

# Current Guidelines for Integration of Palliative Care in Oncology



Bridget N. Fahy, MD<sup>a,b</sup>

## KEYWORDS

• Palliative care • Oncology • Symptom management • Quality of life

## KEY POINTS

- Palliative care is as an essential component of cancer care.
- All patients should be screened for palliative care needs at the time of diagnosis and at regular intervals throughout the course of routine cancer care, as well at end of life.
- Palliative care has been shown to reduce the burden of symptoms, enhance quality of life, and improve mood.
- Receipt of palliative care may impact health care resource use in patients with cancer, particularly at end of life.
- Significant barriers exist that prevent integration of palliative care into routine cancer care with unique barriers for surgical oncology patients.

## INTRODUCTION

Palliative cancer and oncology are inextricably linked. The term palliative care was introduced in 1974 by Balfour Mount, a surgical oncologist, at the Royal Victoria Hospital of McGill University in Montreal, Canada. The close ties between palliative care and cancer reflect a recognition that palliative care is needed in patients with life-limiting illnesses, such as cancer, both during and following cancer-directed therapies. According to the World Health Organization, patients with cancer account for approximately one-third of all patients in need of palliative care, second only to those with cardiovascular disease.<sup>1</sup>

The current guidelines for integrating palliative care with cancer care reflect an evolution in the understanding of what palliative care is, and is not. Most notably, the erroneous equation between palliative care and end-of-life care continues to be a stubborn misperception. Palliative medicine is a multidisciplinary and

---

<sup>a</sup> Department of Surgery, Division of Surgical Oncology, University of New Mexico, 1 University of New Mexico, MSC 07-4025, Albuquerque, NM 87131, USA; <sup>b</sup> Division of Palliative Medicine, University of New Mexico, Albuquerque, NM, USA  
E-mail address: [bfahy@salud.unm.edu](mailto:bfahy@salud.unm.edu)

interdisciplinary medical specialty that addresses several distinct domains: physical, psychological, social, spiritual/religious/existential, cultural, as well as end-of-life care.<sup>2</sup> Although it incorporates these same domains, hospice care is appropriate for patients with a life expectancy of 6 months or less if a disease takes its expected course. With rare exceptions, hospice care is not appropriate for patients whose goal is life prolongation, particularly through receipt of cancer-directed therapies that are not strictly palliative. Despite the early introduction of palliative care into cancer care advocated by Dr Mount in the 1970s, the progress toward realization of his vision has been slow. Only recently have national oncology organizations and professional societies made a more concerted effort to encourage providers to routinely integrate palliative care into standard cancer care. In addition to the perceptual progress made, advances in palliative care integration into cancer care are the result of a growing body of research focused on the impact of palliative care for patients with cancer at all stages of disease, including those receiving curative-intent treatments.

The following discussion reviews the current guidelines for integrating palliative care into standard oncology care as published by several national oncology organizations and professional societies, and summarizes some of the key evidence on which the current guidelines are based. Barriers to integration of palliative care into usual cancer care are noted, as well efforts needed to address these barriers. In addition, recommendations for integrating palliative care into oncology are made with a specific note of needs for surgical oncology patients.

## **PROFESSIONAL ORGANIZATIONS ADDRESS NEED FOR PALLIATIVE CARE IN PATIENTS WITH CANCER**

### ***American Society of Clinical Oncology***

---

The American Society of Clinical Oncology (ASCO) first broached the topic of palliative care for oncology patients by focusing on patients at end of life. In their article entitled "Cancer Care During the Last Phase of Life," the investigators advocated for hospice as an excellent model for managing end-of-life care and thought this required access to state-of-the-art palliative care provided by skilled clinicians, with palliative care experts, as needed.<sup>3</sup> The synonymous usage of hospice and palliative care continued by ASCO (and most other professional medical organizations) for almost a decade before a distinction between end-of-life care and palliative care was significantly appreciated. The false equivalence of these 2 related but distinct forms of medical care was responsible, in part, for delayed integration of palliative care with oncology care. It was not until 2009 that ASCO formally introduced the concept of integrating palliative care throughout the course of cancer care.<sup>4</sup> In 2012, ASCO published a provisional clinical opinion on the integration of palliative care in oncology based on a review of the available clinical trials that, for the first time, provided strong evidence to support concurrent palliative care with standard oncology care.<sup>5</sup> A clinical practice guideline update was published in 2016 based on updated systematic reviews, randomized clinical trials, and metaanalyses.<sup>6</sup> The investigators sought to answer the question of whether palliative care concurrent with oncology care should be standard practice. Their summary recommendation was, "Patients with advanced cancer, whether in-patient or outpatient, should receive dedicated palliative care services, early in the disease course, concurrent with active treatment. Referring patients to interdisciplinary palliative care teams is optimal, and services may complement existing programs."<sup>6</sup>

### ***Society of Surgical Oncology***

---

The Society of Surgical Oncology (SSO), as part of the American Federation of Clinical Oncologic Societies, first endorsed palliative and supportive care as a component of quality cancer care in 1998.<sup>7</sup> As part of this consensus statement, the sponsoring societies agreed that “Supportive care services and effective symptom management are essential to promoting the quality of life for people diagnosed with cancer. Patients must have access to these services and therapies as part of their comprehensive cancer care.”<sup>7</sup> Since this initial statement, the SSO has not provided any further statements on the role of palliative care in oncology. In a recent editorial by Brian Badgwell,<sup>8</sup> he surmises that the lack of further guidance from the SSO reflects an understanding that SSO guidance fits under the ASCO statement. In the absence of any explicit statements on the integration of palliative care for surgical oncology patients, the SSO’s intent on this topic can only be inferred.

### ***Institute of Medicine***

---

The Institute of Medicine (IOM) has published several statements about the role of palliative care as a component of comprehensive cancer care, beginning in 1997. Similar to ASCO, the early focus of these statements was on end-of-life care.<sup>9</sup> Two years later, the IOM published another report *Ensuring Quality Cancer Care*, in which they recommended that guidelines based on the best available evidence be developed for (cancer) prevention, diagnosis, treatment, and palliative care.<sup>10</sup> The significance of including palliative care along with other standard aspects of cancer care cannot be overemphasized, because this guideline was among the first to emphasize the need to integrate palliative care into standard cancer care. In 2001, the IOM published *Improving Palliative Care for Cancer*, in which the investigators made 10 recommendations on various aspects of palliative care in oncology, which included development of a core set of cancer quality measures as they pertain to palliative care, requirements for recognition of a comprehensive cancer center, ensuring access to information about palliative care through various patient-oriented organizations, and the need for research in palliative care.<sup>11</sup> Since this 2001 publication, the National Academies of Science, Engineering, and Medicine has published numerous other proceedings and consensus reports about the importance of, and guidelines for, integrating palliative care into cancer care for both children and adults.<sup>12</sup>

### ***American College of Surgeons, Commission on Cancer***

---

The Commission on Cancer (CoC) was established by the American College of Surgeons (ACS) in 1922 to establish standards to ensure quality, comprehensive cancer care. The palliative care Standard 2.4 was introduced in 2012, with CoC-accredited centers required to meet this standard by 2015.<sup>13</sup> This standard was part of new patient-centered functions and quality measurement and outcomes. Standard 2.4 required CoC-accredited centers to have palliative care services available to patients either on site or by referral. The availability of palliative care services was identified as an essential component of cancer care, beginning at the diagnosis and being continuously available throughout treatment, surveillance, and, when applicable, during bereavement. The palliative care standard was updated in 2016 to include emphasis that palliative care was not simply hospice care, again reinforcing the role of introducing palliative care services from the time of diagnosis and not only at end of life.<sup>14</sup> The CoC 2020 standards continue to include a palliative care standard (now Standard 4.5); it includes a requirement that programs evaluate palliative care use, criteria for referral, and areas for improvement.<sup>15</sup>

### ***National Comprehensive Cancer Network***

The National Comprehensive Cancer Network (NCCN) first published guidelines on the integration of palliative care into cancer care in 2003.<sup>16</sup> Since then, the guidelines have been updated and expanded on an annual basis. The most current NCCN palliative care guidelines include several standards of palliative care,<sup>17</sup> including:

- Institutions should develop processes for integrating palliative care into cancer care, both as part of usual oncology care and for patients with specialty palliative care needs.
- All patients with cancer should be screened for palliative care needs after initial visit, at appropriate intervals, and as clinically indicated.
- Patients/family/caregivers should be informed that palliative care is an integral part of their comprehensive cancer care.

In addition, the current guidelines contain a robust set of recommendations on topics ranging from indications for palliative care specialist consultation to management of several common symptoms (eg, pain, dyspnea, constipation) to advance care planning to palliative sedation. A detailed review of all palliative care–related guidelines contained within the most recent version of the NCCN guidelines is beyond the scope of this article. As with all NCCN guidelines, they are a statement of evidence and consensus of the investigators regarding their views of currently accepted approaches to treatment. Notably absent from the current guidelines is representation of a surgical oncologist on the NCCN palliative care panel or any specific guidance regarding selection of patients for palliative surgical intervention.

### **WHAT IS THE EVIDENCE FOR INTEGRATING PALLIATIVE CARE INTO CANCER CARE?**

As outlined earlier, the earliest discussions about the role of palliative care in patients with cancer focused on patients at end of life, specifically when cancer treatment was no longer provided. One of the earliest studies to examine the impact of palliative care in patients with terminal cancer was published by Higginson and McCarthy<sup>18</sup> in 1989. The investigators examined changes in symptoms of 86 patients referred to a terminal care support team and found significant improvements in pain after 1 week of care, with further improvement into the week of death. Several studies have subsequently been published that examined the impact of palliative care on patients with cancer who received palliative care services in various settings (inpatient, home based). Most of these early studies prospectively studied patients who received various palliative care interventions. Most, but not all, studies found an improvement in pain and nonpain symptoms, overall quality of life, and mood in patients following receipt of the palliative care intervention.

Coincident with the increased focus on earlier introduction of palliative care in the late 2000s came the introduction of clinical trials designed to assess the impact of providing palliative care concurrent with cancer care. Integrated or early palliative care are the terms most often used to describe the simultaneous provision of palliative care with cancer-directed therapies. The seminal randomized clinical trial evaluating the impact of integrated palliative care was published by Temel and colleagues<sup>19</sup> in 2010. The investigators randomized patients with newly diagnosed metastatic non–small-cell lung cancer (NSCLC) to palliative care integrated with standard oncologic care or standard oncologic care alone. The primary outcome was change in quality of life at 12 weeks. Patients assigned to early palliative care had better quality of life and fewer patients had depressive symptoms. Since this landmark study, numerous studies have been performed to evaluate the impact of palliative care in patients

with cancer. These studies have varied by tumor type, stage of disease, and receipt of cancer therapies. Studies have also varied in the specific palliative care interventions provided; some have focused on symptom control, whereas others have addressed quality of life and mood. The setting for provision of palliative care also varies between inpatient, clinic-based, and home-based care. A summary of several key studies on the impact of palliative care on symptoms, quality of life, mood, and other patient-reported outcomes is provided in **Table 1**.

### ***Patient-Reported Outcomes, Symptoms***

---

Pain and nonpain symptoms have reportedly been improved with involvement of palliative care in most of the studies published.<sup>18,20–22,24–28,30,33</sup> Of the studies that did not show an improvement in symptoms in the palliative care intervention group, 1 group hypothesized that there may be little room for improvement when low symptom intensity scores are reported in a given symptom domain.<sup>25</sup> Given the heterogeneity of patients with cancer included in the studies, it is also possible that this variability reflects tumor-related differences in various symptom domains. For example, dyspnea may be a significant symptom for patients with lung cancer but a less prominent symptom for patients with gastrointestinal malignancies. The effect of palliative care intervention for any 1 domain may be obscured by the number of patients with a given tumor represented in the overall patient population studied. The method by which symptoms are assessed also varied by study. In most studies, the Edmonton Symptom Assessment System was the standardized instrument used. However, this was not uniformly used, which may have contributed to the lack of benefit seen in the palliative care intervention arm and at least 2 of the studies.<sup>33,35</sup>

A summary of the effect of palliative care intervention on various individual symptoms is provided in **Table 1**. Pain was the most common symptom assessed in most studies. Patients who received the palliative care intervention had improvement in pain in 7 of the studies reviewed.<sup>18,20–22,24,26,27</sup> The impact of palliative care on several gastrointestinal symptoms, including nausea, anorexia, constipation, and diarrhea, has been reported in multiple studies. Overall, patients receiving palliative care reported an improvement in these symptoms.<sup>20–22,24,26,33</sup> Patients who received palliative care have also shown an improvement in insomnia<sup>20,24,26</sup> and fatigue.<sup>24,26,27</sup> Improvement in dyspnea with palliative care has been less consistent. Two studies found no change in dyspnea scores after the introduction of palliative care,<sup>18,24</sup> whereas other investigators reported improvement<sup>26</sup> or initial improvement followed by worsening in the last days of life.<sup>22</sup> These findings show the complex trajectory and challenges in management of some symptoms experienced by patients with cancer, particularly in the final days of life.

### ***Quality of Life***

---

In addition to symptoms, quality of life is one of the other most commonly assessed domains in the integrated palliative care literature. The most common instrument used is the European Organisation for Research and Treatment of Cancer Quality of Life (EORTC-QLQ) C-30.<sup>38</sup> The generic questionnaire originally developed in 1988 now has 19 specific modules. **Table 1** includes a summary of several key studies that have assessed the impact of palliative care on quality of life in patients with cancer. Of the 14 studies cited, 10 showed a significant improvement in quality of life among patients who received the palliative care intervention. Although improvements in symptom control generally correlated with improvements in overall quality of life, at least 2 studies showed an improvement in quality of life despite a lack of significant impact of palliative care on symptoms.<sup>25,31</sup> Differences in assessment tools used to

**Table 1**  
Impact of palliative care on symptoms, quality of life, and mood

	Care Setting	Study Design	Symptom	QoL	Mood	Other
Higginson & McCarthy, <sup>18</sup> 1989	Hospital and home PCT	N = 86 Retrospective review	↓ Pain No change in dyspnea	—	—	—
Ellershaw et al, <sup>20</sup> 1995	Hospital PCT	N = 125 Prospective study	↑ Control multiple symptoms	—	—	↑ Diagnostic and prognostic understanding
Peruselli et al, <sup>21</sup> 1997	Home PCT	N = 73 Prospective study	↓ Pain ↑ Appetite ↓ Nausea	—	Improved	—
Mercadante et al, <sup>22</sup> 2000	Home PCT	N = 373 Prospective study	↓ Pain ↓ Nausea/vomiting ↓ Diarrhea Initial ↓ dyspnea and constipation	—	—	—
Jordhøy et al, <sup>23</sup> 2001	Cooperation between palliative medicine unit and community service	N = 235 intervention N = 199 controls Cluster randomized trial	—	No difference	—	—
Strömberg et al, <sup>24</sup> 2005	Referrals to PC department	N = 201 Longitudinal assessment	↓ Pain ↓ Anorexia ↓ Nausea/vomiting ↓ Fatigue ↓ Insomnia ↓ Constipation No change in dyspnea	↑	No change in depression ↓ Anxiety	—
Bakitas et al, <sup>25</sup> 2009	Telephone sessions	N = 161 intervention N = 161 usual care RCT	↓ Symptom intensity (trend)	↑	↓ Depression	—

Follwell et al, <sup>26</sup> 2009	Oncology PC clinic	N = 150 Prospective study	↓ Pain ↓ Fatigue ↓ Nausea ↓ Anorexia ↓ Insomnia ↓ Dyspnea ↓ Constipation	—	↓ Distress ↓ Depression ↓ Anxiety	—
Temel et al, <sup>19</sup> 2010	Outpatient PC	N = 151 Randomized trial	—	↑	↓ Depression	—
Bischoff et al, <sup>27</sup> 2013	Outpatient PC comanagement	N = 266 Observational study	↓ Pain ↓ Fatigue No change in nausea	↑	↓ Depression ↓ Anxiety	↑ Spiritual well-being
Zimmermann et al, <sup>28</sup> 2014	Outpatient PC	N = 228 intervention N = 233 control	Improvement in multiple symptoms at 4 mo.	↑	—	↑ Spiritual well-being
Bakitas et al, <sup>29</sup> 2015	PC telehealth	N = 307 Random assignment of early vs late PC	No difference	No difference	↓ Depression in early PC	—
Ferrell et al, <sup>30</sup> 2015	Outpatient PC	N = 491 Prospective, serial accrual of usual care followed by intervention group	Improvement in symptoms	↑	↓ Psychological distress	↑ Spiritual well-being
Grudzen et al, <sup>31</sup> 2016	Inpatient PC after emergency department referral	N = 69 PC N = 67 usual care RCT	No difference	↑	No difference in depression	—
Maltoni et al, <sup>32</sup> 2016	Outpatient PC	N = 107 systematic PC N = 107 on demand PC Multicenter randomized trial	—	↑	No difference	—

(continued on next page)

**Table 1**  
**(continued)**

	Care Setting	Study Design	Symptom	QoL	Mood	Other
Groenvold et al, <sup>33</sup> 2017	Outpatient PC	N = 145 PC N = 152 standard care Multicenter randomized trial	No effect on primary need Possible ↓ in nausea/vomiting	—	—	—
Temel et al, <sup>34</sup> 2017	Outpatient PC	N = 175 integrated PC N = 175 usual care Random assignment	—	↑	↓ Depression	—
Johnsen et al, <sup>35</sup> 2020	Outpatient PC	N = 145 integrated PC N = 152 standard care Multicenter randomized trial	No effect on symptoms	No effect	No effect on anxiety or depression	—
Slama et al, <sup>36</sup> 2020	Outpatient PC	N = 60 integrated PC N = 66 standard care RCT	—	No difference	No difference in depression or anxiety	—
Vanbutsele et al, <sup>37</sup> 2020	Outpatient PC	N = 186 Random assignment	—	↑	—	—

**Abbreviations:** PC, palliative care; PCT, palliative care team; QoL, quality of life; RCT, randomized control trial.



measure quality of life, timing of the palliative care intervention, and definitions of what constitutes significant improvement may contribute to the variable relationship between symptom control and quality of life.

### **Mood**

---

The impact of palliative care on mood in patients with cancer was reviewed in 13 studies. Unlike assessments of symptoms and quality of life, the instrument used to assess changes in mood with palliative care interventions is less uniform. Depression and anxiety are domains assessed as part of the Edmonton Symptom Assessment System. Emotional function is a domain of the EORTC-QLQ-C30. The other commonly used instrument to assess mood is the Hospital Anxiety and Depression Scale (HADS). Despite these differences in measurements of mood in patients who received palliative care, 9 of the studies reviewed showed an improvement in depression and/or anxiety among patients who received the palliative care intervention. One of the studies that used the HADS instrument found a decreasing trend in emotional distress and anxiety after 2 months of their palliative care intervention; however, the differences did not reach statistical significance and may be attributed to multiple factors, including the short duration of the palliative care intervention.<sup>35</sup>

### **Spiritual Well-Being**

---

A limited number of studies have assessed the impact of palliative care intervention on spiritual well-being (see [Table 1](#)). The most widely used instrument is the Functional Assessment of Chronic Illness Therapy-Spiritual Well-Being (FACIT-Sp 12).<sup>39</sup> Bischoff and colleagues,<sup>27</sup> Zimmermann and colleagues,<sup>28</sup> and Ferrell and colleagues<sup>30</sup> found an improvement in spiritual well-being as measured by the FACIT-Sp 12 in patients with cancer who received outpatient palliative care. The details of how the palliative care providers addressed spiritual concerns is unclear. The spiritual needs of patients with cancer as part of a palliative care intervention is a largely untapped area of research.

## **OTHER OUTCOMES OF INTEGRATED PALLIATIVE CARE IN CANCER**

The beneficial impact of palliative care integration with usual cancer care on pain and nonpain symptoms, quality of life, and mood has been largely, if not uniformly, confirmed by the results of the studies to date. Although not a defined palliative care domain, there has been significant interest in the impact of palliative care on resource use, particularly at end of life (eg, intensive care unit admissions, emergency department visits, hospice enrollment). The interest in this area stems from a desire to ensure that patient preferences for care are elicited and respected, particularly in patients at the most advanced stage of cancer when the burden of further cancer-directed therapy is likely highest and the benefits in terms of symptoms, quality of life, and mood are likely to be lowest. Integrated palliative care has been shown to enhance communication between patients and their providers about end-of-life preferences in patients with newly diagnosed lung and noncolorectal gastrointestinal cancers.<sup>34</sup> Patients with clear understanding of their prognoses who are able to articulate their preferences are more likely to receive care that matches their preferences (eg, intensive care, life support, symptom-focused care).<sup>40</sup> In addition, when patients with advanced cancer were able to discuss their wishes for end-of-life care with their physicians, they were less likely to receive mechanical ventilation, resuscitation, and intensive care unit admission compared with patients who did not have these

discussions.<sup>41</sup> Importantly, these discussions were not associated with higher rates of major depressive disorder.

**Table 2** summarizes the findings from 11 trials that examined the impact of a palliative care intervention on health care resource use. Three studies found that patients who received palliative care were more likely to die at home or in a nonacute facility,<sup>42,45,46</sup> whereas 2 studies did not show a difference in place of death in patients who received palliative care.<sup>32,37</sup> Data on the impact of palliative care on either the number of hospitalizations or duration of hospitalizations are mixed; 3 studies found a decrease, whereas 6 showed no difference in hospitalizations. Similarly, palliative care had a variable impact on hospice use; 3 studies did not show a difference in hospice use,<sup>30,31,37</sup> whereas another study did show an increase in hospice enrollment.<sup>32</sup> The timing of palliative care intervention has not been shown to affect resource use. A recent randomized controlled trial of patients who received palliative care early (on study enrollment) versus delayed (after 3 months) did not differ in any of the domains of resource use, including hospital days, intensive care unit days, or emergency department visits.<sup>29</sup>

Lastly, a limited number of studies have examined the impact of palliative care integration on survival. This area of investigation likely resulted from concerns that palliative care would result in reduced survival as patients and/or their caregivers elected for symptom-focused care rather than cancer-directed care. The landmark article by Temel and colleagues<sup>19</sup> found a 2.7-month increase in median survival with concurrent palliative care and standard cancer care in patients with metastatic NSCLC. In contrast, 1 year before this study was published, a randomized controlled trial by Bakitas and colleagues<sup>25</sup> did not find a difference in survival between the palliative care intervention and standard care groups. Interestingly, a follow-up study by the same group of early versus delayed palliative care found a 15% increase in 1-year survival in the group who received early palliative care compared with those who received palliative care 3 months later.<sup>29</sup> Two additional studies failed to show an improvement in survival with palliative care,<sup>32,33</sup> whereas 1 additional study did report a statistically nonsignificant doubling in median survival (132 days in the control group vs 289 days) in the palliative care intervention group.<sup>31</sup> Interpretation of the impact of integrated palliative care on survival is limited by numerous variables, including the setting in which palliative care is provided (outpatient vs inpatient) and estimated life expectancy based on tumor-related factors.

## BARRIERS TO INTEGRATION OF PALLIATIVE CARE

Although much progress has been made toward earlier integration of palliative care into routine oncology care, significant barriers remain. A recent comprehensive overview on the integration of oncology and palliative care was published by the Lancet Oncology Commission.<sup>47</sup> In this overview, the investigators outline several barriers to integrating palliative care into oncology. They specifically mention the common misperception that palliative care is synonymous with end-of-life care, lack of perceived need by oncology providers for palliative care as an integral part of the cancer care continuum, inadequate access to palliative care specialists, lack of information regarding the cost and benefits of palliative care, and inadequate training by oncologists in primary palliative care. This last barrier highlights the need for competency in primary palliative care. In contrast with subspecialty palliative care, this refers to the ability of all cancer providers to have a basic proficiency in key palliative care domains.<sup>48</sup> The core competencies in surgical palliative care were outlined by Dr Geoffrey Dunn<sup>49</sup> in 2009. All surgeons are expected to be able to:

**Table 2**  
Impact of palliative care on resource use

	Care Setting	Study Design	Location of Death	Hospitalization	Aggressiveness of Care	Hospice Use
Jordhøy et al, <sup>42</sup> 2000	Cooperation between palliative medicine unit and community service	N = 235 intervention N = 199 controls Cluster randomized trial	↑ Home	No difference	—	—
Costantini et al, <sup>43</sup> 2003	Palliative home care team	N = 189 PC, N = 378 control Quasiexperimental design	—	↓ Percentage of hospital days vs usual care	—	—
Miccinesi et al, <sup>44</sup> 2003	Home PC	N = 315 Retrospective review	—	↓ Hospitalizations ↓ days	—	—
Back et al, <sup>45</sup> 2005	PC service through Veterans' Administration	N = 82 PC N = 183 no PC Retrospective nonrandomized	↓ Death in acute care setting	—	↑ Chemotherapy in last 60 d of life	—
Bakitas et al, <sup>25</sup> 2009	Telephone sessions	N = 161 intervention N = 161 usual care RCT	—	No difference in # of hospital days, ICU admissions, or emergency department visits	—	—
Bakitas et al, <sup>29</sup> 2015	PC telehealth	N = 307 Random assignment of early vs late PC	No difference	No difference in hospital days, ICU days, emergency room visits	No difference in chemotherapy in last 14 d of life	—
Ferrell et al, <sup>30</sup> 2015	Outpatient PC	N = 491 Prospective, serial accrual of usual care followed by intervention group	—	No difference in unscheduled admissions	No difference in chemotherapy in the last 2 wk of life	No difference in hospice referral

(continued on next page)

**Table 2**  
(continued)

	Care Setting	Study Design	Location of Death	Hospitalization	Aggressiveness of Care	Hospice Use
Grudzen et al, <sup>31</sup> 2016	Inpatient PC after emergency department referral	N = 69 PC N = 67 usual care RCT	—	No difference in hospital or ICU days	↓ Chemotherapy in the last 30 d of life	No difference hospice enrollment
Maltoni et al, <sup>32</sup> 2016	Outpatient PC	N = 107 systematic PC N = 107 on demand PC Multicenter randomized trial	No difference	No difference in hospitalizations or emergency department visits	↓ Chemotherapy at end of life	↑ hospice use
Merchant et al, <sup>46</sup> 2018	Receipt of any PC services within 2 y of death	N = 24,241 received PC N = 10,389 no PC Retrospective analysis	↓ In-hospital death	↓ Hospitalization, ICU admissions, and emergency department visits	↓ Chemotherapy in last 30 d of life	—
Vanbutsele et al, <sup>37</sup> 2020	Outpatient PC	N = 91 integrated PC N = 94 usual care Random assignment	No difference	No difference	No difference in chemotherapy in last 30 d of life	No difference

Abbreviation: ICU, intensive care unit.

- Assess and treat pain and other symptoms
- Communicate effectively and compassionately bad news and poor prognoses
- Conduct a patient and family meeting regarding advanced directives and end-of-life decisions
- Perform palliative procedures competently and with sound judgment to meet patient goals of care
- Exercise sound clinical judgment and skill in the withdrawal and withholding of life support

Breaking down these remaining barriers to palliative care integration will depend on ongoing educational and research efforts. Some of the current guidelines for integrating palliative care into routine cancer care were formulated without the benefit of rigorous research, in contrast with the clinical trials routinely performed in other aspects of cancer care. Although National Institutes of Health (NIH) funding for palliative medicine investigators and the proportion of palliative medicine research funded by the NIH has increased in recent years, grants related to palliative care represented only 0.2% of all NIH research awards during the most recent time period studied.<sup>50</sup>

In addition to the barriers to integrating palliative care noted earlier, there exist unique challenges for surgical oncology patients. Suwanabol and colleagues<sup>51</sup> recently studied surgeon-perceived barriers to palliative care in patients with stage IV colorectal cancer. They reported that 76% of respondents had received no formal education in palliative care, highlighting the need for specific training in primary palliative care competencies. Surgeons also noted communication, difficulty in prognostication, and systemic issues related to culture and lack of appropriate resources as additional barriers to palliative care integration. The absence of expressed guidelines for integrating palliative care into surgical oncology by national surgical societies and lack of surgeon representation on expert panels tasked with providing guidelines on palliative care in oncology further hinder effective provision of palliative care services to surgical oncology patients.

## SUMMARY AND RECOMMENDATIONS

Palliative care is now recognized as an essential component of cancer care. The road to this point has included several significant challenges, including an understanding of the distinction between palliative care and hospice and a lack of high-quality studies and clinical trials showing the beneficial effects of integrated palliative care. Although these challenges have been significantly addressed, several key questions remain: (1) what is the optimal model of delivery? (2) When is the ideal time to refer? (3) Which patients are in greatest need of a referral? (4) How much palliative care should oncologists themselves be providing?

While data from future studies that will address these questions are awaited, the following recommendations regarding integrated palliative care are appropriate for all oncology providers:

- All patients should be screened for palliative care needs at the time of diagnosis and at regular intervals
- Providers are expected to be able to provide primary palliative care
- Referral to subspecialty palliative medical providers should be provided for complex symptom management, severe emotional or psychosocial distress, spiritual or existential crisis, assistance with complex medical decision making, and on patient or caregiver request

- Education regarding the benefits of integrated palliative care with routine oncology care should be a component of training programs for all oncology providers

Given the unique issues associated with palliative surgical interventions (eg, procedural morbidity and mortality, impact of postoperative recovery on future cancer treatment), surgical societies that specialize in the care of patients with cancer are strongly advised to develop surgery-specific guidelines for integrating palliative care into routine surgical oncology care. Potential integration models may be needs based, prognosis based, or trigger based. A needs-based model would result in palliative care subspecialty consultation for patients with complex or difficult symptoms or needs. Prognosis-based palliative care referral is considered for patients with limited life expectancy, incurable cancer, and/or those with progressive disease despite treatment. Trigger-based palliative care relies on defined criteria to initiate palliative care consultation; these criteria typically use disease-based and prognosis-based triggers for referral, plus screening of unmet needs. The specific model used for integrating palliative care is likely to vary depending on unique characteristics of the population of patients with cancer, access to subspecialty palliative care services, and institutional resources. Regardless of the model used, oncology providers must commit to ensuring the palliative care services are available to their patients from diagnosis through end of life. Quality cancer care requires access and administration of palliative care concurrent with standard cancer care.

### CLINICS CARE POINTS

- All patients with cancer, particularly those with advanced cancer, should be screened for palliative care needs at the time of diagnosis and throughout the course of cancer treatment, as well as when cancer-directed therapies are no longer provided.
- Palliative care should not be reserved for end-of-life care only.
- Cancer providers need to be aware of the pain and nonpain symptoms commonly experienced by patients with cancer and develop the knowledge and skills needed to address these needs through development of primary palliative care competency.
- Patients and their family members should be referred for subspecialty palliative care for complex symptom management, severe emotional or psychosocial distress, spiritual or existential crisis, assistance with complex medical decision making, and on patient or caregiver request.

### DISCLOSURE

The author has no relevant financial interests to disclose.

### REFERENCES

1. World Health Organization. Palliative care key facts. Available at: <https://www.who.int/news-room/fact-sheets/detail/palliative-care>. Accessed September 26, 2020.
2. National Consensus Project for Quality Palliative Care. Clinical practice guidelines for quality palliative care. 4th edition. Richmond (VA): National Coalition for Hospice and Palliative Care; 2018. Available at: <https://www.nationalcoalitionhpc.org/ncp>.

3. American Society of Clinical Oncology. Cancer care during the last phase of life. *J Clin Oncol* 1998;16:1986–96.
4. Ferris FD, Bruera E, Cherny N, et al. Palliative cancer care a decade later: accomplishments, the need, next steps—From the American Society of Clinical Oncology. *J Clin Oncol* 2009;27:3052–8.
5. Smith TJ, Temin S, Alesi ER, et al. American Society of Clinical Oncology provisional clinical opinion: the integration of palliative care into standard oncology care. *J Clin Oncol* 2012;30:880–7.
6. Ferrell BR, Temel JS, Temin S, et al. Integration of palliative care into standard oncology care: American Society of Clinical Oncology clinical practice guideline update. *J Clin Oncol* 2017;35:96–112.
7. Edwards MJ. Access to quality cancer care: consensus statement of the American Federation of Clinical Oncologic Societies. *Ann Surg Oncol* 1998;5:657–9.
8. Badgwell B. Will palliative care ever be cool? *Ann Surg Oncol* 2018;25:1799–800.
9. Field MJ, Cassel CK, editors. Institute of medicine: approaching death: improving care at the end of life. Washington, DC: National Academies Press; 1997.
10. Hewitt ME, Simone JV, National Cancer Policy Board (U.S.), editors. Ensuring quality cancer care. Washington, DC: National Academy Press; 1999.
11. National Research Council. Improving palliative care for cancer: summary and recommendations. Washington, DC: The National Academies Press; 2001.
12. National Academies of Sciences, Engineering and Medicine. Available at: <https://www.nap.edu>. Accessed September 26, 2020.
13. Commission on Cancer. cancer program standards 2012: ensuring patient-centered care. Available at: <https://www.facs.org/~media/files/quality%20programs/cancer/coc/programstandards2012.ashx>. Accessed September 26, 2020.
14. Commission on Cancer. Cancer program standards 2016: ensuring patient-centered care. Available at: [https://www.facs.org/~media/files/quality%20programs/cancer/coc/2016%20coc%20standards%20manual\\_interactive%20pdf.ashx](https://www.facs.org/~media/files/quality%20programs/cancer/coc/2016%20coc%20standards%20manual_interactive%20pdf.ashx). Accessed September 26, 2020.
15. Commission on Cancer. Cancer program standards 2020: optimal resources for cancer care. Available at: [https://www.facs.org/-/media/files/quality-programs/cancer/coc/optimal\\_resources\\_for\\_cancer\\_care\\_2020\\_standards.ashx](https://www.facs.org/-/media/files/quality-programs/cancer/coc/optimal_resources_for_cancer_care_2020_standards.ashx). Accessed September 26, 2020.
16. National Comprehensive Cancer Network. Palliative care clinical practice guidelines in oncology. *J Natl Compr Canc Netw* 2003;1:394.
17. National Comprehensive Cancer Network. Palliative care clinical practice guidelines in oncology. Available at: [https://www.nccn.org/professionals/physician\\_gls/pdf/palliative.pdf](https://www.nccn.org/professionals/physician_gls/pdf/palliative.pdf). Accessed September 26, 2020.
18. Higginson I, McCarthy M. Measuring symptoms in terminal cancer: are pain and dyspnoea controlled? *J R Soc Med* 1989;82:264–7.
19. Temel JS, Greer JA, Muzikansky A, et al. Early palliative care for patients with metastatic non-small-cell lung cancer. *N Engl J Med* 2010;363:733–42.
20. Ellershaw JE, Peat SJ, Boys LC. Assessing the effectiveness of a hospital palliative care team. *Palliat Med* 1995;9:145–52.
21. Peruselli C, Paci E, Franceschi P, et al. Outcome evaluation in a home palliative care service. *J Pain Symptom Manage* 1997;13:158–65.
22. Mercadante S, Fulfaro F, Casuccio A. The impact of home palliative care on symptoms in advanced cancer patients. *Support Care Cancer* 2000;8:307–10.
23. Jordhøy MS, Fayers P, Loge JH, et al. Quality of life in palliative cancer care: results from a cluster randomized trial. *J Clin Oncol* 2001;19:3884–94.

24. Strömberg AS, Sjogren P, Goldschmidt D, et al. A longitudinal study of palliative care: patient-evaluated outcome and impact of attrition. *Cancer* 2005;103:1747–55.
25. Bakitas M, Lyons KD, Hegel MT, et al. Effects of a palliative care intervention on clinical outcomes in patients with advanced cancer: the Project ENABLE II randomized controlled trial. *JAMA* 2009;302:741–9.
26. Follwell M, Burman D, Le LW, et al. Phase II study of an outpatient palliative care intervention in patients with metastatic cancer. *J Clin Oncol* 2009;27:206–13.
27. Bischoff K, Weinberg V, Rabow MW. Palliative and oncologic co-management: symptom management for outpatients with cancer. *Support Care Cancer* 2013;21:3031–7.
28. Zimmermann C, Swami N, Krzyzanowska M, et al. Early palliative care for patients with advanced cancer: a cluster-randomised controlled trial. *Lancet* 2014;383:1721–30.
29. 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;33:1438–45.
30. Ferrell B, Sun V, Hurria A, et al. Interdisciplinary palliative care for patients with lung cancer. *J Pain Symptom Manage* 2015;50:758–67.
31. Grudzen CR, Richardson LD, Johnson PN, et al. Emergency department-initiated palliative care in advanced cancer: a randomized clinical trial. *JAMA Oncol* 2016;2:591–8.
32. Maltoni M, Scarpi E, Dall'Agata M, et al. Systematic versus on-demand early palliative care: results from a multicentre, randomised clinical trial. *Eur J Cancer* 2016;65:61–8.
33. Groenvold M, Petersen MA, Damkier A, et al. Randomised clinical trial of early specialist palliative care plus standard care versus standard care alone in patients with advanced cancer: The Danish Palliative Care Trial. *Palliat Med* 2017;31:814–24.
34. Temel JS, Greer JA, El-Jawahri A, et al. Effects of early integrated palliative care in patients with lung and GI cancer: a randomized clinical trial. *J Clin Oncol* 2017;35:834–41.
35. Johnsen AT, Petersen MA, Sjogren P, et al. Exploratory analyses of the Danish Palliative Care Trial (DanPaCT): a randomized trial of early specialized palliative care plus standard care versus standard care in advanced cancer patients. *Support Care Cancer* 2020;28:2145–55.
36. Slama O, Pochop L, Sedo J, et al. Effects of early and systematic integration of specialist palliative care in patients with advanced cancer: randomized controlled trial PALINT. *J Palliat Med* 2020;23(12):1586–93.
37. Vanbutsele G, Van Belle S, Surmont V, et al. The effect of early and systematic integration of palliative care in oncology on quality of life and health care use near the end of life: a randomised controlled trial. *Eur J Cancer* 2020;124:186–93.
38. European Organisation for Research Treatment of Cancer. Quality of Life Cancer Patients. Available at: <https://qol.eortc.org>. Accessed September 26, 2020.
39. Peterman AH, Fitchett G, Brady MJ, et al. Measuring spiritual well-being in people with cancer: the functional assessment of chronic illness therapy–Spiritual Well-being Scale (FACIT-Sp). *Ann Behav Med* 2002;24:49–58.
40. Mack JW, Weeks JC, Wright AA, et al. End-of-life discussions, goal attainment, and distress at the end of life: predictors and outcomes of receipt of care consistent with preferences. *J Clin Oncol* 2010;28:1203–8.



41. Wright AA, Zhang B, Ray A, et al. Associations between end-of-life discussions, patient mental health, medical care near death, and caregiver bereavement adjustment. *JAMA* 2008;300:1665–73.
42. Jordhøy MS, Fayers P, Saltnes T, et al. A palliative-care intervention and death at home: a cluster randomised trial. *Lancet* 2000;356:888–93.
43. Costantini M, Higginson IJ, Boni L, et al. Effect of a palliative home care team on hospital admissions among patients with advanced cancer. *Palliat Med* 2003;17:315–21.
44. Miccinesi G, Crocetti E, Morino P, et al. Palliative home care reduces time spent in hospital wards: a population-based study in the Tuscany Region, Italy. *Cancer Causes Control* 2003;14:971–7.
45. Back AL, Li Y-F, Sales AE. Impact of palliative care case management on resource use by patients dying of cancer at a Veterans Affairs medical center. *J Palliat Med* 2005;8:26–35.
46. Merchant SJ, Brogly SB, Goldie C, et al. Palliative care is associated with reduced aggressive end-of-life care in patients with gastrointestinal cancer. *Ann Surg Oncol* 2018;25:1478–87.
47. Kaasa S, Loge JH, Aapro M, et al. Integration of oncology and palliative care: a Lancet Oncology Commission. *Lancet Oncol* 2018;19:e588–653.
48. von Gunten CF. Secondary and tertiary palliative care in US hospitals. *JAMA* 2002;287:875–81.
49. Dunn GP. Principles and core competencies of surgical palliative care: an overview. *Otolaryngol Clin North Am* 2009;42:1–13.
50. Brown E, Morrison RS, Gelfman LP. An update: NIH research funding for palliative medicine, 2011-2015. *J Palliat Med* 2018;21:182–7.
51. Suwanabol PA, Reichstein AC, Suzer-Gurtekin ZT, et al. Surgeons' perceived barriers to palliative and end-of-life care: a mixed methods study of a surgical society. *J Palliat Med* 2018;21:780–8.