charlson comorbidity score • Creatinine clearance • Calcium level • Below-normal white blood cell and/or platelet count • Polychemotherapy (vs monotherapy) • Receipt of camptothecin chemotherapy	Medical record abstraction	Chemotherapy-related hospitalization adjudicated by the oncology clinical care team
Brooks GA. 2019[24]	Patients with stage IV or recurrent solid tumor malignancy first chemotherapy treatment	• Albumin • Sodium	Abstracted administrative, EHR, and clinical data	All-cause hospitalization within 30 days of chemotherapy treatment
Grant RC. 2019[25]	Adult patients with cancer commonly treated on outpatient basis	• Combination of cancer type and treatment regimen • Age • Emergency department visits in the prior year	Population-based administrative and clinical databases	Emergency department visit or hospitalization within 30 days after starting systemic therapy for cancer
Hong JC. 2018[26]	Patients undergoing chemotherapy or radiation therapy All adult patients who underwent outpatient external-beam RT with or without concurrent systemic therapy (chemotherapy, immunotherapy, or hormonal therapy)	Factors with highest predictive gain: • Planned number of radiation fractions • Planned total radiation dose • Time since most recent ED visit • Weight loss • Age	Machine learning from pretreatment EHR data and treatment data	Any ED visit or hospitalization second day of treatment to completion of treatment

Patient-Centered Care

Education about disease and symptom management and medication use and side effects is paramount to patient-centered oncology care. While surveys of patients show general satisfaction with aspects of their provider-led education, some report wanting more detailed information showing the need for minimum standards for patient education with opportunity for further conversations that may be specific to individuals.[27,28] Patient education has shown some success at reducing common side effects of oncology treatment including fatigue and is best coupled with nurse-led symptom management as needed as outlined in the following section.[29]

Similarly, early goals of care conversations about serious illness care are associated with care that better aligns with patient wishes, higher quality of life, and lower family stress among family members.[30] Providers should initiative conversations as this is commonly expected by people undergoing episodes of care.[31] Interventions targeted at clinicians to implement standards around goals of care conversations are often necessary, being associated with a significant increase in goals of care conversations occurring, the conversations being documented in the medical record, a higher-quality conversation, and a higher concordance between a patient's stated goals and the care that a patient actually receives for patients with stable goals when compared with usual care.[32] Often these interventions take the form of practice and feedback sessions.[33]

Goals of care conversations should include clear discussions of information on prognosis and certainty of prognosis as accurately as possible, preferences for decision-making including designating a durable power of attorney for health care, understanding the person's fears related to the cancer diagnosis and treatment, understanding the patient's specific goals as they relate to quality of life and social events discussing the impact of impaired function with trade-offs, and involving family members or others in treatment and management.[34]

Questions to ask include:[35]

- Patient understanding: What is your understanding now of where you are with your illness?
- Information preferences: How much information about what is likely to be ahead with your illness would you like from me?
- Goals: If your health situation worsens, what are your most important goals?
- Fears: What are your biggest worries about the future and your health?
- Trade-offs: If you become sicker, how much are you willing to go through for the possibility of gaining more time?
- Family: How much does your family know about your priorities and wishes?
- Resources: What is available in your community?

Care Management

Among oncology patients admitted to the Cleveland Clinic's palliative and general medical oncology services, 27.4% were readmitted within 30 days.[13] This rate declined by 4.5% after introduction of provider education, post-discharge nursing phone calls within 48 hours, and post-discharge provider follow-up appointments within five business days.[36] These care management approaches are key to the strategies outlined in The American Society for Clinical Oncology's Best Practices for Reducing Unplanned Acute Care for Patients With Cancer that calls for "enhancing access and care coordination, standardizing clinical pathways for symptom management, [and] developing new loci for urgent cancer care."[13] While nurse-led patient navigation programs have had mixed impacts on quality of life and patient distress, they are associated with patient satisfaction.[37]

At a minimum, the workgroup recommends a standard protocol for management based on risk based on internal clinic resources including post-discharge outreach to those identified as higher-risk, and post-discharge provider follow-up appointments coupled with standard symptom management and triage pathways for common side effects, and telehealth standards built into care pathways.

Telephone follow-up after treatment for cancer, typically done by a nurse who is part of the oncology care team, can be proactive or serve as an as-needed resource accessed by the patients. Remote symptom management does not occur in all cases, depending on the resources available at the delivery site.[38] Barriers to remote symptom management include lack of time, obtaining accurate patient information over the telephone, high workload, and lack of knowledge or training.[35]

Proactive telephone follow-up has shown be to effective at meeting patient psychosocial and informational needs, with studies showing patients receiving the calls to have shorter hospital visits and to ask more informed questions at those visits.[39] Telephone follow-up has been shown to provide continuity of care, be seen as more convenient, feel more normal than a clinic visit, and benefit from structure.[40] Further, telephone follow-up has been successful across multiple cancer types including colorectal, breast, and endometrial cancer.[41,42]

The Pan-Canadian Oncology Symptom Triage and Remote Support (COSTaRS) program, an evidence-based telephone practice guides for 15 symptoms (i.e., anxiety, appetite loss, bleeding, breathlessness/dyspnea, constipation, depression, diarrhea, fatigue/tiredness, febrile neutropenia, mouth dryness/xerostomia, mouth sores/stomatitis, nausea and vomiting, pain, peripheral neuropathy, skin rash, skin reaction, and sleep changes) common among oncology patients is being used in multiple delivery sites across Canada and also within the United States to improve the consistency and quality of remote nursing symptom management.[43,44,45] Review of the COSTaRS program found the practice guidelines to be used only 33% of the time and among those a higher score on a symptom management scale, more complete assessments, and functioning more within their full nursing scope of practice rather than referral to an oncologist. The majority of people reported satisfaction with the COSTaRS telephone-based cancer treatment symptom support.[46]

Palliative Care

Palliative care can be offered alongside curative treatment at any age or stage of illness and can address many of the deficits in our health care system. "*Palliative care focuses on expert assessment and management of…symptoms*, *assessment and support of caregiver needs, and coordination of care* [attending*] to the physical, functional, psychological, practical, and spiritual consequences of a serious illness. It is a person- and family-centered approach to care, providing people living with serious illness relief from the symptoms and stress of an illness.*"[47]

Palliative care consistently shows improved outcomes for patients in both in- and out-patient settings and has been associated with reduction in symptom burden, higher satisfaction with care, more appropriate referrals to hospice, and fewer days in a hospital. [48,49,50] For oncology patients, early delivery of palliative care has been associated with increased quality of life and with longer life.[51,52] Palliative care reduces caregiver stress and has been shown to reduce caregiver emotional and spiritual needs as well as increasing caregiver confidence.[53,54] For many diagnoses, patients who receive palliative care earlier on in the course of their disease have been shown to live longer and with a higher quality of life when compared to those who start palliative care later in the course of illness.[55]

Many of the aspects of palliative care, including the patient needs described above, can and should be managed within oncology care with referrals to specialty palliative care when patient need increases beyond the capacity of primary palliative care. [56] This primary palliative care can meet many of the physical, functional, psychological, practical, and spiritual consequences of a serious illness. The oncology care team should refer to specialty palliative care when a patient's needs can no longer be met within the oncology setting due to increases in symptom burden, including pain, nausea, delirium, fatigue, anxiety, and/or depression.

Measurement

The primary outcome measure is emergency department and hospital utilization as shown with the two claims-based measures below:

- **Claims:** Risk-adjusted proportion of patients with all-cause hospital admissions within the 6-month episode
- **Claims:** Risk-adjusted proportion of patients with all-cause ED visits or observation stays that did not result in a hospital admission within the 6-month episode

Symptom management as measured by NQF measures as reported by the practices:

- NQF 0384: Oncology: Medical and Radiation – Pain Intensity Quantified
  Percentage of patient visits, regardless of patient age, with a diagnosis of cancer currently receiving chemotherapy or radiation therapy in which pain intensity is quantified
- NQF 0383: Oncology: Medical and Radiation – Plan of Care for Pain
  Percentage of visits for patients, regardless of age, with a diagnosis of cancer currently receiving chemotherapy or radiation therapy who report having pain with a documented plan of care to address pain
- NQF : Care for Older Adults
  The percentage of adults 66 years and older who had each of the following during the measurement year reported separately and cumulatively.
    - Advance care planning
    - Medication review
    - Functional status assessment
    - Pain assessment

Appendix A: Bree Collaborative Members

Member	Title	Organization
Susie Dade, MS		
Gary Franklin, MD, MPH	Medical Director	Washington State Department of Labor and Industries
Stuart Freed, MD	Chief Medical Officer	Confluence Health
Richard Goss, MD	Medical Director	Harborview Medical Center – University of Washington
Darcy Jaffe, MN, ARNP, NE-BC, FACHE	Senior Vice President, Safety & Quality	Washington State Hospital Association
Sonja Kellen	Global Benefits Director	Microsoft
Dan Kent, MD	Chief Medical Officer, Community Plan	UnitedHealthcare
Wm. Richard Ludwig, MD	Chief Medical Officer, Accountable Care Organization	Providence Health and Services
Greg Marchand	Director, Benefits & Policy and Strategy	The Boeing Company
Robert Mecklenburg, MD	Medical Director, Center for Health Care Solutions	Virginia Mason Medical Center
Kimberly Moore, MD	Associate Chief Medical Officer	Franciscan Health System
Carl Olden, MD	Family Physician	Pacific Crest Family Medicine, Yakima
Drew Oliveira, MD	Executive Medical Director	Regence BlueShield
Mary Kay O'Neill, MD, MBA	Partner	Mercer
John Robinson, MD, SM	Chief Medical Officer	First Choice Health
Jeanne Rupert, DO, PhD	Provider	One Medical
Angela Sparks, MD	Medical Director Clinical Knowledge Development & Support	Kaiser Permanente Washington
Hugh Straley, MD (Chair)	Retired	Medical Director, Group Health Cooperative; President, Group Health Physicians
Shawn West, MD		
Laura Kate Zaichkin, MPH	Director of Health Plan Performance and Strategy	SEIU 775 Benefits Group
Judy Zerzan, MD, MPH	Chief Medical Officer	Washington State Health Care Authority

Appendix B: Oncology Care Charter and Roster

Problem Statement

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.[i] 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.[ii]

Aim

To reduce potentially avoidable emergency department visits and therefore improve patient experience and care outcomes for patients undergoing cancer treatment.

Purpose

To propose evidence-based recommendations to the full Bree Collaborative on:

- 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
-

Duties & Functions

The Oncology Care workgroup will:

- Research evidence-based and expert-opinion informed guidelines and best practices (emerging and established).
- Consult relevant professional associations and other stakeholder organizations and subject matter experts for feedback, as appropriate.
- Meet for approximately ten-twelve months, as needed.
- Provide updates at Bree Collaborative meetings.
- Post draft report(s) on the Bree Collaborative website for public comment prior to sending report to the Bree Collaborative for approval and adoption.
- Present findings and recommendations in a report.
- Recommend data-driven and practical implementation strategies including metrics or a process for measurement.
- Create and oversee subsequent subgroups to help carry out the work, as needed.
- Revise this charter as necessary based on scope of work.

[i] Centers for Disease Control and Prevention. Side Effects of Cancer Treatment. Available: www.cdc.gov/cancer/survivors/patients/side-effects-of-treatment.htm

[ii] 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.

Structure

The workgroup will consist of individuals confirmed by Bree Collaborative members or appointed by the chair of the Bree Collaborative or the workgroup chair. The chair of the workgroup will be appointed by the chair of the Bree Collaborative. The Bree Collaborative program director and program assistant will staff and provide management and support services for the workgroup.

Less than the full workgroup may convene to: gather and discuss information; conduct research; analyze relevant issues and facts; or draft recommendations for the deliberation of the full workgroup. A quorum shall be a simple majority and shall be required to accept and approve recommendations to send to the Bree Collaborative.

Meetings

The workgroup will hold meetings as necessary. The director will conduct meetings along with the chair, arrange for the recording of each meeting, and distribute meeting agendas and other materials prior to each meeting. Additional workgroup members may be added at the discretion of the workgroup chair.

Name	Title	Organization
Hugh Straley, MD (Chair)	Chair	Bree Collaborative
Sibel Blau, MD	Oncologist	Northwest Medical Specialties
Andra Davis, PhD, MN, BSN	Assistant Professor, Vancouver	Washington State University
Gurpreet Dhillon, MBA	Director, Hospice, Palliative Care and PeaceHealth St. Joseph Cancer Center Service Lines	PeaceHealth
Stefanie Hafermann, RN	Lead, Program Design, Clinical Services	Cambia Health Plans
Blair Irwin, MD, MBA	Oncologist	Multicare Regional Cancer Center
Barb Jensen, RN, BSN, MBA	Director of Oncology and Palliative Care	Skagit Regional Health
Nancy Thompson, RN, MS, AOCNS	Director, Quality & Clinical Practice	Swedish Cancer Institute
Laura Panattoni, PhD	Staff Scientist	Hutchinson Institute for Cancer Outcomes Research
Camille Puronen, MD	Oncologist	Kaiser Permanente Washington

Appendix C: Guideline and Systematic Review Search Results

	Year	Title	Summary
AHRQ: Research Findings and Reports	2017	Assessment Tools for Palliative Care	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	Closing the Quality Gap Series: Improving Health Care and Palliative Care for Advanced and Serious Illness	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 Review of Quality of Care Evaluation for the Palliation of Dyspnea	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 Framework for Assessing Quality Indicators for Cancer Care at the End-of-Life	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	Cancer Quality-ASSIST Supportive Oncology Quality Indicator Set:	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

		Feasibility, Reliability, and Validity Testing	41 indicators most promising for further testing and use in this population, with an overall kappa score of 0.85 for specified care.
Cochrane Collection	2019	Psychosocial interventions for informal caregivers of people living with cancer	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	Early palliative care for adults with advanced cancer	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	Psychosocial interventions for fatigue during cancer treatment with palliative intent	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	Educational interventions for the management of cancer-related fatigue in adults	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	Interventions to enhance return-to-work for cancer patients	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.

	2013	Effectiveness and cost-effectiveness of home palliative care services for adults with advanced illness and their caregivers	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.
	2011	Interventions for improving palliative care for older people living in nursing care homes	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.
	2011	Non-invasive interventions for improving well-being and quality of life in patients with lung cancer	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.
Health Technology Assessment Program	None		
Centers for Disease Control and Prevention	Nothing specific, 2016 Opioid Prescribing Guidelines for Chronic Pain		
Institute for Clinical and Economic Review	2016	Palliative Care in the Outpatient Setting	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).

Veterans Administration Evidence-based Synthesis Program	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 (e.g., 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.

National Consensus Project for Quality Palliative Care National Coalition for Hospice and Palliative Care	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.

American Society of Clinical Oncology	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

[1] National Cancer Institute. Cancer Statistics. Accessed: April 2020. Available: www.cancer.gov/about-cancer/understanding/statistics

[2] National Cancer Institute. Cancer Stat Facts: Cancer of Any Site. Accessed: April 2020. Available: https://seer.cancer.gov/statfacts/html/all.html

[3]State Cancer Profiles – Incidence Rates Table. National Cancer Institute. Accessed: April 2020. Available: https://statecancerprofiles.cancer.gov/incidencerates/index.php?stateFIPS=53&areatype=county&cancer=001&race=00&sex=0&age=001&type=incd#results

[4] Washington State Department of Health. Washington State Cancer Registry. Accessed: May 2020. Available: https://fortress.wa.gov/doh/wscr/Query.mvc/SubmitToCHATQueryService

[5] Singh GK, Jemal A. Socioeconomic and Racial/Ethnic Disparities in Cancer Mortality, Incidence, and Survival in the United States, 1950-2014: Over Six Decades of Changing Patterns and Widening Inequalities. J Environ Public Health. 2017;2017:2819372.

[6] Mapes D. New Data on Cancer Disparities in Washington. Fred Hutch. Accessed: March 2020. Available: www.fredhutch.org/en/news/center-news/2019/05/new-data-on-cancer-health-disparities-in-washington.html

[7] Walker GV, Grant SR, Guadagnolo BA, et al. Disparities in stage at diagnosis, treatment, and survival in nonelderly adult patients with cancer according to insurance status. J Clin Oncol. 2014;32(28):3118–3125.

[8] Cancer Treatment & Survivorship – Facts & Figures 2019-2021. American Cancer Society. www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/cancer-treatment-and-survivorship-facts-and-figures/cancer-treatment-and-survivorship-facts-and-figures-2019-2021.pdf

[9] Side Effects of Cancer Treatment. Centers for Disease Control and Prevention. Accessed: March 2020. Available: www.cdc.gov/cancer/survivors/patients/side-effects-of-treatment.htm

[10] 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.

[11] Bell JF, Whitney RL, Reed SC, et al. Systematic Review of Hospital Readmissions Among Patients With Cancer in the United States. Oncol Nurs Forum. 2017;44(2):176–191.

[12] Aprile G, Pisa FE, Follador A, et al. Unplanned presentations of cancer outpatients: a retrospective cohort study. Support Care Cancer. 2013;21(2):397–404.

[13] Handley NR, Schuchter LM, Bekelman JE. Best Practices for Reducing Unplanned Acute Care for Patients With Cancer. J Oncol Pract. 2018;14(5):306–313.

[14] Hurria A, Togawa K, Mohile SG, et al. Predicting chemotherapy toxicity in older adults with cancer: A prospective multicenter study. J Clin Oncol 29:3457-3465, 2011.

[15] Extermann M, Boler I, Reich RR, et al: Predicting the risk of chemotherapy toxicity in older patients: The Chemotherapy Risk Assessment Scale for High-Age Patients (CRASH) score. Cancer 118:3377-3386, 201

[16] Korotkin BD, Hoerger M, Voorhees S, Allen CO, Robinson WR, Duberstein PR. Social support in cancer: How do patients want us to help?. J Psychosoc Oncol. 2019;37(6):699-712.

[17] Usta YY. Importance of social support in cancer patients. Asian Pac J Cancer Prev. 2012;13(8):3569-3572.

[18] Nausheen B, Gidron Y, Peveler R, Moss-Morris R. Social support and cancer progression: a systematic review. J Psychosom Res. 2009;67(5):403-415.

[19] About Social Determinants of Health. World Health Organization. Accessed: July 2020. Available: www.who.int/social_determinants/sdh_definition/en/

[20] Measures and Data Sources. Robert Wood Johnson Foundation. Accessed: July 2020. Available: www.countyhealthrankings.org/our-approach

[21] Social Determinants of Health (SDOH). NWJM Catalyst. December 1, 2017. Available: https://catalyst.nejm.org/doi/full/10.1056/CAT.17.0312

[22] Daly R, Gorenshteyn D, Nicholas KJ, et al. Building a Clinically Relevant Risk Model: Predicting Risk of a Potentially Preventable Acute Care Visit for Patients Starting Antineoplastic Treatment. *JCO Clinl Cancer Inform.* 2020;4:275-289.

[23] Brooks GA, Kansagra AJ, Rao SR, et al. A Clinician Prediction Model to Assess Risk for Chemotherapy-Related Hospitalization in Patients Initiating Palliative Chemotherapy. *JAMA Oncol*. 2015; 1(4):441-447.

[24] Brooks GA, Uno H, Aiello Bowles EJ, et al. Hospitalization Risk During Chemotherapy for Advanced Cancer: Development and Validation of Risk Stratification Models Using Real-World Data. *JCO Clin Cancer Informatics*. 2019.
[25] Grant RC, Moineddin R, Yao Z, et al. Development and Validation of a Score to Predict Acute Care Use After Initiation of Systemic Therapy for Cancer. *JAMA Network Open.* 2019;2(10):e1912823.
[26] Hong JC, Niedzwiecki D, Palta M, et al. Predicting Emergency Visits and Hospital Admissions During Radiation and Chemoradiation: An Internally Validated Pretreatment Machine Learning Algorithm. *JCO Clin Cancer Informatics.* 2018;2:1-11.
[27] Kaupp K, Scott S, Minard LV, Lambourne T. Optimizing patient education of oncology medications: A quantitative analysis of the patient perspective. J Oncol Pharm Pract. 2019;25(6):1445-1455. doi:10.1177/1078155219843675
[28] Hartigan K. Patient education: the cornerstone of successful oral chemotherapy treatment. Clin J Oncol Nurs. 2003;7(6 Suppl):21-24.
[29] Du S, Hu L, Dong J, et al. Patient education programs for cancer-related fatigue: A systematic review. Patient Educ Couns. 2015;98(11):1308-1319. 3
[30] Wright AA, Zhang B, Ray A, Mack JW, Trice E, Balboni T, et al. Associations between end-of-life discussions, patient mental health, medical care near death, and caregiver bereavement adjustment. *JAMA*. 2008 Oct 8;300(14):1665-73.
[31] Steinhauser KE, Clipp EC, McNeilly M, Christakis NA, McIntyre LM, Tulsky JA. In search of a good death: observations of patients, families, and providers. *Ann Intern Med.* 2000 May 16;132(10):825-32.
[32] Curtis JR, Downey L, Back AL, et al. Effect of a patient and clinician communication-priming intervention on patient-reported goals-of-care discussions between patients with serious illness and clinicians: a randomized clinical trial. *JAMA Intern Med*. 2018;178(7):930–940.
[33] Rao JK, Anderson LA, Inui TS, Frankel R. Communication interventions make a difference in conversations between physicians and patients: a systematic review of the evidence. *Med Care* 2007;45:340–9.
[34] Bernacki RE, Block SD; American College of Physicians High Value Care Task Force. Communication about serious illness care goals: a review and synthesis of best practices. *JAMA Intern Med*. 2014 Dec;174(12):1994-2003.
[35] Bernacki R, Hutchings M, Vick J, Smith G, Paladino J, Lipsitz S et al. Development of the Serious Illness Care Program: a randomised controlled trial of a palliative care communication intervention. *BMJ Open*. 2015 Oct 6;5(10):e009032.
[36] Montero AJ, Stevenson J, Guthrie AE, et al. Reducing Unplanned Medical Oncology Readmissions by Improving Outpatient Care Transitions: A Process Improvement Project at the Cleveland Clinic. *J Oncol Pract*. 2016;12(5):e594–e602.
[37] Tho PC, Ang E. The effectiveness of patient navigation programs for adult cancer patients undergoing treatment: a systematic review. JBI Database System Rev Implement Rep. 2016;14(2):295-321. doi:10.11124/jbisrir-2016-2324
[38] Macartney G, Stacey D, Carley M, Harrison MB. Priorities, barriers and facilitators for remote support of cancer symptoms: a survey of Canadian oncology nurses. Can Oncol Nurs J. 2012;22(4):235-247.
[39] Beaver K, Campbell M, Williamson S, et al. An exploratory randomized controlled trial comparing telephone and hospital follow-up after treatment for colorectal cancer. Colorectal Dis. 2012;14(10):1201-1209.
[40] Beaver K, Williamson S, Chalmers K. Telephone follow-up after treatment for breast cancer: views and experiences of patients and specialist breast care nurses. J Clin Nurs. 2010;19(19-20):2916-2924.
[41] Beaver K, Williamson S, Sutton CJ, Gardner A, Martin-Hirsch P. Endometrial cancer patients' preferences for follow-up after treatment: A cross-sectional survey. Eur J Oncol Nurs. 2020;45:101722.
[42] Williamson S, Beaver K, Gardner A, Martin-Hirsch P. Telephone follow-up after treatment for endometrial cancer: A qualitative study of patients' and clinical nurse specialists' experiences in the ENDCAT trial. Eur J Oncol Nurs. 2018;34:61-67.
[43] Stacey D, Macartney G, Carley M, Harrison MB; The Pan-Canadian Oncology Symptom Triage and Remote Support Group (COSTaRS). Development and evaluation of evidence-informed clinical nursing protocols for remote assessment, triage and support of cancer treatment-induced symptoms. Nurs Res Pract. 2013;2013:171872.
[44] Stacey, D. Quality of telephone nursing services for adults with cancer on non-emergent visits to ED. Presentation to the Bree Collaborative Oncology Care Meeting. Seattle, WA. June 2, 2020.
[45] Stacey D, COSTaRS Team. Remote Symptom Practice Guides for Adults on Cancer Treatments Of the Pan-Canadian Oncology Symptom Triage and Remote Support (COSTaRS) Team. Ottawa Hospital Research Institute & University of Ottawa, Canada. January 2020.
[46] Stacey D, Green E, Ballantyne B, et al. Patient and family experiences with accessing telephone cancer treatment symptom support: a descriptive study. Support Care Cancer. 2016;24(2):893-901. doi:10.1007/s00520-015-2859-6

[47] Clinical Practice Guidelines for Quality Palliative Care, 4th edition. National Consensus Project for Quality Palliative Care. Richmond, VA: National Coalition for Hospice and Palliative Care; 2018. Accessed: April 2019. Available: www.nationalcoalitionhpc.org/ncp.

[48] Institute for Clinical and Economic Review. Palliative Care in the Outpatient Setting. April 2016. Accessed: April 2019. Available: https://icer-review.org/announcements/palliative-care-final-report-release/

[49] Gomes B, Calanzani N, Curiale V, McCrone P, Higginson I. Effectiveness and cost-effectiveness of home palliative care services for adults with advanced illness and their caregivers. *Sao Paulo Med J.* 2016 Jan-Feb;134(1):93-4.

[50] Hall S, Kolliakou A, Petkova H, Froggatt K, Higginson IJ. Interventions for improving palliative care for older people living in nursing care homes. *Cochrane Database Syst Rev.* 2011 Mar 16;(3):CD007132.

[51] Haun MW, Estel S, Rücker G, Friederich HC, Villalobos M, Thomas M, et al. Early palliative care for adults with advanced cancer. *Cochrane Database Syst Rev.* 2017 Jun 12;6:CD011129.

[52] Temel JS, Greer JA, Muzikansky A, Gallagher ER, Admane S, Jackson VA, Dahlin CM, Blinderman CD, Jacobsen J, Pirl WF, Billings JA, Lynch TJ. Early palliative care for patients with metastatic non-small-cell lung cancer. *N Engl J Med.* 2010 Aug 19;363(8):733-42.

[53] Gelfman LP, Meier DE, Morrison RS. Does palliative care improve quality? A survey of bereaved family members. *J Pain Symptom Manage*. 2008;36(1):22–28.

[54] Abernethy AP, Currow DC, Fazekas BS, Luszcz MA, Wheeler JL, Kuchibhatla M. Specialized palliative care services are associated with improved short- and long-term caregiver outcomes. Support Care Cancer. 2008 Jun;16(6):585-97.

[55] Bakitas MA, Tosteson TD, Li Z, et al. Early Versus Delayed Initiation of Concurrent Palliative Oncology Care: Patient Outcomes in the ENABLE III Randomized Controlled Trial. *J Clin Oncol*. 2015;33(13):1438–1445.

[56] Buss MK, Rock LK, McCarthy EP. Understanding Palliative Care and Hospice: A Review for Primary Care Providers. *Mayo Clin Proc.* 2017 Feb;92(2):280-286.