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Oncology and Palliative Medicine: Providing Comprehensive Care for Patients With Cancer

Laura Finn, MD,[1] Alva Roche Green, MD,[2] Sonia Malhotra, MD[3,4]

[1]Division of Hematology and Bone Marrow Transplant, Department of Internal Medicine, Ochsner Clinic Foundation, New Orleans, LA [2]Division of Palliative Medicine, Department of Family Medicine, Mayo Clinic, Jacksonville, FL [3]Section of Palliative Medicine, Department of Pulmonary and Critical Care, Ochsner Clinic Foundation, New Orleans, LA [4]The University of Queensland School of Medicine, Ochsner Clinical School, New Orleans, LA

Background: Despite the evidence for the fundamental need for palliative medicine services in the practice of oncology, integration of these medical specialties remains a clinical challenge.

Methods: We reviewed the current literature regarding the practice of palliative medicine in the field of oncology, examining randomized clinical trials of palliative medicine services in advanced cancer, models of palliative medicine delivery, studies of cost effectiveness, and national palliative medicine practice and referral guidelines. In this review, we describe the role of palliative medicine in oncology, including the timing of palliative medicine consultation, models of care delivery, and improvements in patient outcomes.

Results: Randomized controlled trials and national guidelines support early referral of patients with cancer to palliative medicine. Palliative medicine has a fundamental role in symptom management, distress relief, family and caregiver support, and advance care planning. Integration of palliative medicine in oncology improves patient outcomes and decreases healthcare costs. Early involvement of palliative medicine after the cancer diagnosis is supported by national guidelines, but barriers include variable referral patterns among oncologists and the need for an expanded palliative medicine workforce.

Conclusion: Palliative medicine has a wide-ranging role in the spectrum of comprehensive cancer care—from patient diagnosis to survivorship. The entire multidisciplinary care team has a role in providing palliative care in inpatient and outpatient settings. An effective palliative medicine and oncology collaboration improves patient care and quality of life, has broad research and guideline support, and is cost effective.

Keywords: *Cancer pain, cost-benefit analysis, medical oncology, palliative medicine, surgical oncology*

Address correspondence to Laura Finn, MD, Division of Hematology and Bone Marrow Transplant, Department of Internal Medicine, Ochsner Clinic Foundation, 1514 Jefferson Hwy., New Orleans, LA 70121. Tel: (504) 842-3910. Email: laura.finn@ochsner.org

INTRODUCTION

Oncologists are tasked with the care of complex patients in a rapidly evolving field of new therapies through which patient survival has been prolonged. These changes to the cancer trajectory have augmented patients' need for symptom control and supportive care because patient and caregiver distress may be challenging and prolonged. In the evolving field of oncology, palliative medicine has a growing and important role in managing sources of patient distress and improving patient quality of life (QOL). In this review, we discuss the role of palliative medicine in the practice of oncology, the delivery of palliative medicine and barriers to delivery, the cost effectiveness of palliative medicine, and national guidelines and society recommendations for integrating palliative medicine in oncology.

THE ROLE OF PALLIATIVE MEDICINE

Palliative medicine is the specialized care of people living with serious illness that focuses on alleviating the burden of symptoms and improving QOL.[1] Palliative medicine is appropriate for patients of any age and at any stage of serious illness. It is ideally provided concurrently with curative and life-prolonging treatments. Palliative medicine teams work alongside a patient's team of specialists to provide symptom and communication expertise, emotional support, assistance with medical decision making, and assistance with end-of-life care and bereavement support when appropriate.

Oncologists and primary care physicians provide primary palliative care for initial symptom control, including management of pain and non–pain symptoms of the cancer diagnosis, cancer treatment including stem cell transplants, and cancer survivorship. The approach to primary symptom therapy involves the entire oncology care team with the involvement of additional specialty services such as psychiatry, radiation oncology, and surgery as needed. Secondary palliative care is provided by teams of palliative medicine specialists who build upon the care already

provided during primary palliative services.[2,3] Core palliative medicine teams generally consist of physicians, nurses, social workers, and chaplains. Other providers such as psychologists, pharmacists, child life specialists, and music and art therapists are often a part of the multidisciplinary palliative medicine team. Secondary palliative care can facilitate the treatment of challenging symptoms of cancer, including refractory or atypical pain, cancer fatigue, and anorexia. The addition of secondary palliative care enhances the multidisciplinary team and addresses the patient's needs beyond symptom management: psychosocial needs, caregiver stewardship, and advance care planning. Hannon et al reported in a qualitative study that patients discern distinct roles between their oncologist who provides cancer therapy and their palliative medicine providers who provide symptom control and emotional support.[4] A study by Dow et al also showed that patients with cancer may prefer to discuss end-of-life issues with a physician other than their oncologist.[5]

Evidence shows that early introduction to palliative medicine improves QOL for patients with cancer. In the landmark study by Temel et al, patients with metastatic non–small cell lung cancer were randomized into 2 groups: standard oncology care vs standard oncology care with the integration of outpatient palliative medicine consultation and follow-up visits.[6] The group randomized to palliative medicine had improved QOL, anxiety screening, and depression screening scores. Additionally, patients in the palliative medicine group had a lower percentage of deaths in the hospital, less aggressive end-of-life care, and higher rates of resuscitation status preference documentation. Interestingly, improved median survival was also noted in the group receiving palliative care (11.6 vs 8.9 months).[6] A metaanalysis of randomized controlled trials in palliative care also showed an association between palliative care intervention and improved patient QOL and decreased symptom burden.[7] Caregiver outcomes were variable but consistently showed improvement in caregiver satisfaction.

Patient and family support is essential to the field of palliative medicine. Patients and families often have higher rates of satisfaction with their medical care and the quality of communication and support when palliative medicine teams are involved.[8] Palliative medicine teams also help patients and families as they transition to end of life and often assist with bereavement support. Early palliative medicine involvement can help families feel less angry and less in denial about the anticipated death of their loved one.[9]

DELIVERY OF PALLIATIVE MEDICINE

Palliative medicine can be provided in a variety of settings, including inpatient hospital consultation, dedicated palliative medicine units, hospital units, outpatient clinics, assisted living and long-term care facilities, and even home-based care. The most familiar model of palliative medicine delivery is inpatient-based services that may involve a single practitioner, consultant palliative medicine team, or even a palliative medicine hospital unit.[10] Inpatient palliative medicine should be available for specialty consultation throughout the entire hospital setting—from the emergency department to the intensive care unit.

Outpatient oncology access to palliative medicine is a priority as the majority of oncology care is ambulatory. However, fewer than half of the nation's palliative medicine programs have outpatient services because of challenges in implementation, largely attributable to a palliative medicine workforce shortage.[11,12] Early access to outpatient palliative medicine facilitates longitudinal care throughout the patient's cancer trajectory and improves the transition of care through the spectrum of healthcare settings.[13] A single visit with a palliative medicine provider will not fully address the needs of any patient. Establishing palliative medicine clinics in ambulatory oncology practices provides the advantages of increasing access to higher volumes of patients in need, facilitating early referral, and improving communication between the oncologist and palliative medicine team.[14]

Project ENABLE (Educate, Nurture, Advise, Before Life Ends) showed that palliative medicine can be successfully implemented in a variety of oncology practice models, including cancer centers, private practices, and rural clinics using advanced practice practitioners and via a variety of patient encounters including individual and group meetings. Project ENABLE also showed that palliative medicine can be implemented at the time of advanced cancer diagnosis and that the telephone is a feasible method of intervention.[15] The randomized controlled trial ENABLE II further tested the telephone model of intervention and reported an improvement in patient QOL.[16] Patients had a lower risk of death in the year after trial enrollment (hazard ratio 0.67, 95% confidence interval 0.496-0.906, P=0.009) and had increased median survival compared to controls at 14 vs 8.5 months (P=0.14). When a similar intervention was provided for caregivers of patients with advanced cancer in ENABLE III, caregivers in the intervention group had significantly lower depression scores and stress burden, further supporting early palliative medicine consultations in oncology.[17]

BARRIERS TO PALLIATIVE MEDICINE DELIVERY

One barrier to palliative medicine referrals is the common misperception that palliative care is only associated with end of life.[18] However, patients accept palliative medicine intervention without a loss of hope; the ENABLE and ENABLE II studies showed decreased depression in patients who received palliative care, providing evidence that palliative medicine consultations should not be postponed until failure of therapy, symptom crises, or end of life.[15,16] One simple yet apparently effective measure for divesting the stigma of palliative care as end-of-life care rather than an additional form of cancer therapy is to add the term *supportive care* to the name of the palliative medicine team.[19] Identifying palliative medicine teams as Palliative Medicine and Supportive Care helps bridge some of the barriers oncologists have in referring patients to palliative medicine services.[20-24]

The National Comprehensive Cancer Network criteria for patient consultation with palliative medicine include poor pain control, multiple allergies to pain medications, refractory non–pain symptoms, severe comorbidities, and inability to fulfill advance care planning.[25] Referrals in practice are usually physician initiated, creating significant variability in patterns of palliative medicine involvement despite the availability of referral guidelines. Clinical symptom and distress screening to trigger palliative medicine consultations by predefined criteria has the potential to improve

early referrals.[26-28] Automated referral based on patient symptoms or distress screening scores has been studied in randomized clinical trials and is recommended.[6,16,29,30] However, automated referrals are not feasible in most oncology practices because of the palliative medicine workforce deficit. Institutions and private practices need to develop practical pathways for automated referral to secondary palliative care in addition to enhancing the quality of primary palliative care services available.

COST EFFECTIVENESS OF PALLIATIVE MEDICINE

Healthcare costs and utilization for patients with cancer, especially advanced cancer, and end-of-life care are significant. A study published in 2013 reported a median survival of 3.4-4.7 months for patients with cancer after an unexpected hospital admission, with 73.5%-74.8% of patients deceased by 1 year.[31] A study by Adelson et al showed that 30-day readmission rates decrease significantly after standardized palliative medicine consultations.[28] Other studies report that direct hospital costs decreased by 14%-32% when palliative medicine consultation was provided within 2 days of admission.[32,33] Palliative care consults provided within 1-10 days of admission provide a significant cost savings.[33-35] Consults provided within 6 days of admission provided a significant direct cost savings of approximately 14%.[33] Another study suggests that patients on Medicaid who receive an early palliative medicine consultation are more likely to receive care outside of the intensive care unit, are less likely to be hospitalized repeatedly, and enroll in hospice earlier.[36] Referral to outpatient palliative care within 3 months of the end of life also decreases hospital admission, decreases costs, increases hospice utilization, and improves patient QOL.[37,38] The Centers for Medicare and Medicaid Services provides separate payment for advance care planning discussions, a benefit that should promote palliative medicine services.[39] Appropriate use of palliative medicine services can yield institutional annual savings of nearly $2 million by decreasing patient length of stay and daily hospital costs.[40,41]

SOCIETY RECOMMENDATIONS

The evidence for a synchronized effort between oncology and palliative medicine is compelling, leading to guidelines statements from prominent oncology and palliative medicine societies. In February 2017, the American Society of Clinical Oncology (ASCO) updated its clinical practice guideline for the integration of palliative medicine into oncology to recommend that all patients with advanced cancer receive palliative medicine services within 8 weeks of their diagnosis and concurrent with active treatment in both the inpatient and outpatient settings.[42] Referring patients to multidisciplinary palliative medicine services is optimal. ASCO defines patients with advanced cancer as those with metastasis, late-stage cancer, and/or a prognosis of 24 months or less.[42]

As part of the Choosing Wisely initiative of the American Board of Internal Medicine, the American Academy of Hospice and Palliative Medicine calls for no delay in palliative care for patients with serious illness who are in any form of distress because they are receiving active treatment.[43] Evidence is provided by studies, including randomized controlled trials, that palliative medicine improves pain and symptom control, improves caregiver satisfaction with care, and reduces healthcare costs.[43]

CONCLUSION

Palliative medicine has an extensive role in oncology beginning when patients are diagnosed, continuing through treatments, and concluding with survivorship or end-of-life care. Oncologists are primary palliative care providers who are responsible for maximizing patient QOL by requesting palliative medicine consultations at the most beneficial time in the cancer trajectory to avoid and relieve patient distress. Patients with any serious illness deserve exceptional symptom management and supportive care. All patients deserve the setting and opportunity to consider and communicate their wishes for advance care planning. Oncologists and palliative medicine providers are intimate colleagues in all of these tasks. Effective collaboration with palliative medicine improves patient outcomes, is cost effective, and has the broad support of clinical research and treatment guidelines.

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REFERENCES

1. Summary Data. Center to Advance Palliative Care and National Palliative Care Research Center. National Palliative Care Registry. https://registry.capc.org/metrics-resources/summary-data/. Accessed August 15, 2016.
2. Hui D. Definition of supportive care: does the semantic matter? *Curr Opin Oncol*. 2014 Jul;26(4):372-379. doi: 10.1097/CCO.0000000000000086.
3. Hui D, Bruera E. Integrating palliative care into the trajectory of cancer care. *Nat Rev Clin Oncol*. 2016 Mar;13(3):159-171. doi: 10.1038/nrclinonc.2015.201.
4. Hannon B, Swami N, Pope A, et al. Early palliative care and its role in oncology: a qualitative study. *Oncologist*. 2016 Jul 22. [Epub ahead of print].
5. Dow LA, Matsuyama RK, Ramakrishnan V, et al. Paradoxes in advance care planning: the complex relationship of oncology patients, their physicians, and advance medical directives. *J Clin Oncol*. 2010 Jan 10;28(2):299-304. doi: 10.1200/JCO.2009.24.6397.
6. 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 Aug 19;363(8):733-742. doi: 10.1056/NEJMoa1000678.
7. Kavalieratos D, Corbelli J, Zhang D, et al. Association between palliative care and patient and caregiver outcomes: a systematic review and meta-analysis. *JAMA*. 2016 Nov 22;316(20):2104-2114. doi: 10.1001/jama.2016.16840.
8. Holland JM, Keene JR, Kirkendall A, Luna N. Family evaluation of hospice care: examining direct and indirect associations with overall satisfaction and caregiver confidence. *Palliat Support Care*. 2015 Aug;13(4):901-908. doi: 10.1017/S1478951514000595.
9. Kim SH, Hwang IC, Ko KD, et al. Association between the emotional status of family caregivers and length of stay in a palliative care unit: a retrospective study. *Palliat Support Care*. 2015 Dec;13(6):1695-1700. doi: 10.1017/S1478951515000619.

10. Bruera E, Hui D. Conceptual models for integrating palliative care at cancer centers. *J Palliat Med*. 2012 Nov;15(11): 1261-1269. doi: 10.1089/jpm.2012.0147.
11. Davis MP, Strasser F, Cherny N. How well is palliative care integrated into cancer care? A MASCC, ESMO, and EAPC project. *Support Care Cancer*. 2015 Sep;23(9):2677-2685. doi: 10. 1007/s00520-015-2630-z.
12. Davis MP, Strasser F, Cherny N, Levan N. MASCC/ESMO/EAPC survey of palliative programs. *Support Care Cancer*. 2015 Jul; 23(7):1951-1968. doi: 10.1007/s00520-014-2543-2.
13. Coleman EA. Falling through the cracks: challenges and opportunities for improving transitional care for persons with continuous complex care needs. *J Am Geriatr Soc*. 2003 Apr; 51(4):549-555.
14. Muir JC, Daly F, Davis MS, et al. Integrating palliative care into the outpatient, private practice oncology setting. *J Pain Symptom Manage*. 2010 Jul;40(1):126-135. doi: 10.1016/j. jpainsymman.2009.12.017.
15. Bakitas M, Stevens M, Ahles T, et al. Project ENABLE: a palliative care demonstration project for advanced cancer patients in three settings. *J Palliat Med*. 2004 Apr;7(2):363-372.
16. 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 Aug 19;302(7):741-749. doi: 10.1001/jama.2009. 1198.
17. Dionne-Odom JN, Azuero A, Lyons KD, et al. Benefits of early versus delayed palliative care to informal family caregivers of patients with advanced cancer: outcomes from the ENABLE III randomized controlled trial. *J Clin Oncol*. 2015 May 1;33(13): 1446-1452. doi: 10.1200/JCO.2014.58.7824.
18. Cherny NI. Stigma associated with ''palliative care'': getting around it or getting over it. *Cancer*. 2009 May 1;115(9): 1808-1812. doi: 10.1002/cncr.24212.
19. Roeland E, Ku G. Spanning the canyon between stem cell transplantation and palliative care. Hematology Am Soc Hematol Educ Program. 2015;2015:484-489. doi: 10.1182/ asheducation-2015.1.484.
20. Dalal S, Palla S, Hui D, et al. Association between a name change from palliative to supportive care and the timing of patient referrals at a comprehensive cancer center. *Oncologist*. 2011;16(1):105-111. doi: 10.1634/theoncologist.2010-0161.
21. Fadul N, Elsayem A, Palmer JL, et al. Supportive versus palliative care: what's in a name?: a survey of medical oncologists and midlevel providers at a comprehensive cancer center. *Cancer*. 2009 May 1;115(9):2013-2021. doi: 10.1002/cncr.24206.
22. Hui D, Park M, Liu D, Reddy A, Dalal S, Bruera E. Attitudes and beliefs toward supportive and palliative care referral among hematologic and solid tumor oncology specialists. *Oncologist*. 2015 Nov;20(11):1326-1332. doi: 10.1634/theoncologist. 2015-0240.
23. Wentlandt K, Krzyzanowska MK, Swami N, Rodin GM, Le LW, Zimmermann C. Referral practices of oncologists to specialized palliative care. *J Clin Oncol*. 2012 Dec 10;30(35):4380-4386. doi: 10.1200/JCO.2012.44.0248.
24. Maciasz RM, Arnold RM, Chu E, et al. Does it matter what you call it? A randomized trial of language used to describe palliative care services. *Support Care Cancer*. 2013 Dec;21(12): 3411-3419. doi: 10.1007/s00520-013-1919-z.
25. Levy MH, Adolph MD, Back A, et al. Palliative care. *J Natl Compr Canc Netw*. 2012 Oct 1;10(10):1284-1309.
26. Lee SJ, Katona LJ, De Bono SE, Lewis KL. Routine screening for psychological distress on an Australian inpatient haematology and oncology ward: impact on use of psychosocial services. *Med J Aust*. 2010 Sep 6;193(5 Suppl):S74-S78.
27. Wagner LI, Schink J, Bass M, et al. Bringing PROMIS to practice: brief and precise symptom screening in ambulatory cancer care. *Cancer*. 2015 Mar 15;121(6):927-934. doi: 10.1002/cncr. 29104.
28. Adelson K, Paris J, Horton JR, et al. Standardized criteria for palliative care consultation on a solid tumor oncology service reduces downstream health care use. *J Oncol Pract*. 2017 May; 13(5):e431-e440. doi: 10.1200/JOP.2016.016808.
29. Zimmermann C, Swami N, Krzyzanowska M, et al. Early palliative care for patients with advanced cancer: a cluster-randomised controlled trial. *Lancet*. 2014 May 17;383(9930): 1721-1730. doi: 10.1016/S0140-6736(13)62416-2.
30. 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 May 1;33(13):1438-1445. doi: 10.1200/JCO.2014.58. 6362.
31. Rocque GB, Barnett AE, Illig LC, et al. Inpatient hospitalization of oncology patients: are we missing an opportunity for end-of-life care? *J Oncol Pract*. 2013 Jan;9(1):51-54. doi: 10.1200/JOP. 2012.000698.
32. May P, Garrido MM, Cassel JB, et al. Palliative care teams' cost-saving effect is larger for cancer patients with higher numbers of comorbidities. *Health Aff (Millwood)*. 2016 Jan;35(1):44-53. doi: 10.1377/hlthaff.2015.0752.
33. May P, Garrido MM, Cassel JB, et al. Prospective cohort study of hospital palliative care teams for inpatients with advanced cancer: earlier consultation is associated with larger cost-saving effect. *J Clin Oncol*. 2015 Sep 1;33(25):2745-2752. doi: 10.1200/ JCO.2014.60.2334.
34. Starks H, Wang S, Farber S, Owens DA, Curtis JR. Cost savings vary by length of stay for inpatients receiving palliative care consultation services. *J Palliat Med*. 2013 Oct;16(10):1215-1220. doi: 10.1089/jpm.2013.0163.
35. McCarthy IM, Robinson C, Huq S, Philastre M, Fine RL. Cost savings from palliative care teams and guidance for a financially viable palliative care program. *Health Serv Res*. 2015 Feb;50(1):217-236. doi: 10.1111/1475-6773.12203.
36. Morrison RS, Dietrich J, Ladwig S, et al. Palliative care consultation teams cut hospital costs for Medicaid beneficiaries. *Health Aff (Millwood)*. 2011 Mar;30(3):454-463. doi: 10.1377/hlthaff.2010.0929.
37. Blackhall LJ, Read P, Stukenborg G, et al. CARE track for advanced cancer: impact and timing of an outpatient palliative care clinic. *J Palliat Med*. 2016 Jan;19(1):57-63. doi: 10.1089/jpm. 2015.0272.
38. Scibetta C, Kerr K, Mcguire J, Rabow MW. The costs of waiting: implications of the timing of palliative care consultation among a cohort of decedents at a comprehensive cancer center. *J Palliat Med*. 2016 Jan;19(1):69-75. doi: 10.1089/jpm. 2015.0119.
39. Centers for Medicare and Medicaid Services. Proposed policy, payment, and quality provisions changes to the Medicare Physician Fee Schedule for Calendar Year 2017. https://www. cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/ 2016-Fact-sheets-items/2016-11-02.html. Accessed June 13, 2017.
40. Cowan JD. Hospital charges for a community inpatient palliative care program. *Am J Hosp Palliat Care*. 2004 May-Jun; 21(3):177-190.
41. Ciemins EL, Blum L, Nunley M, Lasher A, Newman JM. The economic and clinical impact of an inpatient palliative care consultation service: a multifaceted approach. *J Palliat Med*. 2007 Dec;10(6):1347-1355.

42. 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 Jan;35(1):96-112.

43. Fischberg D, Bull J, Casarett D, et al. Five things physicians and patients should question in hospice and palliative medicine. *J Pain Symptom Manage*. 2013 Mar;45(3):595-605. doi: 10.1016/j.jpainsymman.2012.12.002.

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