

Implementing Evidence-Based Palliative Care Programs and Policy for Cancer Patients: Epidemiologic and Policy Implications of the 2016 American Society of Clinical Oncology Clinical Practice Guideline Update

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The American Society of Clinical Oncology (ASCO) recently convened an Ad Hoc Palliative Care Expert Panel to update a 2012 provisional clinical opinion by conducting a systematic review of clinical trials in palliative care in oncology. The key takeaways from the updated ASCO clinical practice guidelines (CPGs) are that more people should be referred to interdisciplinary palliative care teams and that more palliative care specialists and palliative care-trained oncologists are needed to meet this demand. The following summary statement is based on multiple randomized clinical trials: “Inpatients and outpatients with advanced cancer should receive dedicated palliative care services, early in the disease course, concurrent with active treatment. Referral of patients to interdisciplinary palliative care teams is optimal, and services may complement existing programs” (*J Clin Oncol.* 2017;35(1):96). This paper addresses potential epidemiologic and policy interpretations and implications of the ASCO CPGs. Our review of the CPGs demonstrates that to have clinicians implement these guidelines, there is a need for support from stakeholders across the health-care continuum, health system and institutional change, and changes in health-care financing. Because of rising costs and the need to improve value, the need for coordinated care, and change in end-of-life care patterns, many of these changes are already underway.

end of life care; interdisciplinary health team; oncology services, hospital; palliative care; policy

Abbreviations: ASCO, American Society of Clinical Oncology; CPG, clinical practice guideline.

INTRODUCTION

The American Society of Clinical Oncology (ASCO) recently convened an Ad Hoc Palliative Care Expert Panel to update a 2012 provisional clinical opinion that entailed conducting a systematic review of clinical trials in palliative care in oncology. The updated systematic review, published recently in the *Journal of Clinical Oncology*, included randomized clinical trials, systematic reviews, and meta-analyses published from March 2010 to January 2016 (1). On the basis of this review, the Expert Panel provided evidence-based clinical practice guidelines (CPGs) for palliative care in oncology. This paper further explores the epidemiologic and policy interpretations and implications of these CPGs.

OVERVIEW OF THE ASCO CLINICAL PRACTICE GUIDELINE UPDATE

The ASCO CPGs update included 9 randomized clinical trials (2–10), 2 publications reporting on a quasiexperimental

trial (11, 12), and 5 secondary analyses of randomized clinical trials included in the 2012 provisional clinical opinion (13–17). For studies to be included in the review, they needed to focus on patients diagnosed with cancer, be published in English, and have study designs as phase III randomized clinical trials, rigorously conducted systematic reviews, meta-analyses, or published secondary analyses of the randomized clinical trials included in the 2012 provisional clinical opinion. Excluded publication formats included editorials, commentaries, letters, news articles, case reports, meeting abstracts, or narrative reviews.

The primary outcomes abstracted from the studies were quality of life, symptom relief, psychological outcomes, survival, and satisfaction. Study populations were primarily outpatients with advanced and/or metastatic cancer, although the study by Ferrell et al. (11) also included patients with early stage non-small cell lung cancer, and the trial by Higginson et al. (6) included patients with lung cancer as well as those with other advanced pulmonary diseases (i.e., chronic obstructive pulmonary disease, interstitial lung disease) or

diseases with severe pulmonary symptoms (i.e., chronic heart failure, motor neuron disease). Three studies (2, 4, 7) compared early with delayed palliative care. All studied interventions involved nurses, and 6 also involved other palliative care specialists, such as physicians (2, 6, 7, 10–12). The ASCO CPGs assessed and further commented on study design features (e.g., randomization method, allotment concealment) and risk of bias.

The ASCO CPGs contained 3 overarching recommendations. First, patients with advanced cancer should receive dedicated palliative care services as either inpatients and/or outpatients. Second, oncologists should refer patients with advanced cancer to interdisciplinary palliative care providers so that palliative care can be provided concurrently with aggressive life-prolonging and/or curative oncological treatments. Third, to provide more and/or better psychosocial support of family caregivers, oncology providers may also consider referring patients with early or advanced cancer to palliative care, as needed.

The ASCO CPGs noted insufficient data to suggest a particular way of providing palliative care as superior to others, but they did recommend referral to specialist services. No clinical trials have been performed that tested if oncologists could provide this specialized service themselves, but the data strongly support the use of independent interdisciplinary teams. Data to suggest that oncologists are not providing the necessary services include that the control arms in most of the aforementioned studies were usual oncology care; in addition, in the Canadian trial reported by Zimmermann et al. (10), over half the oncologists in the control arm had some formal palliative care training.

The necessary components used in the clinical trials appear to be as follows: the amount of time the patient has with the palliative care clinician (at least an extra hour a month); formal assessment tools such as the Edmonton Symptom Assessment System, the National Comprehensive Cancer Network Distress Thermometer, or the Faith and Belief, Importance, Community, and Address in Care Spiritual History Tool; patient education about prognostic awareness; and formal management strategies (e.g., the Time, Education, Assessment, and Management (TEAM) approach) (T.J.S., unpublished data, 2017).

BUILDING ON THE ASCO CLINICAL PRACTICE GUIDELINES

The following section has been divided according to 4 specific ASCO CPG questions: 1) how do we conceptualize palliative care in oncology; 2) which patients should be considered for palliative care; 3) when should patients with cancer be referred to palliative care; and 4) which health professionals should be providing palliative care? We list the ASCO CPGs, their clinical interpretation, and the epidemiologic and policy implications. Of note, we discuss only ASCO CPGs with potential epidemiologic and policy implications.

Finally, while these ASCO CPGs were developed specifically for clinical practice, our discussions of the epidemiologic and policy implications of these recommendations address broader feasibility and sustainability issues that are

likely to impact not only individual providers and patients but also hospitals, hospital systems, and payers who plan to incorporate these recommendations into practice.

How do we define or conceptualize palliative care in oncology?

ASCO recommendation. Patients with advanced cancer should receive palliative care services, which may include a referral to a palliative care provider. Essential components of palliative care may include the following:

- Rapport and relationship building with patient and family caregiver;
- Symptom, distress, and functional status management (i.e., pain, dyspnea, fatigue, sleep disturbance, mood, nausea, or constipation);
- Exploration of understanding and education about illness and prognosis;
- Clarification of treatment goals;
- Assessment and support of coping needs (i.e., provision of dignity therapy);
- Assistance with medical decision making;
- Coordination with other care providers;
- Provision of referrals to other care providers as indicated;
- Palliative care involvement occurring within 8 weeks of diagnosis for newly diagnosed patients with incurable cancer.

The CPGs list evidence quality as intermediate (3, 13, 15, 16) and strength of recommendation as moderate.

ASCO clinical interpretation. The ASCO Expert Panel interprets this recommendation to suggest that palliative care integrated early into oncology care is helpful for patients and families and complements the provision of oncology services by ensuring that the delivered treatments are more likely to reflect the patient's goals and values. Palliative care services should be individually tailored, and visits should be time intensive so that providers can fully appreciate the extent of the patient's goals and preferences.

Epidemiologic and policy considerations. To ensure that institutions are able to integrate palliative care early into oncology care, it is necessary to revise billing and/or payment structure so that providers are compensated for the time they spend providing palliative care. For example, palliative care provider billing often does not adequately reflect, or sufficiently reimburse, the time-intensive nature of palliative care visits; it is often "easier," and more financially fortuitous, to instead bill for a specific "procedure." Policy changes to billing practices to prioritize and/or better value provider time commitment, instead of procedures, would financially incentivize more palliative care. However, this practice would not be without risk as increased billing for palliative care could be "passed on" to patients through increased co-payments; the higher financial burden for patients could actually deter patients from seeking palliative care and thus undermine the ASCO CPG recommendation. Yet, as evidence supports that palliative care improves both patient-reported outcomes (10, 11, 18, 19) and cost savings to second party payers and hospitals (20–26), these payers are best served by not only adopting

policies that promote early access to palliative care but also shouldering the cost of providing that palliative care. Policy choices and practice changes to do so could include decreased or subsidized co-payments for patients, care bundles that automatically include palliative care consultation, and/or payment conditional on palliative care involvement.

Which patients should be considered for palliative care?

The ASCO CPGs address this question with 2 recommendations.

ASCO recommendation. Patients who are good candidates for specialty palliative care referrals are those who are part of patient populations included in studies that demonstrated palliative care intervention improvements in patient/family outcomes. Most studies to date are among outpatients with advanced stage malignancies and their families, though the study by Ferrell et al. (11) included patients with all stages of non-small cell lung cancer.

The CPGs do not rate the evidence in this field but rather reference a Center to Advance Palliative Care consensus panel report by Weissman and Meier (27), which developed criteria for a palliative care assessment at the time of a patient's hospital admission. The primary criteria (i.e., global indicators that represent the minimum that hospitals should use to screen patients at risk for unmet palliative care needs) are as follows: the "surprise question" (e.g., you would not be surprised if the patient died within 12 months, with proven validity and ease of use) (28); frequent admissions; admission prompted by difficult-to-control physical/psychological symptoms (29); complex care requirements; decline in function; feeding intolerance; and/or unintended weight decline.

There are a few other studies (2, 10, 11, 19) that also inform these CPGs.

ASCO clinical interpretation. The ASCO Expert Panel suggests that the clinical use of these criteria would increase patient referrals to palliative care and that there are insufficient specialist palliative care providers to meet this higher demand. Data support a significant workforce shortage of palliative care (30, 31), and experts encourage wider dissemination and support of "primary" or "generalist" palliative care, where nonspecialists provide for a patient's basic palliative care needs (32). As such, oncologists could receive generalist palliative care training, which would enable them to regularly assess their cancer patients for unmet palliative care needs.

Epidemiologic and policy considerations. To effectively implement these CPGs, organization leadership could develop and implement policies to address 3 key areas. First, many clinicians equate palliative care with hospice and end-of-life care, which likely leads to lower referral rates for patients that would otherwise qualify for palliative care (33). To dispel the clinician stigma surrounding palliative care, hospitals and hospital systems could create policies wherein patients that meet the Center to Advance Palliative Care criteria are referred to the palliative care team, just like a Wound Care Team.

Second, evidence supports that patients and family members often lack awareness of palliative care. For example, a national survey of 800 adults aged 18 or more years found

that 70% of participants were not at all knowledgeable about palliative care (33). Once these participants were provided with a definition of palliative care (i.e., specialized medical care for people with serious illnesses that is focused on providing patients with relief from the symptoms, pain, and stress), 90% of participants indicated they were likely to consider using palliative care if they or a loved one had a serious illness (33). Thus, institutions wishing to promote palliative care consistent with the ASCO CPGs could consider implementing a patient education campaign for palliative care to increase awareness about and use of the service.

Finally, and perhaps most urgently, institutions, payers, and policy makers wishing to increase use of palliative care services, as consistent with these ASCO CPGs, must address the palliative care workforce shortage that currently exists and is not expected to change in the near future through creating feasible and sustainable means of training oncologists. As of 2011, there was 1 oncologist for every 141 newly diagnosed cancer patients in the United States but only 1 palliative medicine physician for every 1,200 persons living with a serious or life-threatening illness (30). The gap between the current supply of hospice and palliative medicine physicians and the hypothetical demand to reach mature physician staffing levels is approximately 6,000–18,000 individual physicians, depending on the proportion of time each physician dedicates to palliative medicine, as most hospice and palliative medicine physicians practice part time (31). Although the exact shortage of hospice and palliative medicine advance practice nurses has not been reported (C. Dahlin, Harvard Medical Center for Palliative Care, personal communication, 2016), as of 2016 there are 11,500 nurses registered with the Hospice and Palliative Nurses Association (<http://hpna.advancingexpertcare.org/>); there are 5,627 hospitals in the United States, not counting separate outpatient and/or ambulatory care cancer centers (34). We estimate that at least as many palliative care advance practice nurses are needed as physicians. To train incoming oncologists as a way to overcome this shortage, a palliative care rotation could also be incorporated into the required components of fellowship trainings. This could emphasize the TEAM approach suggested above (T.J.S., unpublished manuscript, 2017).

To train practicing oncologists, payers and/or institutions could consider programs such as clinical practice competencies and/or required and compensated palliative care apprenticeships or clinical experiences. Payers, institutions, and policy makers could also work with the Accreditation Council for Graduate Medical Education and/or other accreditation groups and/or palliative medicine professional organizations to develop and instigate palliative care training programs outside of and/or beyond that of fellowship programs; such certificate programs, particularly for mid-career professionals, could greatly increase the pool of palliative care-trained providers. The specifics of these trainings could be tailored to the needs of each institution, namely, the type of training (i.e., in-person vs. online webinar, classroom format vs. case studies vs. hands-on clinical experience), the skills of the trainer (i.e., oncologist, hospice and palliative medicine doctor, or advanced practice nurse), the duration of training (i.e., a few days vs.

several weeks), and the financial and human resources needed to facilitate the training.

Although trainings are certainly a key area that needs further attention and support to address the workforce shortage, there are nonphysician providers who are trained in hospice and palliative care services; however, the scope-of-practice laws in some states prevent these providers from practicing to the full extent of their license, thereby limiting access to care that could otherwise be available. For example, some states' scope-of-practice laws and regulations for advanced certified hospice and palliative nurses require them to have formal physician backup protocols and place strict limits on nurses' prescribing authority (35). Similar restrictions have been noted for pharmacists, especially with regard to the role they could serve in pain management (35, 36). These laws would need to be amended or repealed to improve access to palliative care.

When should patients with cancer be referred to palliative care?

ASCO recommendation. Patients with advanced cancer should be referred to interdisciplinary palliative care teams (consultation) that provide inpatient and outpatient care early in the course of disease, alongside active treatment for their cancer. For newly diagnosed patients, we suggest early palliative care involvement within 8 weeks of diagnosis.

The guideline lists evidence quality as intermediate (2, 6, 7, 10, 11, 18, 19, 37) and strength of recommendation as strong. For newly diagnosed patients, the evidence quality was intermediate and strength of recommendation moderate; there was uniform consensus on the 8-week mark.

ASCO clinical interpretation. The ASCO expert panel advises that interdisciplinary palliative care services should be integrated into early routine care for patients with cancer, regardless of which stage the cancer is in at time of diagnosis. In a randomized clinical trial for patients at a community-based palliative care service (91% of whom had cancer), patients randomized to receive interdisciplinary case conference including their general practitioner compared with physician education and patient/caregiver education had reduced hospitalizations and better maintained performance status (38).

Epidemiologic and policy considerations. Early integration can occur only if the institution adopts organizational behavior-changing policies to encourage oncologists to refer their patients to palliative care. From an epidemiologic standpoint, these referrals are not currently occurring. For example, only 8% of lung cancer patients in the United States see a palliative care specialist, and these visits are often near death to address end-of-life issues (39). In addition, only 5% of decedent head and neck cancer patients ever see palliative care (40). Further, at the University of California, San Francisco, which has a longstanding, highly respected palliative care cancer program, only 32% of decedent cancer patients received a palliative care consultation in 2010–2012, with only 10% of patients receiving early consultations; 82% of the late palliative care was for end-of-life hospitalization (41). Individual oncology providers would need to change practice; organizations wishing to better follow this recommendation may also wish to consider a

trigger or systematic referral of appropriate patients that would occur beyond and/or outside of individual provider practices. Just as comprehensive cancer center groups may already operationalize patients being seen by wound care teams, ostomy specialists, social workers, and/or psychologists without explicit orders to do so from an oncologist, so such normalization of being seen by a palliative care provider and/or team could be added to regular routines. Moreover, policy changes could further accelerate these changes in practice (e.g., hospital, payer, or professional provider organization guidelines that advocate for concurrent palliative care and/or tracking or reimbursing in consideration of palliative care–related quality metrics).

These trigger referrals and policies must also be bolstered by the institution's allocation of sufficient monetary and hospital space resources for palliative care–trained specialists to accommodate an influx of referrals to their practice. Beyond workforce shortages to hire palliative care providers, hospitals should ensure that their palliative care teams and providers are well supported and resourced, particularly given that evidence supports high burnout rates among palliative care providers (42).

Which health professionals should be providing palliative care?

ASCO recommendation. Palliative care for patients with advanced cancer should be delivered through interdisciplinary palliative care teams with consultations available in both outpatient and inpatient settings.

The CPGs list the evidence quality as intermediate (2, 6, 7, 10, 11, 18, 19, 37) and strength of recommendation as moderate.

ASCO clinical interpretation. ASCO recommends that facilities have an interdisciplinary palliative care team composed of the following health professionals: hospice and palliative medicine physicians and/or advance practice providers, palliative care nurses, social workers, chaplains, and rehabilitation specialists (i.e., physical therapy, occupational therapy, or rehabilitation medicine).

Epidemiologic and policy considerations. Not all members of the palliative care interdisciplinary team can bill under the current Medicare structure as chaplains and social workers are unable to bill for their palliative care–related services. Thus, current billing often does not sufficiently cover the services of the full interdisciplinary palliative care team. In 1 study, if the patient had a discussion on goals of care and was seen by a chaplain (instead of their community religious person), the chance of hospice use nearly doubled from 48% to over 80%, and the chance of the patient's dying in the intensive care unit was reduced from 22% to 0% (43). Policy changes in Medicare could address this inequity. However, until then, the health-care system can allocate sufficient resources to compensate these palliative care team members for their time.

With current palliative care provider workforce shortages, it is essentially impossible for every US hospital to have an interdisciplinary palliative care team that can meet the needs of all seriously ill patients. Fellowship programs have insufficient capacity to address the shortage of hospice and palliative

medicine clinicians (31). Morrison et al. (30) suggest 2 ways to expand fellowship training: 1) lift the graduate medical education cap on Medicare-funded residency positions and redistribute these unused graduate medical education slots toward Accreditation Council for Graduate Medical Education–approved palliative medicine fellowship training; and 2) have the Health Resources and Services Administration create a loan forgiveness program for palliative care clinicians.

An additional way to increase hospice and palliative medicine practitioners is to create a pathway through which mid-career practitioners can transition to palliative care through a route other than a fellowship program. Examples include certified training programs (outside of fellowship training) and/or practice pathway boarding systems. Morrison et al. (30) also suggest the establishment of a Health Resources and Services Administration award to incentivize mid-career medical and nursing workforce training in palliative care. The Society for Hospital Medicine will soon implement a “certificate” program for hospitalists who undertake their specific palliative care training (R. Razzak, Sidney Kimmel Comprehensive Cancer Center of Johns Hopkins Medical Institutions, personal communication, 2016). The Palliative Care and Hospice Education and Training Act (44)—which aims to establish fellowships, academic and research support, and a network of trained palliative care educators—has been gathering bipartisan support for several years (45).

Beyond promoting an increase in hospice and palliative medicine specialists, some researchers have encouraged that primary care providers receive palliative care training. Gutman (32) advocates that each medical specialty should develop primary palliative care skills. From a pragmatic standpoint, Morrison et al. (30) advise that medical licensing organizations establish hospice and palliative medicine continuing medical education training for referring physicians as a requirement for licensure at the state level. Models for such trainings exist; for example, Dahlin et al. (46) tested a model of providing mid-career advance practice registered nurses with a week-long palliative care externship involving didactic, experiential, and clinical components, which led to increases in nurses’ knowledge, skills, and confidence in palliative care.

FURTHER PRACTICE CONSIDERATIONS

Cost implications of palliative care

The ASCO CPGs briefly summarized several studies that demonstrated how palliative care reduces the total cost of care (23, 24, 47–50). Palliative care consultations also may lead to earlier referral to hospice, which can reduce costs and health-system utilization (51–53). For example, 1 study demonstrated that being discharged to hospice leads to a 5% 30-day readmission rate versus a 25% rate for matched patients who did not go home with hospice (54).

With regard to epidemiologic and policy considerations in this era of high health-care costs, hospitals and health-care payers are actively searching for ways to improve and/or maintain health-care quality at a lower cost. With its evidence-based cost savings, palliative care is 1 of these rare initiatives that not only improves patient and family

outcomes but also does so at a lower cost (47). Further, recent data show that the more comorbidities the patient has (55) or the earlier the palliative care intervention (56), the bigger the savings, at least some due to decreased length of hospital stay (57). In considering health-care quality to be the ratio of patient and family outcomes over health-care costs, palliative care is 1 of the very few medical treatments that not only increases the numerator but also decreases the denominator to thus provide a “double dose” of improved quality of care.

In addition to the studies cited in the ASCO CPGs, there are further more recent studies that bolster the evidence base regarding the cost savings of palliative care. Higginson et al. (58) studied patients with multiple sclerosis who received a palliative care consultation service versus a 12-week wait. This intervention saved the National Health Service about \$2,700 (US dollars) per patient during this 12-week period, even counting the added palliative care services. In a separate trial, Higginson et al. (6) studied patients with refractory breathlessness (most of whom had lung cancer, with others having chronic obstructive pulmonary disease or interstitial lung disease) who received a breathlessness support service (including palliative care) versus usual care. This intervention saved the National Health Service about \$325 (US dollars) per patient with cancer. Farquhar et al. (59), using their version of the breathlessness intervention service developed with Higginson, randomized 87 patients with dyspnea due to malignant or nonmalignant cause to the breathlessness intervention service or to the breathlessness intervention service after a waiting period of 4 weeks. The breathlessness intervention service had some positive effects on breathlessness in the patients with nonmalignant cause breathlessness, at an added cost of £799 (reduced to £100 when outliers were excluded), neither statistically significant. In the similar trial with 67 patients whose breathlessness was associated with malignancy and who were randomized to the breathlessness intervention service or assigned to the breathlessness intervention service after a 2-week wait, breathlessness was markedly improved qualitatively and quantitatively ($P = 0.049$), and the service reduced overall health system costs by £354, making it not only cost-effective but cost saving (37).

It is imperative that these and other similar findings are presented to hospital leadership to garner support to create or expand a palliative care program. For example, at our academic institution, the inpatient palliative care unit and palliative care consultations generated \$3.49 million in cost savings in 1 fiscal year (60). Our team presented these findings to senior leadership at our institution and successfully negotiated more financial and personnel resources dedicated toward palliative care.

Cassel et al. (47) published a business case for palliative care that contains useful information for facilities seeking to either create or expand palliative care programs. The article outlines the financial benefits of palliative care in addition to the aforementioned cost savings; namely, palliative care prevents avoidable health-care utilization, reduces the length of hospitalizations, reduces readmission rates (which benefits hospitals that are penalized for such occurrences), and reduces mortality rates.

Disparities in accessing palliative care

The ASCO CPGs acknowledged limited research on palliative care access for vulnerable populations (61). The few existing studies suggest that the risk factors for poor access to palliative care include race (62), socioeconomic status, immigration status (63, 64), and geography (i.e., rural vs. urban/metropolitan) (65–67). However, studies on health disparities in palliative care have several methodological limitations (61). For example, the studies included in ASCO's CPGs section on health equity had white race participants overly represented at 71%–97%.

ASCO recommends that readers consider their guidelines in the context of disparities in access to palliative care, as a way to level the playing field and ensure quality of care.

With respect to epidemiologic and policy considerations, hospitals and hospital systems can adopt certain policies to improve access to care, particularly for racial minorities and other populations with disparities. One study (68) demonstrated that patients in racially discordant interactions (i.e., when the provider is from a different race than the patient) experienced less open communication patterns, whereby physicians provided significantly less information and patients were significantly less active in the visit, compared with patients in racially concordant interactions. Policies to meet these needs could include hiring and maintaining a more ethnically and racially diverse workforce (e.g., physicians, nurses, technicians, chaplains, and social workers) and ensuring the availability of translators.

Recent work has shown that African Americans are at least as likely as whites to be referred for inpatient palliative care consultation, live longer than whites after consultation (25 vs. 17 days), and have rates of hospice use that exceeded those of whites (59% vs. 51%) (62). Palliative care consultation appeared to allow providers to bring up advance directives and “do not resuscitate” status with 98% of African Americans at 1 hospital, with 65% agreeing to do not resuscitate orders (69). A separate study demonstrated that palliative care consultation with specific emphasis on goals of care discussion appeared to level the playing field with the same number of African Americans electing hospice as white patients; those who discussed code status had twice the rate of referral to hospice (odds ratio = 2.14) (70).

POLICY AND EPIDEMIOLOGIC GAPS IN RESEARCH

As demonstrated above and highlighted by ASCO in their CPGs, there are several areas in which more research is needed in palliative care. First, studies need to determine which elements of palliative care services contribute most to the outcomes seen in research. Second, assessment tools should be improved to better capture palliative care delivery as well as the effectiveness of care delivered. Third, patients with diverse forms of cancer, diverse racial and ethnic backgrounds, and more advanced cancer types need to be better represented in clinical trials. Fourth, more research is needed on family caregivers who are directly impacted by the patient's receipt of palliative care. Fifth, studies with a larger sample size, longer follow-up, and multisite interventions would help improve the generalizability of findings. Finally,

more research should be dedicated toward determining which health disparities are specific to palliative care and what methods can be used to overcome these barriers.

CONCLUSION

Research has demonstrated the effectiveness of palliative care programs and interventions. For the past several years, both ASCO and the National Comprehensive Cancer Network have recommended that palliative care become a standard of care for patients with cancer, but the majority of patients do not receive this care.

The key takeaway from the ASCO CPGs is that more patients with cancer should be referred to specialist interdisciplinary palliative care, rather than be cared for exclusively by their oncologists (and earlier in the course of their illness). This change requires more hospice and palliative medicine specialists and palliative care-trained oncologists to meet this demand. Although the ASCO CPGs are helpful evidence-based recommendations, we need to consider the pragmatic epidemiologic and policy considerations of these CPGs.

Those on the committee (T.J.S.) were fully aware that there are not enough specialist palliative care practitioners to meet the demand. In many ways, the situation is similar to when lumpectomy and radiation were being proven equivalent or even superior to mastectomy and subsequently recommended by ASCO. We knew there were not enough lumpectomy-trained surgeons at the time but felt the need to drive the adoption of a new and better technology by patient demand, backed by clear-cut evidence.

Future research is needed to determine the feasibility of implementing these CPGs via organizational behavior change, shifting cultural norms to reduce stigma toward palliative care, and promoting institutional senior leadership's support of these services. There are also key policy changes that would help to facilitate the implementation of the CPGs, including expansion of Medicare coverage for palliative care and passage of the Palliative Care and Hospice Education and Training Act, similar to the Project on Death in America Faculty Scholars program (71), on which we modeled parts of the Palliative Care and Hospice Education and Training Act. Our review of the CPGs has demonstrated that the implementation of these guidelines is difficult and requires buy-in and support from diverse stakeholders from across the health-care continuum, as well as policy change.

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