

Early integration of palliative care into standard oncology care: evidence and overcoming barriers to implementation

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In Canada, widespread discussion of medical aid in dying (http://www.parl.gc.ca/HousePublications/Publication. aspx?DocId=8120006) has had an important by-product: a much needed opportunity to review how well we are doing with respect to appropriate and timely access to the provision of expert palliative care for individuals with life-limiting illnesses.

In the field of oncology, palliative care has long been embedded in the patient care paradigm. But even within oncology, recent research has suggested that there is much to improve. When should referral to palliative care be made and for which patient groups? What are the key discussions and interventions that palliative medicine brings to cancer care? What is the impact of earlier care on patient and family outcomes? In other words, what should be the optimal standard for integration of palliative care into oncology care?

Early Referral to Palliative Care and Its Impact— Clinical Trial Evidence

Recent studies offer answers to many of the foregoing questions (Table 1). Several randomized clinical trials examining the effect of early palliative care consultation compared with "usual" (as needed) referral in cancer care have identified important benefits to early integration of palliative care into standard oncology care.

A seminal study addressing the question of optimal timing of referral was that of Temel *et al.*¹, published in 2010. In that trial, patients with stage IV non-small-cell lung cancer diagnosed within the preceding 8 weeks were randomized to receive early palliative care consultation (within 3 weeks of randomization) and subsequent monthly visits together with their standard oncology care or to receive standard oncology care alone. Compared with patients in the standard-care group, patients in the early palliative care group experienced significant improvements in patient-reported outcomes, received less aggressive care at the end of life, and somewhat surprisingly, were observed to have significantly prolonged overall survival.

More recently, in a cluster randomized trial, Zimmermann *et al.*² showed that early palliative care referral led to improved patient-reported outcomes in a variety of cancer types. In another recently published randomized trial that included patients with both solid

tumours and hematologic malignancies, Bakitas *et al.*³ also found improved patient-reported outcomes and observed a trend for improved overall survival. An earlier randomized clinical trial by the same author showed improved quality of life and less depression in patients randomized to receive a nurse-led palliative care intervention within 8–12 weeks of a new diagnosis of advanced cancer⁴. Finally, a large-scale survey extended those findings to show that early palliative care improved caregiver outcomes⁵.

In a systematic review of the evidence, Higginson and Evans concluded that specialist palliative care significantly improved patient outcomes in the domains of pain and symptom control, anxiety, reduced hospital admissions, and increased likelihood of home death⁶.

Early Palliative Care Consultation Reduces Health Care Costs

It is worth expanding on the data suggesting that early palliative care not only improves patient outcomes as already described, but also has a favourable impact on health care costs. May et al.7 demonstrated that, compared with no consultation, a palliative care consultation for appropriate patients within 2 days of hospital admission reduced inpatient care costs by 24%. It was hypothesized that the cost savings were a result of informed avoidance of futile, aggressive interventions in individuals who had early opportunities to discuss care goals and treatment choices. In its community hospice natural experiment, Aetna (a for-profit health care insurance company in the United States) observed that enhancing hospice access resulted not only in improved patient-reported outcomes, but also in less-frequent need for acute or emergency care interventions, leading to cost savings (results available at http://www.ehcca.com/presentations/palliativesummit1/ wade ms3.pdf). In an Ontario population-based analysis, a cohort of patients receiving specialist community palliative care was compared with a matched cohort not receiving those services⁸. The authors, Seow and colleagues, observed a reduction in hospitalizations, emergency room visits, and in-hospital deaths in the intervention group. Finally, in the randomized study by Temel et al.¹, patients receiving early palliative care received significantly less aggressive end-of-life care.

In an editorial accompanying the paper by May *et al.*, David Sher wrote "In today's health care environment—

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TABLE I Studies examining the effects of early referral to palliative care

Reference	Study design	Patient population	Arms	Outcomes		Health services
				QOL	Disease	or cost
Abernathy et al., 2008 ⁵	Large-scale survey	_	NA	Caregivers: improved QOL during care and after patient death	NA	NA
Bakitas <i>et al.,</i> 2009 ⁴	RCT	Advanced solid tumours within 8–12 weeks of diagnosis	Nurse-led monthly palliative care sessions vs. care as needed	Patients: improved QOL, reduced depression	Nonsignificantly increased OS (median: 14 vs. 8.5 months), p=0.14	No effect on hospital admission rates or emergency room use
Temel <i>et al.,</i> 2010 ¹	RCT	Stage IV lung cancer	Early palliative care vs. palliative care s needed	Patients: improved QOL at 12 weeks	Increased OS in early palliative care arm, <i>p</i> =0.04	Early palliative care was associated with less aggressive care at end of life, p =0.05
Zimmermann <i>et al.,</i> 2014 ²	Cluster RCT	Metastatic lung, GI, GU, breast, gynecologic cancers	Early palliative care vs. palliative care as needed	Patients: improved patient-reported outcomes at 4 months (nonsignificant at 3 months)	NA	NA
Bakitas et al., 2015 ³	RCT	Advanced solid and hematopoietic tumours	Early palliative care vs. 3-month delay for palliative care	Patients: patient-reported outcomes nonsignificant	Increased 1-year survival, <i>p</i> =0.038	Decrease in resource use (nonsignificant)
May <i>et al.,</i> 2015 ⁷	Prospective observational cohort	Adult cancer inpatients: tracked timing of palliative care referral and health costs	NA	NA	NA	24% Reduction in health care costs if palliative care consult was obtained within 2 days, <i>p</i> <0.001

QOL = quality of life; RCT = randomized controlled trial; OS = overall survival; NA = not available.

especially in the realm of oncology—programs that improve both patient quality of life and the proverbial bottom line are a rarity, and May *et al.* have provided important data that suggest that early inpatient palliative care consultation is one of them"⁹.

Which Patient Groups?

All of the randomized clinical trials cited here focused on cancer patients with advanced or metastatic disease whose expected survival was limited either by the nature of the disease itself (for example, stage IV non-small-cell lung cancer) or by its prognosis (for example, life expectancy 3–24 months in the study by Zimmerman *et al.*²).

What Intervention Is Early Palliative Care Consultation Providing?

Although oncologists clearly provide a great deal of palliative treatment through radiation, systemic therapies, and other supportive-care measures, specialized palliative care consultation offers additional benefits to patients. The palliative team manages challenging disease (and treatment)—related symptoms, explores with patients their understanding of their illness, facilitates discussion of the patient's care goals

and how they define "quality of life," and aids in advanced care planning. Specialized palliative care consultation is not a single event, but rather part of an ongoing process and dialogue about care needs and planning as the cancer evolves. The clinical trial data cited earlier suggest that it is best for patients and families if that dialogue begins earlier in the course of incurable cancer rather than when urgent needs arise. Quality of life is enhanced, satisfaction with care is increased, decisions about future care are made in a considered fashion, and crisis consultation and hospital admissions are thus potentially avoided.

What Are the Barriers to Implementation?

Despite the clear benefits, many patients with advanced cancer never receive a palliative care consultation—and for those that do, the consultation often does not come "early." For example, a recent study at Queen's University underscored the challenges facing oncologists wanting to have discussions about goals of care in the midst of busy oncology clinics: In a sample of 222 advanced lung and pancreatic cancer patients, only 4% had documentation of a goals-of-care discussion by oncologists in their outpatient record, and only 41% ever received a palliative referral 10. Those findings

are demonstrative of the need to examine ways in which palliative care consultation can be better integrated into oncology care not only *earlier*, but also *more systematically* in the course of disease, so as to bring the benefits of this intervention to all patients. Those goals require, in the first instance, a thorough examination of the existing barriers to implementation of the integrated model from a patient, health care professional, and systems perspective.

From the perspective of patients and their families, the terms "palliative" and "palliation" are often equated with the provision of end-of-life care. Although that task is clearly part of the role of palliative care providers, it is but a subset of the scope of palliative medicine practice. In a recent study, Zimmermann et al. 11 showed that cancer patients and caregivers associate the term "palliative care" with death and end of life, and they are therefore reluctant to be referred early. That stigmatization must be overcome if early integration of palliative care is to be successful. Education for patients and providers is one strategy to address the issue. Berry and colleagues¹² have argued that, to create public knowledge (and demand) for access, the term "palliative care" must undergo a "re-branding" (or even re-naming) to highlight the benefits that it brings to patients-potentially facilitating easier and earlier consultation to palliative care services.

Some oncologists see palliative care as a "philosophy of care incompatible with cancer therapy" (that is, it is about end of life, and not part of a phase of cancer-directed therapy) and also believe that providing palliative care is part of what they do (meaning there is no need to refer for a palliative care consultation)¹³. Thus the argument that oncologists might find it easier to refer patients earlier or more frequently for palliative care consultation if the specialty were to be renamed "supportive care." Data from the MD Anderson Cancer Center support that argument: Renaming "palliative care" to "supportive care" was associated with a 41% increase in inpatient consultations and an earlier time to referral in the outpatient setting¹⁴.

Not all agree that a name change is needed. Instead, the belief that palliative care is only about end-of-life care must be challenged with the evidence already described concerning the benefit of early referral, together with simple-to-follow guidelines for when to refer [for example, by using the "surprise" question: "Would you be surprised if your patient died in 12 (or 6) months?" as articulated in the Gold Standards Framework developed in the United Kingdom¹⁵] and with facilitated access to palliative care for patients who meet the guidelines.

Another significant health professional barrier, this time from the palliative medicine perspective, is that the need for more widespread and earlier palliative care engagement in cancer care will place increased demand on a workforce that is already stretched thin. That concern is amplified by the recognition that early palliative care involvement and expertise benefits not only cancer patients, but also patients with life-limiting nonmalignant disease such as congestive heart failure and chronic obstructive pulmonary disease ^{16,17}.

From a systems perspective, the location of cancer care and palliative care delivery might be remote from one another, creating another barrier to easy access. Cancer

patients are often seen in clinics designated by specialty or subspecialty oncology practitioners, and palliative care clinics and providers might work elsewhere—perhaps even in a different institution.

Addressing the Barriers to Implementation

A number of practical interventions are proposed to enhance integration of palliative care and oncology. Those ideas represent opportunities for further research, because published data are, to date, limited (some reviewed in Hui and Bruera¹⁸).

- Normalize early referral to palliative care.
 - Define which patients to refer early. Oncologists and palliative medicine specialists should jointly develop guidelines about the cancer patients that are, at a defined point in their disease, appropriate for early referral (for example, patients who have a life expectancy in the range of 12 months, such as those with newly diagnosed advanced lung cancer, pancreatic cancer, or glioblastoma).
 - Oncologists should advise patients (and families) who meet the guidelines that palliative care experts form part of the care team and that they will be seeing those experts to manage symptoms and for periodic follow-up while they are receiving cancer treatment. Provide patients with information about how the involvement of palliative care has been shown to improve symptoms, quality of life, and disease outcomes.
 - Set reasonable targets for the proportion of patients who meet the agreed guidelines to be referred. Track that metric and let oncology practitioners know how well they are doing. Plan to increase the target over time.
 - Physically integrate clinical teams wherever possible. Palliative medicine clinics and oncology clinics should be co-located in the same space, with parallel (or shared) patient lists.
 - Include palliative care team members in multidisciplinary case conferences and tumour boards.
 - Identify or develop tools that will facilitate discussions about advanced care planning for use by oncology providers (for example, the Ariadne Lab checklist¹⁹). The discussions need not be carried out only by palliative care experts—they should be embedded into cancer care.
- Adequately resource early referral to palliative care.
 - New investment in specialized nurses and physicians is required to meet the demand. Despite the fears that this "new" need will mean an overall increase in health care expenditures and resource utilization, the opposite has in fact been observed to be the case, as has already been extensively described. The new investment in palliative care providers can be strongly justified by the data showing their work will engender health care cost savings. This "business case" for investment is surely one of the easier ones for cancer care leaders to write.

SUMMARY

There is strong evidence that early palliative care consultation improves symptoms, quality of life, and disease outcomes for cancer patients and families. Implementing integrated oncology and palliative care programs will involve overcoming patient, provider, and systems barriers. Although some of the barriers could be overcome with improved education, tools, and pathways, it is also the case that new investments in palliative medicine providers will have to be made²⁰. Fortunately, there is also considerable evidence that providing palliative care results in health care resource savings by reducing unnecessary acute hospital admissions and aggressive treatment at the end of life, presenting an opportunity to invest those savings into expanding palliative care services. Although the work will have challenges, including how best to define the metrics for success, the rising burden of cancer and other chronic diseases makes it imperative to begin.

CONFLICT OF INTEREST DISCLOSURES

We have read and understood *Current Oncology*'s policy on disclosing conflicts of interest, and we declare that we have none.

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REFERENCES

- Temel JS, Greer JA, Muzikansy A, et al. Early palliative care for patients with metastatic non–small cell lung cancer. N Engl J Med 2010;363:733–42.
- Zimmerman C, Swami N, Krzyzanowska M, et al. Early palliative care for patients with advanced cancer: a clusterrandomised controlled trial. *Lancet* 2014;383:1721–30.
- 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;33:1438–45.
- 4. 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.
- 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;16:585–97.

- 6. Higginson IJ, Evans CJ. What is the evidence that palliative care teams improve outcomes for cancer patients and their families? *Cancer J* 2010;16:423–35.
- 7. 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;33:2745–52.
- Seow H, Brazil K, Sussman J, et al. Impact of community based, specialist palliative care teams on hospitalisations and emergency department visits late in life and hospital deaths: a pooled analysis. BMJ 2014;348:g3496.
- 9. Sher DJ. Economic benefits of palliative care consultation continue to unfold. *J Clin Oncol* 2015;33:2723–4.
- 10. Raskin W, Harle I, Hopman WM, Booth CM. Prognosis, treatment benefit and goals of care: what do oncologists discuss with patients who have incurable cancer? *Clin Oncol (R Coll Radiol)* 2016;28:209–14.
- 11. Zimmermann C, Swami N, Krzyzanowska M, *et al.* Perceptions of palliative care among patients with advanced cancer and their caregivers. *CMAJ* 2016;188:E217–27.
- 12. Berry LL, Castellani R, Stuart B. The branding of palliative care. *J Oncol Pract* 2016;12:48–50.
- 13. Schenker Y, Crowley-Matoka M, Dohan D, *et al.* Oncologist factors that influence referrals to subspecialty palliative care clinics. *J Oncol Pract* 2014;10:e37–44.
- 14. 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;16:105–11.
- 15. The Gold Standards Framework (GSF). The GSF Prognostic Indicator Guidance: The National GSF Centre's Guidance for Clinicians to Support Earlier Recognition of Patients Nearing the End of Life. Shrewsbury, U.K.: GSF; 2011. [Available online at: http://www.goldstandardsframework.org.uk/cd-content/uploads/files/General%20Files/Prognostic%20Indicator%20 Guidance%20October%202011.pdf; cited 12 October 2016]
- 16. Hauptman PJ, Havranek EP. Integrating palliative care into heart failure care. *Arch Intern Med* 2005;165:374–8.
- 17. Vermylen JH. Szmuilowicz E, Kalhan R. Palliative care in COPD: an unmet area for quality improvement. *Int J Chron Obstruct Pulmon Dis* 2015;10:1543–51.
- 18. Hui D, Bruera E. Integrating palliative care into the trajectory of cancer care. *Nat Rev Clin Oncol* 2016;13:159–71.
- 19. Bernacki R, Hutchings M, Vick J, *et al.* Development of the Serious Illness Care Program: a randomised controlled trial of a palliative care communication intervention. *BMJ Open* 2015;5:e009032.
- Ramchandran K, Tribett E, Dietrich B, Von Roenn J. Integrating palliative care into oncology: a way forward. *Cancer Control* 2015;22:386–95.